

the proposal by name and/or OMB Control Number and should be sent to: Reports Liaison Officer, Office of Policy Development and Research, Department of Housing and Urban Development, 451 7th Street, SW., Room 8222, Washington, DC 20410.

**FOR FURTHER INFORMATION CONTACT:** Marie Lihn, Economic and Market Analysis Division, Office of Policy Development and Research, Department of Housing and Urban Development, 451 7th Street, SW., Room 8222, Washington, DC 20410; telephone (202) 708-0590, extension 5866; e-mail [marie\\_l\\_lihn@hud.gov](mailto:marie_l_lihn@hud.gov). This is not a toll-free number. Copies of the proposed forms and other available documents submitted to OMB may be obtained from Ms. Lihn.

**SUPPLEMENTARY INFORMATION:** The Department of Housing and Urban Development will submit the proposed information collection package to OMB for review as required by the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35, as amended).

This Notice is soliciting comments from members of the public and affected agencies concerning the proposed collection of information to: (1) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information; (3) Enhance the quality, utility, and clarity of the information to be collected; and (4) Minimize the burden of the collection of information on those who are to respond; including the use of appropriate automated collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

*This Notice also lists the following information:*

*Title of Proposal:* Section 8 Random Digit Dialing Fair Market Rent Telephone Survey.

*OMB Control Number:* 2528-0142.

*Description of the need for the information and proposed use:* This provides HUD with a fast, inexpensive way to estimate and update Section 8 Fair Market Rents (FMRs) in areas not covered by AHS or CPI surveys, and in areas where FMRs are believed to be incorrect. It also provides estimates of annual rent changes. Section 8(C)(1) of the United States Housing Act of 1937 requires the Secretary to publish Fair Market Rents (FMRs) annually to be effective on October 1 of each year. FMRs are used for the Section 8 Rental Certificate Program (including space rentals by owners of manufactured homes under that program); the Moderate Rehabilitation Single Room

Occupancy program; housing assisted under the Loan Management and Property Disposition Programs; payment standards for the Rental Voucher Program; and any other programs whose regulations specify their use.

Random digit dialing (RDD) telephone surveys have been used for several years to adjust FMRs. These surveys are based on a sampling procedure that uses computers to select statistically random samples of telephone numbers to locate certain types of rental housing units for surveying. HUD contracts with a private company to conduct two types of RDD surveys: (1) Approximately 50 individual FMR areas are surveyed every year to test the accuracy of their FMRs; (2) In addition, 20 RDD surveys are conducted very year to provide updating factors for FMRs not surveyed individually and for Annual Adjustment Factors (AAFs). These surveys are conducted in the non-metropolitan portions of all 10 HUD regions, and in the 10 metropolitan portions of the regions that do not have their own Consumer Price Index (CPI) surveys.

*Members of affected public:* Individuals or households living in areas surveyed.

*Estimation of the total numbers of hours needed to prepare the information collection including number of respondents, frequency of response, and hours of response:*

	Number of phone calls made	Average minutes each	Minutes	Hours
Telephone surveys:				
Number who pick up phone but are screened out .....	416,970	1.16	484,942	8,082
Total interviewed (movers and stayers) .....	42,205	4.32	182,364	3,039
Mail surveys .....	3,984	5.00	19,920	332
Annual total .....	463,159	.....	687,226	11,454

*Status of the proposed information collection:* Pending OMB approval.

**Authority:** The Paperwork Reduction Act of 1995, 44 U.S.C. Chapter 35, as amended; and section 8(C)(1) of the United States Housing Act of 1937.

Dated: June 5, 2003.

**Christopher D. Lord,**

*Deputy Assistant, Secretary for Policy Development.*

[FR Doc. 03-14595 Filed 6-9-03; 8:45 am]

**BILLING CODE 4210-62-M**

**DEPARTMENT OF THE INTERIOR**

**Fish and Wildlife Service**

**Endangered and Threatened Wildlife and Plants; Status Review and 12-Month Finding for a Petition To List the Washington Population of the Western Gray Squirrel**

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

**ACTION:** Notice of 12-month petition finding.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), announce a 12-month finding for a petition to list a distinct population segment (DPS) of the western gray squirrel (*Sciurus griseus griseus*) in Washington, in accordance

with the Endangered Species Act of 1973, as amended. After reviewing the best scientific and commercial information available, we find that the petitioned action is not warranted because the petitioned entity is not a DPS and, therefore, not a listable entity. Additionally, we evaluated the Washington populations of the western gray squirrel relative to the entire range of the subspecies and determined that the Washington populations collectively do not constitute a significant portion of the range of the subspecies. We ask the public to submit to us any new information that becomes available concerning the status of or threats to this subspecies. This information will help us monitor and encourage the conservation of this subspecies.

**DATES:** The finding announced in this document was made on May 30, 2003. Although further listing action will not result from this finding, we request that you submit new information concerning the status of or threats to this subspecies whenever it becomes available.

**ADDRESSES:** You may send data, information, or questions concerning this finding to the Manager, U.S. Fish and Wildlife Service, Western Washington Fish and Wildlife Office, 510 Desmond Drive SE, Suite 102, Lacey, WA 98503. In order to inspect the petition, the administrative finding, supporting information, and comments received, you may make an appointment during normal business hours at the above address.

**FOR FURTHER INFORMATION CONTACT:** Ken Berg, Manager, Western Washington Fish and Wildlife Office (see

**ADDRESSES**) (telephone 360/753-9440, facsimile 360/753-9405).

**SUPPLEMENTARY INFORMATION:**

**Background**

Section 4(b)(3)(B) of the Endangered Species Act of 1973, as amended (Act) (16 U.S.C. 1531 *et seq.*), requires that, for any petition to revise the List of Threatened and Endangered Species that contains substantial scientific or commercial information that listing may be warranted, we make a finding within 12 months of the date of the receipt of the petition on whether the petitioned action is (a) not warranted, or (b) warranted, or (c) warranted but precluded by other pending proposals. Such 12-month findings are to be published promptly in the **Federal Register**.

On January 4, 2001, we received a petition dated December 29, 2000, from the Northwest Ecosystem Alliance, Bellingham, Washington, and the Tacoma Audubon Society, University Place, Washington. The petition requested an emergency rule to list the Washington population(s) of the western gray squirrel (*Sciurus griseus griseus*) as threatened or endangered under the Act or, alternatively, the immediate emergency listing of just the southern Puget Sound population of western gray squirrels, followed by a later consideration of the "full Washington State distinct population segment under the standard processing requirements." On October 29, 2002, we announced an initial petition finding in the **Federal Register** (67 FR 65931) concluding the petition presented substantial information to indicate there may be one or more distinct population segments (DPS) of western gray squirrels in Washington for which listing may be

warranted. We are making this 12-month petition finding in accordance with a court order to complete this finding by June 1, 2003 (*Northwest Ecosystem Alliance v. U.S. Fish and Wildlife Service* (CV No. 02-945 KI (D.OR))).

**Taxonomy**

The western gray squirrel belongs to the mammalian order Rodentia, the suborder Sciurognathi, and the family Sciuridae. There are three subspecies of western gray squirrel: *Sciurus griseus griseus*, which ranges from central Washington to the western Sierra Nevada Range in central California; *S. g. nigripes*, which ranges from south of San Francisco Bay in the central California Coast Range to San Luis Obispo County; and *S. g. anthonyi*, which ranges from the southern tip of the Coast Range (near San Luis Obispo, California) into south-central California (Hall 1981). *Sciurus griseus griseus* was described from a squirrel seen by Lewis and Clark at The Dalles in Wasco County, Oregon (Bailey 1936; Hall 1981).

The western gray squirrel is the largest native tree squirrel in the Pacific Northwest and is the only member of the genus *Sciurus* native to Washington. Two other members of the genus found in Washington are introduced species: the eastern gray squirrel (*S. carolinensis*) and the fox squirrel (*S. niger*) (Washington Department of Wildlife (WDW) 1993). Other common names applied to this subspecies include the silver-gray squirrel (Bailey 1936; Booth 1947; Maser *et al.* 1981), California gray squirrel (Grinnell and Storer 1924; Couch 1926), Oregon gray squirrel (Bowles 1921), Columbian gray squirrel (Bailey 1936), banner-tail (Scheffer 1923), and gray squirrel (Bowles 1920, Booth 1947).

**Description and Natural History**

Western gray squirrels are silvery-gray with dark flanks and creamy white underneath. The tail is long, bushy, and edged with white; darker hairs in the tail give it a pepper-gray frost effect. Large ears without tufts also distinguish the western gray squirrel from other tree squirrels. There is a light reddish-brown wash on the backs of the ears, but otherwise the western gray squirrel is entirely gray. To some extent it resembles the eastern gray squirrel, native to the eastern United States but introduced into the range of the western gray squirrel. However, eastern gray squirrels, which are smaller in size, also have smaller tails and rufous (reddish) coloration on the head, back, flanks, and

underparts (WDW 1993; Carraway and Verts 1994; Ryan and Carey 1995a).

Body measurements of western gray squirrels can be variable. Adult weights can range from 18 to 33 ounces (520 to 942 grams). Total lengths (inclusive of body and tail) may range from 20 to 24 inches (in) (500 to 615 millimeters (mm)), with tail lengths ranging on average from 9 to 15 in (240 to 381 mm) and body lengths ranging from 10 to 15 in (265 to 391 mm) (Hall 1981; Carraway and Verts 1994). Based on the results of four studies, body measurements of western gray squirrels in Klickitat County, Washington, were found to be significantly larger than elsewhere in the subspecies' range (Mary Linders, Washington Department of Fish and Wildlife (WDFW), pers. comm. 2003d).

Western gray squirrels are arboreal (adapted for living in trees) and, although they forage on the ground, they rarely stray far from trees. They use tree canopies for escape, cover, and nesting. Western gray squirrels can move rapidly and cover long distances among tree canopies when canopy conditions permit. A contiguous tree canopy that allows arboreal travel for at least 198 feet (ft) (60 meters (m)) around the nest is an important feature of western gray squirrel habitat (Ryan and Carey 1995a).

Western gray squirrels avoid open spaces; in the Puget Trough, western gray squirrels will not cross the prairie to use an isolated tree (Ryan and Carey 1995a). Western gray squirrels, when released from traps and pointed toward openings, did not cross the prairie or open areas any larger than about 40 ft (12 m). Movements across relatively open areas to small groups of trees or small habitat patches can be facilitated by scattered saplings and small trees in fence lines or in the open areas. For example, one radio telemetered squirrel was observed in a group of three isolated trees separated from the main stand by scattered individual trees. The distance of movement, which is rapidly completed, across a relatively open area with scattered trees may be about 150 ft (50 m) (M. Linders, pers. comm. 2003a).

Ryan and Carey (1995b) found that western gray squirrels on Fort Lewis Military Reservation (Fort Lewis) in Washington were rarely seen in small (less than 5 ac (2 ha)), isolated pure oak stands or in pure Douglas-fir (*Pseudotsuga menziesii*) stands away from oaks. Western gray squirrels preferred stands with a mixture of conifers, oaks, and other food-bearing tree species, and were seen most often in stands greater than 5 acres (ac) (2 hectares (ha)) in size and not more than 1,280 ft (390 m) away from water.

In Washington, and elsewhere within the subspecies' range, the principal food is acorns, although the seeds of Douglas-fir and other conifers are also eaten (Dalquest 1948). While pine nuts and acorns are considered essential foods for storing body fat and conditioning western gray squirrels for winter, green vegetation, seeds and nuts of trees and shrubs, fleshy fruits, mushrooms, and other foods are also consumed. Hypogeous fungi (underground fungi such as truffles) comprise a large portion of the western gray squirrel diet (WDW 1993; Carraway and Verts 1994; Ryan and Carey 1995a).

The western gray squirrel is in the northern portion of its range in Washington, where the diversity of mast-producing tree species is less than in Oregon or California. "Mast" includes fruits and nuts used as a food source by wildlife. A decreased diversity of food resources increases the likelihood that concurrent mast failures could seriously affect the survivability of a mast dependent species such as the western gray squirrel population (Ryan and Carey 1995a, b; Linders 2000).

Western gray squirrels require a year-round source of water. On Fort Lewis, western gray squirrels select forested stands within 1,800 ft (550 m) of permanent water (Ryan and Carey 1995b). The majority of nests at one site in Okanogan County, Washington were within 0.6 mile (mi) (1 kilometer (km)) of water, with a maximum distance of 1 mi (1.6 km) (M. Linders, pers. comm. 2003d). Western gray squirrels drink freely from permanent and intermittent water sources, including lakes, marshes, rivers, streams, and puddles (Ryan and Carey 1995a).

Western gray squirrels are active throughout the day, but are most active in the morning. They were observed from dawn to dusk and year round on Fort Lewis; no nocturnal activity has been observed. Western gray squirrels are most active in August and September, when they are collecting and storing food for winter, and they are less visible in June and July (Ryan and Carey 1995a).

Home range sizes can differ with age, sex, location, population density, and from year to year. Home range size increases with social rank and the number of nests used by an individual. Typically, home range sizes for western gray squirrels vary across the subspecies' range from 1.2 ac (0.5 ha) recorded for males in a city park in California, to 16 ac (6.5 ha) in northern Oregon. Recorded home ranges of females vary from 0.3 ac (0.1 ha) in California to 42 ac (17 ha) in Oregon in the summer (Ryan and Carey 1995a).

However, a study on the Klickitat Wildlife Area in Klickitat County, Washington, documented average home range sizes of 180 ac (73 ha) for males and 52 ac (21 ha) for females (Linders 2000). These home range estimates from Klickitat County were significantly larger than in other parts of the subspecies' distribution. However, methods used to determine home range sizes may be a source of variability (Ryan and Carey 1995a).

Western gray squirrels use two types of stick nests: large, round, covered shelter nests are used in winter, and broad platforms are for seasonal or temporary use (Ryan and Carey 1995a). Cavity nests are also used for rearing young and for sleeping at other times (Carraway and Verts 1994). Western gray squirrels frequently use more than one nest, with different individuals often occupying the same nest on successive nights; two squirrels rarely occupy the same nest simultaneously (Linders 2000). Construction and use of multiple nests by individual squirrels, overlap in use, and the fact that nests may remain intact for 3 to 5 years makes it difficult to associate the number of nests with an estimate of the population size. As an example, in Klickitat County, most pregnant and lactating females used cavity nests in oaks and averaged 14.3 nests each, significantly more than the 3.5 nests per squirrel reported for southern Oregon.

Males reach sexual maturity at 1 year and females at 10 to 11 months of age. In western Washington, breeding occurs from January to September, and lactating females have been observed from May to August (Ryan and Carey 1995a; M. Linders, pers. comm. 2003d). Most researchers believe western gray squirrels have only one litter each year, although there is some indirect evidence to indicate two litters may be biologically possible, but uncommon (Ryan and Carey 1995a). Litter counts ranged from one to five, averaging about 2.6 young/litter over a 3-year period (M. Linders, pers. comm. 2003d).

#### Distribution

Historically, the western gray squirrel's distribution was widespread throughout Washington, Oregon, California, and in western Nevada along the base of the Carson Range and in Washoe County (Dalquest 1948). Currently, the subspecies is rare in Nevada and absent from the Central Valley in California. Western gray squirrels still occur in the interior valley margin of the Cascade Mountains in Oregon and Washington; the foothills of the Coast Range in Oregon; the Sierra Nevada, Tehachapi, Little San

Bernardino, Santa Rosa, and Laguna Mountains in central and southern California; and westward through the Coast Ranges of California (Carraway and Verts 1994). In California, the western gray squirrel is fairly common in the Klamath Mountains of northern California, and the Transverse and Peninsular Ranges of southern California (California Department of Fish and Game (CDFG) 1990). In Oregon, the western gray squirrel distribution extends along the southwestern foothills of the Coast Range northward to Coos Bay, and north along the eastern side of the Coast Range and along both sides of the Cascade Mountains into Washington (Verts and Carraway 1998).

Western gray squirrels in Washington once ranged from southern Puget Sound south to the Columbia River, east along the Columbia River Gorge in the southern Cascades, and north along the eastern slopes of the Cascades to Lake Chelan. Documentation for western gray squirrels includes records for Pierce, Thurston, Grays Harbor, Lewis, Clark, Skamania, Klickitat, Yakima, Kittitas, Chelan, and Okanogan Counties in Washington. There is one record from extreme northeastern Whatcom County, probably associated with western gray squirrels in the northern Cascade Mountains (WDW 1993; WDFW 2002). Currently in Washington, the western gray squirrel distribution has been reduced to three geographically isolated western gray squirrel populations in Washington: the "Puget Trough" population, now centered in Thurston and Pierce Counties in the Puget Sound region; the "South Cascades" population in extreme eastern Skamania County and Klickitat and Yakima Counties; and the "North Cascades" population in Chelan and Okanogan counties (Bayrakçi *et al.* 2001, WDW 1993). The distribution of western gray squirrels in each of these counties is limited.

#### Status Review

On October 29, 2002, we published a positive initial 90-day administrative finding on the petition to list the Washington population of the western gray squirrel in the **Federal Register** indicating the petitioned action may be warranted (67 FR 65931). At that time, we requested public comments on this initial finding and any additional information, comments, and suggestions from the public, governmental agencies, the scientific community, industry, and any other interested parties concerning the status of the subspecies throughout its range in Washington, Oregon, California, and Nevada. We asked for

information regarding the subspecies' historic and current distribution, habitat conditions and use, biology and ecology, threats, and ongoing conservation measures for the subspecies and its habitat. We requested any available information on the three Washington populations of the western gray squirrel concerning (1) the genetics of these populations as they relate to each other and to the closest populations in Oregon; (2) the extent to which the two populations east of the Cascade Mountains are discrete from each other; (3) current status and trends of each of these populations; (4) the presence of the subspecies on additional public or private lands; (5) identification of the current specific threats to each of the populations; and (6) any additional information supporting the DPS analysis of significance, as defined in our DPS policy (61 FR 4722), of each of these populations to the subspecies as a whole.

We received comments, information, and data concerning the status of the western gray squirrel from 27 individuals, State and local agencies, nongovernmental organizations, industries, museums, and universities. Some commenters expressed only support for or opposition to a potential listing without providing additional documentation. Information or data from more substantive comments are incorporated, where appropriate, and concerns raised in the comments are addressed throughout this petition finding. We also reviewed information from peer-reviewed journal articles, agency reports and file documents, telephone interviews, and correspondence with biologists familiar with the western gray squirrel.

#### **Western Gray Squirrel Status Summary**

The rangewide status review initiated in the 90-day petition finding (67 FR 65931) entailed obtaining and considering the best scientific and commercial information available to assist us in our DPS analysis of the western gray squirrel in Washington.

#### **Nevada**

Western gray squirrels are considered uncommon in Nevada. They are only found on the Carson Range in west-central Nevada where they are yearlong residents; they are not documented to currently occur elsewhere in Nevada (Biological Resources Research Center, University of Nevada-Reno (UNR) 2003). Johnson (1954) reported collection of the subspecies in Washoe County near the California State line, and observations of individuals along the

base of the Carson Range. Hall (1981) cites marginal records in Verdi and just southwest of Carson City.

The Nevada western gray squirrel population probably represents a migrant population from the Sierra Nevada in California on the fringe of the subspecies' range (UNR 2003). Although western gray squirrels occur along the west slope of the Sierra Nevada, up to 7,700 ft (2,347 m) at times, they probably crossed into Nevada from lower elevations in the northern Sierra Nevada. The subspecies has never been wide-ranging in Nevada, and its limited range in Nevada is probably related to the absence of oak trees (Johnson 1954).

The western gray squirrel is a "protected species" under the Nevada Administrative Code (NAC) (NAC 503.030). There is no open season on species classified as protected (NAC 503.090), according to criteria specified in NAC 503.103. The National Heritage Status Rank for the western gray squirrel in Nevada is S4 (Apparently Secure) (NatureServe Explorer 2002).

Current distribution and population sizes in Nevada have not been documented. Although small and possibly isolated from other populations in the subspecies' range in California, this western gray squirrel population has apparently never been large. Two public comments in response to our request for information in the 90-day finding provided data suggesting that western gray squirrels are "common in the Lake Tahoe basin, especially in the urbanized areas of the basin" (J. Shane Romsos, Tahoe Regional Planning Agency (NV), pers. comm. 2002) and are "common and well-adapted to the urban/forest interface setting in South Lake Tahoe, California" (Peter Maholland, California Tahoe Conservancy, pers. comm. 2002). Western gray squirrels are apparently adapted to habitat and food sources available in these urbanized areas.

#### **California**

The western gray squirrel is fairly common in California where it occupies mature stands of most conifer, hardwood, and mixed hardwood-conifer habitats in the Klamath, Sierra Nevada, Tehachapi, Little San Bernardino, Santa Rosa, Laguna Mountains, and Transverse and Peninsular Ranges. Western gray squirrels are also found in riparian stands and other suitable habitats in the Sacramento Valley (CDFG 1990).

The western gray squirrel is a regulated game species in California. CDFG bases hunting regulations on estimates of approximately 12 million ha (30 million ac) of western gray

squirrel habitat, not including orchards, that are occupied by approximately 18 million squirrels just before the breeding season. Their estimates include an average net increase of about 1.2 million squirrels annually, after assuming a 50 percent juvenile mortality, a 50 percent adult mortality, and a hunting harvest rate of less than 1 percent each year. Their conclusions, based on these estimates, are that hunting mortality does not have adverse effects on the western gray squirrel populations, and that environmental and density-dependent mechanisms help keep the populations in check with their habitats (CDFG 2002). Also, CDFG data indicate the number of tree squirrel hunters has declined from a high of about 68,000 in the late 1960s to about 12,000 hunters in 2000. The number of tree squirrels harvested has declined from a peak of about 350,000 in the late 1970s to about 75,000 tree squirrels harvested in 2000 (CDFG 2002).

The National Heritage Status Rank for the western gray squirrel in California is S4 (Apparently Secure) and S5 (Secure) (NatureServe Explorer 2002). None of the subspecies of the western gray squirrel is included on the CDFG "special animal" list. This list is a general term referring to all of the taxa the California Natural Diversity Data Base is interested in tracking, regardless of their legal and protection status (CDFG 1999).

Several conservation programs, policies, and regulations help maintain western gray squirrel habitat in California. The Integrated Hardwood Range Management Program, established in 1986, aims to maintain, and increase where possible, acreage of California's hardwood range resources. In 2001, the Oak Woodlands Conservation Act created the Oak Woodlands Conservation Fund for conservation actions to preserve oak woodlands and guidelines for the program are under development. The California Forest Practice Rules provide regulations for maintaining hardwood and riparian components during timber harvest planning. California Partners in Flight prepared an oak woodland bird conservation plan to conserve and restore oak woodlands, which will help maintain western gray squirrel habitats and populations. The 1985 hardwood conservation policy and 1989 hardwood guidelines developed by the California Fish and Game Commission are used as references to ensure hardwood conservation measures are considered in all project proposals reviewed under the California Environmental Quality Act (Patrick Lauridson, CDFG, *in litt.* 2002).

## Oregon

There are no historical or current population data for the western gray squirrel in Oregon, but based on Bailey (1936) and anecdotal information (Marshall *et al.* 1996), the numbers and distribution of western gray squirrels appear to be much reduced. The Natural Heritage Rank for the western gray squirrel in Oregon is S4? (*i.e.*, the subspecies is not rare and apparently secure, but with cause for long-term concern; the “?” indicates the assigned rank is uncertain) (Oregon Natural Heritage Program 2001).

Oregon maintains a list of State threatened and endangered species under the authority of ORS 496.172, the Oregon Endangered Species Act of 1987 (OESA) (Oregon Administrative Rule (OAR) 635-100-100 to 635-100-130), which helps in carrying out the State's policy of preventing the serious depletion of any indigenous species. Oregon's Sensitive Species Rule (OAR 635-100-040) requires the Oregon Department of Fish and Wildlife (ODFW) to develop and maintain a State list of sensitive vertebrate species that are likely to become threatened or endangered throughout all or any significant portion of their range in Oregon. This list was created for the purpose of encouraging actions that will prevent further declines in species' populations and habitats and avoid the need for listing under the OESA. The western gray squirrel is classified by ODFW as a sensitive species of “undetermined status” in Oregon, which indicates the subspecies may be susceptible to population decline of sufficient magnitude that it could qualify for State classification as endangered, threatened, critical, or vulnerable status, but additional research is needed (ODFW 1997; Oregon Natural Heritage Program 2001). The basis for the western gray squirrel's sensitive species classification in Oregon includes population declines caused by timber harvesting and competition with other tree squirrel species (Marshall *et al.* 1996). Western gray squirrels are legally hunted in Oregon. Hunting restrictions that delay and shorten the hunting season in north-central Oregon, however, help avoid take of lactating females (Marshall *et al.* 1996).

## Washington

The western gray squirrel was once considered one of the most commonly encountered mammals in the Pacific Northwest (Bowles 1921). The western gray squirrel was more widely distributed in prehistoric times,

probably ranging throughout western Washington and the Cascade Mountains in association with oak communities, but has diminished in recent times along with the decrease in distribution of oak woodlands (Rodrick 1987; WDW 1993). One hypothesis suggests that the western gray squirrel migrated northward into Washington with the spread of Oregon (Garry) white oak (*Quercus garryana*) from the Willamette Valley in Oregon. Dalquest (1948) described the western gray squirrel in Washington as being a species “of oak woods rather than coniferous forest” with its geographic range largely regulated by the distribution of oaks, especially Oregon white oak. The range of this subspecies in Washington, formerly widespread in the oak-conifer forests, is now less widely distributed and limited to small scattered populations that follow the range of Oregon white oak (Ryan and Carey 1995a; WDFW 1995).

In Washington, western gray squirrels once ranged from southern Puget Sound south to the Columbia River, east along the Columbia River Gorge in the southern Cascade Mountains, and north along the east side of the Cascade Mountains to Lake Chelan (Booth 1947; Larrison 1970). During the last century, the western gray squirrel distribution in Washington has been reduced to three geographically isolated western gray squirrel populations in Washington: The “Puget Trough” population, now centered in Thurston and Pierce Counties in the Puget Sound region; the “South Cascades” population in extreme eastern Skamania County and Klickitat and Yakima Counties; and the “North Cascades” population in Chelan and Okanogan counties (WDW 1993). The National Heritage Status Rank for the western gray squirrel in Washington is S2 (imperiled) (NatureServe Explorer 2002).

There have been relatively few studies of western gray squirrels in Washington. Early literature was largely observational and anecdotal (Bowles 1920, 1921; Scheffer 1923; Couch 1926; Dalquest 1948; Larrison 1970). Recent studies to determine western gray squirrel densities, biology, and ecology have not been consistent in objectives, effort, or techniques, and have not been directed at determining the status and trends of the subspecies in all areas of the State.

A regional assessment of the conservation status for potential western gray squirrel habitat in Washington determined that there are approximately 1.8 million ac (719,035 ha) of potential western gray squirrel habitat in the state (M. Linders, pers. comm. 2003d). In the

Puget Trough, there are 1,797 ac (727 ha) of occupied habitat remaining (David Brittell, WDFW, *in litt.* 2003). The estimate of “occupied” habitat was based on western gray squirrels and nest locations buffered by a 183-ac (74-ha) circle, the average home range size for male squirrels in Klickitat County (D. Brittell, *in litt.* 2003). A 1996 model was developed to direct survey efforts in Klickitat County, where 62,189 ac (25,167 ha) were identified as occupied. However, application of the buffering method, developed in a later study, to the 1996 potential habitat model indicated there may be only 56,607 ac (22,908 ha) that are occupied in Klickitat County. In Chelan and Okanogan Counties, 3,094 ac (1,252 ha) were identified as occupied (Cassidy *et al.* 1997; D. Brittell, *in litt.* 2003).

*Puget Trough Population.* Bowles (1920, 1921) stated that western gray squirrels were in the Puget Trough as early as 1896, although “by no means common” at that time, probably because of adverse environmental conditions and lack of legal protection. He suggested that western gray squirrels had always been in Pierce County in low numbers, traveling up from Oregon over time and becoming permanent residents if food and other natural conditions were satisfactory. Bowles reported that following legal protection about 1910, there was an “immense increase” in numbers of western gray squirrels. By 1921, there was significant damage to trees caused by western gray squirrels stripping bark for food in the Pierce County area. Squirrel hunting was reinstated in 1926 and continued until 1943, except for a localized hunt in Thurston and Pierce Counties in 1949 and 1950. The western gray squirrel became a State protected species in 1954. Although records show that western gray squirrels still occurred in the Puget Trough in the 1970s and 1980s, they had become increasingly rare and were found only in isolated relict populations restricted to a few locations in the state (Rodrick 1987, WDW 1993, WDFW 2002).

Current population estimates of the western gray squirrel in the Puget Trough area are limited. In southern Thurston County, the last western gray squirrel was seen in the late 1970s (WDFW 2002). Surveys during 1985 and 1986 detected western gray squirrels on just 4 of 26 sites (15 percent), and these were confined to the Fort Lewis area (Rodrick 1987). In Statewide surveys of 40-ac (16-ha) survey blocks from 1994 to 2000 by WDFW, western gray squirrels or nest locations were found in 9 of 100 (9 percent) survey blocks in the Puget Trough. In February 1996, no

western gray squirrels were detected in WDFW surveys in Thurston County (D. Brittell, *in litt.* 2002). Isolated occurrences have been reported in the past in Grays Harbor and Lewis Counties (WDFW 2002), and more recently in Clark County (Tracy Fleming, National Air and Stream Improvement Council, pers. comm. 2003). In 2002, fewer than a dozen sightings of western gray squirrels were reported (Dave Clouse, Fort Lewis, pers. comm. 2003).

Although the western gray squirrel was once common on the partially wooded prairies adjacent to Puget Sound, the surviving Puget Trough population is now centered on Fort Lewis in southern Pierce and northern Thurston Counties where the largest area of oak woodlands remains. From 1992 to 1993, 156 western gray squirrel observations were documented on 169 sites on Fort Lewis. These observations were estimated to represent 81 individual western gray squirrels on 44 oak-conifer sites (Ryan and Carey 1995b). During intensive surveys in 1998 to 1999, only 6 western gray squirrels in only 4 percent (5 of 133) suitable habitat stands were detected in over 4,000 hours of survey effort. The researchers concluded that the low western gray squirrel population on Fort Lewis is at a high risk of extirpation (Bayrakçi *et al.* 2001). Subsequent western gray squirrel sightings included 3 (including 1 road kill) in 2000 and 11 (including 1 road kill) in 2002 (D. Clouse, pers. comm. 2003). Factors that may have influenced the decline of western gray squirrels on Fort Lewis include (1) poor acorn crops or undependable food resources; (2) drought and unavailability of water in many oak ecotones; (3) road kills; (4) competition with eastern gray squirrel and Douglas' squirrels (*Tamiasciurus douglasii*); (5) reduction in quality and quantity of oak habitat; (6) diseases and parasites; and (7) predation (Carey and Harrington 2001).

From 1993 to 1995, The Nature Conservancy of Washington conducted surveys, analyzed nest trees, and trapped western gray squirrels on McChord Air Force Base (McChord AFB) adjacent to Fort Lewis. Fifteen observations of western gray squirrels occurred at 6 different locations on McChord AFB. Most of these observations (13) occurred in 1993, with the remaining two observations occurring in 1995; none were observed in 1994 (The Nature Conservancy of Washington and Washington Natural Heritage Program 1996). They hypothesized that western gray squirrels were dispersing from Fort Lewis to

McChord AFB to use acorns and other food resources when available, but only when environmental conditions were favorable (e.g., when water sources are available in wet years). In the mid-1990s, a western gray squirrel occupied a nest box erected for American kestrels (*Falco sparverius*) on McChord AFB. Two or three western gray squirrels were seen in 1995, and possible western gray squirrel nests were found in 1996 (McChord AFB 2002). Although western gray squirrels were previously found on private lands, the last observation of western gray squirrels on private lands adjacent to the military bases was in 1990 (WDFW 2002).

The western gray squirrel in the Puget Trough of western Washington persists in a transitional ecological setting, in comparison with the subspecies' populations elsewhere in its range. Western gray squirrels in the Puget Trough occupy an ecotone (transitional) habitat composed of Oregon white oak woodlands situated between upland Douglas-fir forests and prairies (Ryan and Carey 1995; Bayrakçi *et al.* 2001). Here, scattered woodlands of Oregon white oak and Douglas-fir encircle the prairies (WDW 1993).

This western gray squirrel population, located at the northwestern limits of the subspecies' range, occur in habitat that closely conforms to the distributional range of the Oregon white oak. The western gray squirrel ranges only as far north in the Puget Trough as the northern limit of the continuous distribution of Oregon white oak on the gravelly prairies just south of Tacoma (Dalquest 1948; Larrison 1970; Stein 1990; WDW 1993). While the Puget Trough area is essentially the northwestern limit of the continuous range of the Oregon white oak, it does occur in discontinuous patches further north on the islands of Puget Sound and, in British Columbia, Canada, on Vancouver Island and in two disjunct stands on the mainland (Stein 1990).

Geologic and floristic evidence indicates that Oregon white oak associations have evolved through successive eras as components of relatively arid pine forest that repeatedly advanced northward from a locus in the southwestern U.S. and northwestern Mexico as climates warmed and retreated as climates cooled. The most recent northward expansion ended about 6,000 years ago (Stein 1990). Pollen spectra samples show that oak communities were common around Puget Sound during the warm, dry post-glacial period 10,000 years ago. Subsequent trends toward cooler and moister conditions have influenced the replacement of Oregon

white oaks by conifers (Stein 1990; Agee 1993; WDW 1993).

Prehistorically, the "Tacoma prairies" once occupied the lowland areas of Pierce and Thurston Counties in the Puget Sound region of the Puget Trough, with a southward finger into Lewis County; prairies intermittently reappeared in Clark County down to the Columbia River (Kruckeberg 1991). This landscape feature of the Puget Trough consists of a mosaic of prairie, oak woodland, and open forest called a "gravelly outwash plain." The gravelly outwash prairies coincide with the southern terminus of the last continental ice sheet during the Vashon glaciation, which ended 15,000 years ago (Kruckeberg 1991).

Although the Puget Trough of western Washington has a wetter climate than occurs in much of the Oregon white oak range, the Puget Sound area is near sea-level and has a warm, relatively dry climate because of the Puget Sound and the surrounding mountain ranges (Thyssel and Carey 2001). The Puget Sound region is included in the *Tsuga heterophylla* (western hemlock) Zone, with many of the same plant communities. Large areas in this region, however, differ from the surrounding plant community types in that prairie, oak woodland, and pine forest are encountered. These plant-community type differences, related to both climate and soil, include Oregon white oak stands and prairies being invaded by Douglas-fir and the occurrence of species rarely or never found in western Washington or northwestern Oregon (Franklin and Dyrness 1988).

As previously discussed, western gray squirrels depend primarily on acorns and pine seeds (Sumner and Dixon 1953; Kruckeberg 1991; Carraway and Verts 1994). Because of the wetter climate and flatter topography of the Puget Trough in comparison with the rest of the western gray squirrel range, the habitat is more homogeneous, and there are fewer mast-producing trees (C. Maser, pers. comm. 2003). Consequently, in this region, the success of the western gray squirrel is probably more intimately tied to the success of Oregon white oak because it provides an essential winter food item for this squirrel.

Elsewhere in the subspecies' range, Oregon white oaks occur in communities that include a wider range of mast-producing tree species. In western Washington, the western gray squirrel depends primarily on Oregon white oak, Douglas-fir, and where available, ponderosa pine (*Pinus ponderosa*). In Oregon, the western gray squirrel diet includes seeds from a

wider variety of oak (*i.e.*, Oregon white oak, tanoak (*Lithocarpus densifloris*), Sadler oak (*Quercus sadleriana*), canyon live oak (*Quercus chrysolepis*), California black oak (*Quercus kelloggii*), valley oak (*Quercus lobata*) and pine species (*i.e.*, sugar pine (*Pinus lambertiana*), Jeffrey pine (*Pinus jeffreyi*), lodgepole pine (*Pinus contorta*)) than are available to western gray squirrels in the Puget Trough of Washington (Carraway and Verts 1994; Marshall *et al.* 1996).

In California, the western gray squirrel is dependent on mature stands of conifer and oak habitats and is closely associated with oaks (CDFG 1990). Oak species in western gray squirrel habitat in California include valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), California black oak, interior live oak (*Quercus wislizenii*), and scrub oak (*Quercus dumosa*). In addition to Douglas-fir and ponderosa pine, other tree species in California western gray squirrel habitats include Fremont cottonwood (*Populus fremontii*), digger pine (*Pinus sabiniana*), white fir (*Abies concolor*), sugar pine, giant sequoia (*Sequoiadendron giganteum*), redwood (*Sequoia sempervirens*), and eucalyptus (*Eucalyptus globulus*) (Carraway and Verts 1994).

Although western gray squirrels consume hypogeous fungi and seeds and nuts of various trees and shrubs, acorns and pine seed may be more critical in the diet because they are high-energy foods needed for overwintering (Ryan and Carey 1995a). In the Puget Trough, acorns are the principal diet from late summer through early spring. Mushrooms and truffles are mostly eaten in spring and fall, and Douglas-fir seed are eaten upon ripening in the late summer through fall. However, mast crops differ each year caused by the depletion of food reserves in a heavy seed year, weather in year of fruiting or previous years, diseases and parasites, and maturation differences among tree groups (Ryan and Carey 1995a). Oak mast production is sporadic and unpredictable, with good mast years occurring only once in 7 to 10 years. During an 8-year study in northern Oregon, there were 4 years with poor Oregon white oak acorn crops. In 1991, there was no acorn crop in the Columbia River Gorge and an insignificant crop in 1992. When ponderosa pine is not available, western gray squirrels also rely on Douglas-fir seed (WDW 1993). However, environmental factors make the Douglas-fir seed crop erratic, and abundant crops are produced sporadically, from 2 to 11 years apart. One crop failure and two or more light

to medium crops usually occur between heavy crops (U.S. Forest Service 1974).

*South Cascades Population.* Although Booth (1947) noted that western gray squirrels were uncommon in the southern part of the Cascade Mountains and more common in Pierce County, the South Cascades population currently is the largest remaining population of western gray squirrels in Washington. The western gray squirrel appears to be widely distributed across Klickitat County, but the populations are localized. Western gray squirrels remain along the Klickitat River and Catherine, Major, and Rock Creeks (WDW 1993). Between 1994 and 1996, systematic field surveys to delineate western gray squirrel distribution in the Columbia River Gorge documented the presence of individuals or their sign (*e.g.*, nests) in 22 watershed administrative units. Surveys were conducted in parts of 275-square mi (712-square km) sections containing suitable western gray squirrel habitat; their presence was recorded in 61 percent of these sections (M. Linders, pers. comm. 2003d).

Based on intensive and widespread surveys in Washington from 1994 to 2000, 89 percent (1,642 of 1,847) of all western gray squirrel nests and observations occurred in Klickitat County (D. Brittell, *in litt.* 2002). Eighty-three percent (514 of 618) of the occupied survey blocks had nest locations alone, and 10 percent (59 of 618) of the survey units had both western gray squirrels and their nests. The 7 percent (45 of 618) of the survey units having western gray squirrels with no known nest locations may have represented dispersal or breeding movements. Nest-only sites likely had associated western gray squirrels. Because nests persist for several years, however, a die-off would be difficult to detect (D. Brittell, *in litt.* 2002). More recent information is limited to forest practice surveys and random encounters. Residents noticed a decline of western gray squirrels in Klickitat County, particularly following introduction of California (Beechey's) ground squirrels (*Spermophilus beecheyi*) (Rodrick 1987; WDW 1993).

Statewide surveys from 1994 to 2002 established that most observations of western gray squirrels and their nests occurred in Klickitat County (M. Linders, pers. comm. 2003c). Surveys in 2000 and 2001 on the Klickitat Wildlife Area documented density estimates of 0.08–0.13 western gray squirrels/ha and a more recent estimate for western gray squirrels in this area was slightly higher (0.1–0.2 squirrels/ha) (M. Linders, pers. comm. 2003b). Density estimates for western gray squirrels in California

ranged from 1.37/ha in the spring in Lake County to 2.47/ha in the Yosemite Valley (Grinnell and Storer 1924). There are no density estimates for western gray squirrels in Oregon or Nevada.

Booth (1947) described the western gray squirrel as uncommon in the southern Cascade Mountains. In Yakima County, western gray squirrels were abundant in the Ahtanum and Cowiche Creek drainages, and less common along Oak Creek prior to the 1950s. A mange epidemic in the 1940s and 1950s decimated western gray squirrel populations (Stream 1993). Western gray squirrels may have been extirpated from the Oak Creek Management Area following a severe mange epidemic in the 1940s and 1950s; a reintroduction attempt in the area, using western gray squirrels from Oregon, was not successful (WDW 1993).

Little is known about western gray squirrels on the Yakama Indian Nation Reservation. Between 1995 and 1998, the Yakama Indian Nation conducted limited surveys across the reservation. Small nest clusters, scattered individual western gray squirrels, and negative surveys were reported (D. Brittell, *in litt.* 2002).

*North Cascades Population.* The North Cascades population has received the least attention of the three Washington populations; no population or trend data, including density estimates, are available. There were no systematic attempts to delineate the distribution of western gray squirrels in the North Cascades prior to 1995. During 1995 surveys by WDFW on the west side of the Methow Valley of Okanogan County, 21 western gray squirrels (including 3 killed by automobiles) and 2 nests were observed. In 1996, 22 western gray squirrels, including roadkills, and 89 nests were observed. No western gray squirrels were observed during surveys of the east side of the Methow Valley in 1997. When interviewed, residents of the upper Methow Valley believed that numbers of western gray squirrels were declining, but residents of the lower Methow Valley thought the populations had been stable over the past 15 to 30 years (M. Linders, pers. comm. 2003d).

In 2000, surveys of all areas previously known to have western gray squirrel nests detected only 3 remnants out of the 89 nests recorded in a 1996 survey (M. Linders, pers. comm. 2003d). Eighteen previously unreported nests were documented and four western gray squirrels were observed. Relocating individual nests, however, can be difficult without detailed mapping and marking (Vander Haegen *et al.* 2003). Also, western gray squirrels build and

use more than one nest per season, and nests may remain intact for 3 to 5 years. Consequently, the fact that only 3 remnant nests and 18 previously unreported nests in an area that formerly had 89 nests may represent a significant reduction in the number of western gray squirrel nests in the Methow Valley, possibly suggesting a corresponding population decline. Additional nest surveys in Chelan County, not previously surveyed, located seven previously unreported nests, three western gray squirrels, and one western gray squirrel skin (no body) (M. Linders, pers. comm. 2003d).

The North cascades population occurs in an ecological setting that differs from the Puget Trough area. The native range of oaks extended only into southeastern Yakima County with a patchy distribution in central Yakima County, central Kittitas County, and northeastern Pierce County (Stein 1990). The range expansion northward from Yakima County required adaptations to habitats lacking oaks, the main source of winter foods for this subspecies in most of its range.

Couch (1928) describes the range of the "silver gray squirrel" as being known from Goldendale (Klickitat County) to Lake Chelan (Chelan County). Taylor and Shaw (1929) describe the range of the western gray squirrel as ranging along the eastern edge of the Cascades north to Lake Chelan. There are verified (reported by reliable biologists or other knowledgeable individuals) western gray squirrel sightings recorded for Chelan County from 1938 in the WDFW Natural Heritage Database (WDFW 2002). Booth (1947) notes records from Lake Chelan. Larrison (1970) describes the range as including the lower east slopes of the Cascades to Lake Chelan. He also notes that, while western gray squirrels are most numerous in the oak woods, they are spotty and scarce elsewhere in their range.

The western gray squirrel range extension into Okanogan County may have occurred in response to groves of English walnut (*Juglans regia*) and black walnut (*J. nigra*) planted during the 1940s and 1950s (WDW 1993). Stream (1993) conducted interviews, compiled data from WDW wildlife data printouts, literature reports, and old files from the WDW Yakima Regional office and concluded that the western gray squirrel was native to the east slopes of the Cascade Mountains. He notes that there was "apparently a native population in Chelan County, especially around Lake Chelan," but that the documentation was not clear. Although the predominant habitat used by western

gray squirrels was the oak/pine associations in Yakima County, the oak association was not found where the western gray squirrels occurred around Lake Chelan. The interviews revealed that English walnut trees were planted from 1915 to 1920, and by the 1940s, the western gray squirrel was expanding its range northward due to these planted mast-producing trees. By the 1960s, western gray squirrels were showing up in canyons where black walnut trees were planted in the 1940s.

Western gray squirrels were present at Lake Chelan at least as early as the 1920s, and may have been expanding northward before mast-producing trees planted in nut orchards began producing. Their secretive behavior and low population densities may have made them hard to see. Although the nut orchards probably stimulated the northward expansion and helped population sizes increase, western gray squirrels were also found in natural habitats. Western gray squirrels were regularly seen on Chelan Butte (southeast side of Lake Chelan) in the 1960s and in Purteman Gulch (northeast end of Lake Chelan), but were no longer found there after fires burned the habitat. In the late 1960s, a western gray squirrel nest was found on a pine tree branch in Ribbon Cliff Canyon (along the Columbia River north of Entiat). Western gray squirrels were using pine trees and bigleaf maples (*Acer macrophyllum*) for food. A few western gray squirrels were found in Stehekin (northwestern end of Lake Chelan in Chelan County), but could not survive because of the harsh weather (Mil Sharp, retired WDW wildlife agent, pers. comm. 1992, as cited in Stream 1993).

#### Distinct Population Segment Review

Under the Act, we must consider for listing any species, subspecies, or any distinct population segments of vertebrates if sufficient information exists to indicate that such action may be warranted. We, along with the National Marine Fisheries Service (National Oceanic and Atmospheric Administration-Fisheries), developed a joint policy 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 a part of the taxon being considered, and avoids inclusion of entities that do not require the Act's protective measures.

Under our policy, we use two elements to assess whether a population segment under consideration for listing may be recognized as a DPS. These

elements are (1) discreteness of the population segment in relation to the remainder of the species to which it belongs; and (2) the significance of the population segment to the taxon to which it belongs. If we determine that a population segment being considered for listing meets the discreteness and significance standards, then the level of threat to that population segment is evaluated based on the five listing factors established by the Act to determine if listing the population segment as either threatened or endangered is warranted.

Under current conditions, the Washington population of the western gray squirrel consists of three isolated, disjunct populations. The three populations resulted from western gray squirrels moving northward, from the region that is now the State of Oregon and later became separated from more southern populations by the Columbia River. The distribution of the western gray squirrel in Washington once extended from south Puget Sound, east along the Columbia River, and northward to Lake Chelan and subsequently expanded northward into Okanogan County in more recent times. We view these three populations as isolated portions of a once-continuous population, with a common evolutionary history.

#### Discreteness

A population segment of a vertebrate species may be considered discrete if it satisfies either one of the following two conditions: (1) it is markedly separated from other populations of the same taxon as a consequence of physical, physiological, ecological, or behavioral factors (quantitative measures of genetic or morphological discontinuity may provide evidence of this separation); or (2) it is delimited by international governmental boundaries within which significant differences in control of exploitation, management of habitat, conservation status, or regulatory mechanisms exist.

On the basis of available information, we conclude that the Washington population segment of the western gray squirrel may be discrete in relation to the remainder of the subspecies' populations because it appears to be physically separated from other populations to the south in Oregon, California, and Nevada as a result of geographical isolation by the Columbia River. Additionally, each of the three Washington populations appear to potentially be discrete from each other and this is supported by preliminary genetic analysis (Warheit (2003)). The Columbia River has likely been a barrier

to movement and genetic flow for at least 13,000 years (Mercer and Roth 2003), as discussed further below.

#### Significance

Under our DPS policy, once we have determined that a population segment is discrete, we consider its biological and ecological significance to the larger taxon to which it belongs. This consideration may include, but is not limited to (1) evidence of the persistence of the discrete population segment in an ecological setting that is 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 population segment represents the only surviving natural occurrence of a taxon that may be more abundant elsewhere as an introduced population outside its historic range; and (4) evidence that the discrete population segment differs markedly from other populations of the species in its genetic characteristics.

**Ecological Setting.** The western gray squirrel in the Puget Trough of western Washington persists in a transitional ecological setting, where it occupies habitat composed of Oregon white oak in an ecotone (transitional) between upland Douglas-fir forests and prairies, in comparison with the subspecies' populations elsewhere in its range (Ryan and Carey 1995; Bayrakçi *et al.* 2001). Consequently, existence of the western gray squirrel in the Puget Trough is more intimately tied to the success of Oregon white oak: Oregon white oak is the only native oak in Washington (Stein 1990) and provides an essential winter food item for this squirrel (Sumner and Dixon 1953; Kruckeberg 1991; Carraway and Verts 1994). Acorns and pine seed are critical high-energy foods needed for overwintering (Ryan and Carey 1995a). In western Washington, western gray squirrels have adapted to a more homogeneous environment with fewer and less reliable food resources (Oregon white oak, Douglas-fir, and some ponderosa pine), particularly relying on the acorn of a single tree species as its essential storable winter food resource, thus occupying a less suitable, marginal habitat. Elsewhere in the subspecies' range, Oregon white oaks occur in communities having a wider range of mast-producing tree species, including a variety of oak and pine species, which allows western gray squirrels to use different food resources when one food resource has a poor year for mast production.

The North Cascades population found east of the Cascade Mountains also persists in an ecological setting which

differs from the Puget Trough and the South Cascades. In this population, western gray squirrels expanded their distribution into areas beyond the native range of Oregon white oak. The presence of western gray squirrels in Chelan County early in the twentieth century (Couch 1928; Booth 1947; Larrison 1970; Stream 1993; WDFW 2002) indicates adaptations to using other food resources. The continuous distribution of Oregon white oak extended into Yakima County, with only a spotty distribution into Kittitas County (Stein 1990). The range expansion northward from Yakima County required occupying habitats lacking oaks that provided the main winter food for the subspecies, relying on ponderosa pine as the primary food.

The Washington populations of western gray squirrels are found in differing ecological settings within the State. However, it is not clear that they should collectively or independently be considered as unique ecological settings for the taxon. For example, while the grasslands and oak woodlands of the Puget Sound area have different vegetation complexes compared to the grasslands and oak woodlands where western gray squirrels are found in northern California or southern Oregon, these differences are not so great that we consider the habitat of the Puget Sound population to be a unique or unusual ecological setting for western gray squirrel. The South Cascades population shares many habitat features common to the habitat for western gray squirrels found in Oregon. The North Cascades population's habitat is notable in its absence of oaks, the main source of winter foods for this subspecies in most of its range. This population appears to rely on the seed of pine trees and bigleaf maples (*Acer macrophyllum*).

Throughout their range, however, western gray squirrels consume a variety of types of tree seeds, including many conifer species. In summary, we do not find that the Washington populations individually or collectively are located in an ecological setting unusual or unique for the taxon, such that they meet the significance criterion of the DPS policy.

**Gap in the Range.** The Washington population segment of the western gray squirrel is at the northern portion of the historic and current distribution of the subspecies. Within the Washington population segment, the Puget Trough population represents the northwestern extension, and the North Cascades population represents the northeastern extension of the subspecies' range.

Within the distribution of every species there exists a peripheral

population, an isolate or subpopulation of a species at the edge of the taxon's range. The population is the basic evolutionary and ecological functional unit. The local population is where responses to environmental challenges occur, where adaptations arise, and where genetic diversity is maintained and reshuffled each generation. A species can continue to exist even though many of its populations are destroyed, resulting in a loss of biodiversity and what may be unique genetic or phenotypic traits (Meffe *et al.* 1997). Peripheral populations are often located at a species' ecological limits where unique genetic combinations are exposed to and tested by environmental circumstances that may not be found elsewhere in the range of the species. When a peripheral population is isolated from gene flow from other populations, the isolated peripheral population may become highly adapted to local conditions. Distinctive traits found in peripheral populations can be important for the survival and evolution of a species as a whole (Meffe *et al.* 1997).

Long-term geographic isolation and the loss of gene flow between populations is the foundation for genetic changes in populations resulting from natural selection or chance. Evidence of changes in peripheral populations may include genetic, behavioral and/or morphological differences from populations in the rest of the subspecies' range. Ecological differences were described above, and genetic differences in western gray squirrels are discussed below. We also considered information regarding morphological and behavioral differences in regard to adaptations that may be occurring in the western gray squirrel in Washington.

The secretive behavior of the western gray squirrel in Washington has been frequently noted and might represent an adaptation of a population on the periphery of its range. Bowles (1921) wrote, regarding western gray squirrels in Pierce County, Washington, that "although extremely numerous, we may walk for days in the country they inhabit and never see one." Scheffer (1923) indicated that in the more heavily timbered country in Washington, the gray squirrel was only occasionally seen. Couch (1926) noted that, although western gray squirrels are hard to see, the presence of western gray squirrels in the lower Puget Sound region is evident in the peeled bark of Douglas-fir. Larrison (1970) wrote that western gray squirrels in Washington are "rather shy and do not mix well with civilization," and in the few places

where they have entered settled areas it “keeps hidden from the watcher.” During surveys on McChord AFB, observers noted that western gray squirrels often fled from the presence of the observer (The Nature Conservancy of Washington and Washington Department of Natural Resources (WDNR) 1996). More recently, researchers conducting surveys on Fort Lewis described western gray squirrels as “very wary and challenging to approach and therefore can be difficult for observers to detect” (Bayrakçi *et al.* 2001).

In Oregon, although described as “shy and retiring” in the countryside where they have little human contact, western gray squirrels can be found in urban parks where they are more tolerant of human contact (Susan Weston, *in litt.* 2003). Along the Nevada/California border, western gray squirrels appear to be well-adapted to the urban-forest interface (P. Maholland, pers. comm. 2003) and have been reported as common in the Lake Tahoe basin, especially in the urbanized areas (J.S. Romsos, pers. comm. 2003).

Whether the western gray squirrels in Washington are more secretive than those elsewhere in the range of the subspecies is unclear. Although evidence of shy behavior of the western gray squirrel has long been documented for the Washington population, similar behavior has been documented in Oregon (Susan Weston, *in litt.* 2003). We believe this behavior may be consistent with a species at the edge of its range, where the amount of habitat is restricted by fragmentation and may be less than optimum, and that rather than being “shy,” they are difficult to observe and maintain a close affinity with the habitat that remains. The observation of western gray squirrels in towns in Oregon and Nevada may also be an artifact of there being larger populations of squirrels in this portion of the subspecies’ range. The differences between rural and urban communities may also be less distinct in Oregon and Nevada, with the rural characteristic of large Oregon white oak or ponderosa pine trees or possibly other planted nut trees providing suitable habitat for the squirrels in the urban environment.

Overall, much of the available information on “secretiveness” of the subspecies is anecdotal in nature and there are no comparative studies to determine whether real behavioral differences in secretiveness exist across the range of the subspecies. Even if such differences do exist, the reasons for them are not clear, including whether or how such behavior might be related to the periphery of the range. The

significance of such differences, if they exist, also is unclear.

In evaluating potential differences in the subspecies at the northern extent of its range, we also considered information on morphology and home range size. Body measurements of western gray squirrels in Klickitat County, Washington, were found to be significantly larger than elsewhere in the subspecies’ range (M. Linders, pers. comm. 2003d). This study was conducted in a small area of Klickitat County and results were compared to another study in Washington with a small sample size, and with two California studies. Based on the limited area studies and the small sample size, the results may not be conclusive and applicable for western gray squirrels over their entire range. We also considered information showing that western gray squirrels on the Klickitat Wildlife Area have substantially larger home range sizes when compared with home range estimates elsewhere in the subspecies’ distribution. In this same study, western gray squirrels also used significantly more nests per squirrel than recorded for the subspecies in Oregon (Linders 2000). These results, while interesting, do not explain the reasons for the differences in home range size and numbers of nests. The limited sample size is a confounding factor in interpreting these results. Also, as noted above, differences in methods used to determine home range sizes may be a source of variability in results among studies (Ryan and Carey 1995a). Many factors could account for these differences, and we have no basis for concluding that these results should be attributed to the location of the study area at the northern periphery of the range of the subspecies. Consequently, we do not believe that the information concerning morphology, home range size, or number of nests described for western gray squirrels in Klickitat County provides a justification for a determination of significance under the DPS policy.

The importance of peripheral populations in relation to climate change is a continuing source of discussion and study in the scientific community. Species’ ranges can change dramatically with global shifts in climate. Peripheral populations may survive in isolated refugia that later, with different environmental conditions, serve as a source population for an expanded range and subsequent radiation. What constitutes a peripheral population today could be the center of a species’ range in the future, and consequently peripheral populations are vitally important to a species’ past,

present, and future existence (Nielsen *et al.* 2001).

We have considered the extent to which western gray squirrels in Washington may be significant in relation to climate change. As the result of a climate shift, as occurred in the past when Oregon white oaks moved northward from Oregon, the northern limits of the western gray squirrel range could expand northward as the changing climate again favors Oregon white oak distribution over conifer distributions. At this time there is speculation, but no clear evidence, of the potential role that western gray squirrels in Washington might play in relation to the rest of the subspecies in response to climate change. Similarly, the nature and extent of the effects of climate change on ecological conditions for the western gray squirrel in Washington are not known. Based on the speculative nature of the situation involving the western gray squirrel in relation to climate change, we do not have a basis for concluding that a potential gap in the distribution of western gray squirrels at the northern extent of its range would have evolutionary implications for the subspecies in relation to the potential effects of climate change.

Lastly we consider whether the potential reduction in the range of the subspecies that could occur in the event of the hypothetical loss of the Washington populations, collectively or individually, would meet the significance criterion of the DPS policy. Individually, we do not find that the loss of range that would be represented by the loss of any of the current Washington populations meets the significance criterion of the DPS policy. The limited population information available makes a determination about potential significance particularly difficult, but when viewed individually we do not see the potential reduction in range of each population as reaching significance to the subspecies. Collectively, the loss of all of the Washington populations would represent a serious reduction in the species range. However serious such a hypothetical reduction might be, we do not have information currently that demonstrates this consideration would meet the DPS policy’s requirement of significance to the taxon (subspecies) as a whole, since there is only limited information on the potential biological and ecological significance for Washington in terms of range of the subspecies.

*Whether the Population Represents the Only Surviving Natural Occurrence of the Taxon.* As part of a determination

of significance, our DPS policy suggests that we consider whether there is evidence that the population represents the only surviving natural occurrence of a taxon that may be more abundant elsewhere as an introduced population outside its historic range. The western gray squirrel in Washington is not the only surviving natural occurrence of the subspecies. Consequently, this factor is not applicable to our determination regarding significance.

*Marked Differences in Genetic Characteristics.* The DPS policy suggests that one measure of significance is evidence that the discrete population segment differs markedly from other populations of the subspecies in its genetic characteristics. Preliminary evidence of genetic variation among the three western gray squirrel populations in Washington and two populations in Oregon showed that genetic variability may exist (Parametrix, Inc. 1999). The sample sizes, however, were too small for substantive conclusions (M. Linders, pers. comm. 2003d).

In 2003, researchers from WDFW and the University of Washington completed genetic analyses, using standard conservation genetic research techniques, the results point towards significant genotypic differentiation between Washington populations and squirrel populations south of the Columbia River. The report presents the results of two different types of genetic analyses (microsatellite DNA analysis and mitochondrial control region sequence analyses). The following discussion of the results of the genetic analyses is summarized from Warheit (2003).

#### *Microsatellite DNA Analysis*

Microsatellite DNA analyses were completed on samples from 128 western gray squirrels from California (3), Oregon (24), and Washington (101). Samples were obtained from museum skins, museum tissue collections, road-killed individuals, and ear punches from live-trapped individuals.

Microsatellites are short (no longer than six base pairs (nitrogenous bases that are part of the DNA molecule, such as cytosine and guanine)) tandemly repeated segments interspersed throughout the chromosome. Changes in the repeats result in different lengths of DNA, and a specific length of DNA can be used as a marker for a microsatellite locus (position on the chromosome). Seven of these loci that showed variation were analyzed. The results of the microsatellite analysis was summarized by the genetic diversity (the variation in chromosomes) and the

genetic differentiation (how different genetically are the populations).

#### *Genetic Diversity*

- An allele is a series of two or more different genes that occupy the same position on a chromosome. All populations in Oregon and California showed at least three private alleles (alleles present in only that population), while no Washington population had a private allele. This indicates that while all alleles present in each of the Washington populations are also present in at least one of the Oregon or California populations, there are alleles present in either Oregon or California that are not present in Washington.

- The Washington populations show reduced genetic diversity at all measures compared with populations south of the Columbia River, despite the fact that the mean sample size per locus is larger for each of the Washington populations.

- The reduction in genetic diversity within the Washington populations may be a function of genetic drift, which in turn may be the result of relatively smaller effective population sizes in Washington compared with that in Oregon and California.

#### *Genetic Differentiation*

- There is significant differentiation between each of the Washington populations, and the Oregon and California populations.

- These data support the hypothesis that each of the Washington Western Gray Squirrel populations are genetically distinct from each other, and are now functioning as separate and isolated populations.

- What these analyses demonstrate is that there is considerably more genetic differentiation between Washington and Oregon or California, than there is between Oregon and California populations.

#### *Mitochondrial Control Region Sequence Analyses*

A subset (67) of the same samples from 128 western gray squirrels used in the Microsatellite DNA analyses were used for an additional mitochondrial control region sequence analyses. Mitochondria are structures in the cell, but outside of the nucleus, which contain DNA inherited only from the mother. A 367 basepair portion of the DNA from the control region of mitochondria was sequenced (Warheit 2003).

- The haplotype is the set, made up of one allele of each gene. Haplotypes comprise the genotype (or genetic constitution of an individual or taxon).

They identified only three haplotypes from 40 Washington individuals, compared with 14 haplotypes from 27 Oregon and California individuals, and no haplotype was shared across the Columbia River.

- Genetic differences between populations can also be measured using nucleotide diversity (*i.e.*, average sequence difference). The nucleotide diversity between populations equated to long time intervals since these the Washington and California or Oregon populations diverged (roughly 12,000 to 126,000 years ago).

- Some haplotypes in Washington are more closely related to haplotypes in Oregon than other haplotypes in Washington.

Warheit (2003) summarized the results of these analyses by noting:

this study still requires additional analyses for at least three reasons. First, samples sizes need to be increased for each of the populations south of the Columbia River. Although I do not anticipate that an increase in sample size for each of the Oregon and California will significantly alter the conclusions drawn from the current data set, a greater likelihood and confidence in these conclusions will arise from more samples from Oregon and California. Second, the overall levels of genetic diversity for each of the seven microsatellite markers used in this study are low, and a greater number of microsatellite loci will provide us with a broader survey of the squirrel genome. [T]hird, we need to obtain the control region sequences for the new samples included in the expanded analysis of microsatellites. A more complete set of analyses is needed on the control region data to help understand the historical events that may have produced the phylogeographic patterns drawn from the data (*e.g.*, nested clade analysis).

Despite the preliminary nature of these analyses, the following set of conclusions have been strengthened by the inclusion of a larger sample size from the Fort Lewis and Okanogan Western Gray Squirrel populations:

1. Washington populations of Western gray Squirrels show reduced genetic diversity at both nuclear (microsatellite) and mitochondrial (control region sequences) markers compared with populations from Oregon and California. This reduction in genetic diversity may be the result of genetic drift and relatively smaller effective populations sizes.

2. There is significant genetic differentiation between Washington Western Gray Squirrels, and squirrels from populations south of the Columbia River. Both the microsatellite and sequence data support the hypothesis that the Washington squirrels are a population(s) distinct from those in Oregon and California.

3. There is significant genetic differentiation among the three Washington populations. \* \* \*

Additional and more variable microsatellites should be included in any

subsequent study. It may be advantageous to develop microsatellites specifically for Western Gray Squirrels, rather than adapt microsatellites developed in other species of sciurids.

Thus, the preliminary information from Warheit (2003) suggests that there is genetic differentiation between Washington western gray squirrels, and squirrels from populations south of the Columbia River. We believe that this information supports our contention that western gray squirrel populations in Washington collectively or individually could meet the discreteness criterion of the DPS policy. However, we find that based on the genetic information currently available, the western gray squirrel populations in Washington collectively or individually do not differ markedly from other populations of the subspecies in their genetic characteristics such that they should be considered biologically or ecologically significant based simply on genetic characteristics. Biological and ecological significance under the DPS policy is always considered in light of Congressional guidance (*see* Senate Report 151, 96th Congress, 1st Session) that the authority to list DPS's be used " \* \* \* sparingly" while encouraging the conservation of genetic diversity.

One of the more notable pieces of genetic information in the Washington populations is the lack of genetic diversity. As noted above, this reduction in genetic diversity may be the result of genetic drift and relatively smaller effective population sizes. While there is clearly some genetic information that shows that the Washington populations are different from other populations (*e.g.*, in the microsatellite DNA analyses no haplotype was shared across the Columbia River, also evidence suggests a long time interval since the Washington and California or Oregon populations diverged), at this time we do not believe them to be markedly so. The information we believe counterbalances the differential information is the fact that all alleles present in each of the Washington populations are also present in at least one of the Oregon or California populations, that some haplotypes in Washington are more closely related to haplotypes in Oregon than other haplotypes in Washington, and the fact that the Washington populations of western gray squirrels show reduced genetic diversity at both nuclear (microsatellite) and mitochondrial (control region sequences) markers.

Information on genetics supports the contention that western gray squirrels in Washington have been isolated from other populations for a long period of

time. The results suggest that genetic differences may occur between populations of the western gray squirrel throughout its range. The genetics studies by Warheit (2003) rely on relatively limited sample sizes for some populations,  $n = 3$  for California. Results from the genetics studies may be confounded by the effects of small population size and the consequent inbreeding and genetic drift. The patterns of differentiation that were observed may reflect the negative consequences of isolation, range contraction, and recent significant declines of local populations. To what extent the forces of isolation, genetic drift and/or inbreeding have impacted the western gray squirrel population remaining in Washington is uncertain.

### Conclusion

On the basis of available information, we determined that the Washington populations of the western gray squirrel may be discrete in relation to the remainder of the subspecies' populations. This determination is based on information showing that the populations appear to be geographically separated from, and to have some genetic differences from, other populations to the south in Oregon, California, and Nevada as a result of isolation by the Columbia River. But, pursuant to our DPS policy, this apparent directness does not necessarily mean that the populations in Washington are significant to the remainder of the taxon.

Consequently, following a review of the available information, we conclude that the western gray squirrel populations in Washington are not significant to the remainder of the taxon. We made this determination based on the best available information, which does not demonstrate that (1) these populations persist in ecological settings that are unique for the taxon; (2) the loss of these populations would result in a significant gap in the range of the taxon; and (3) these populations differ markedly from other populations of the subspecies in their genetic characteristics, or in other considerations that might demonstrate significance. Further, the available information does not demonstrate that the life history and behavioral characteristics of these populations in Washington are unique to the subspecies. We acknowledge that, while the precise biological and ecological importance of a discrete population segment is likely to vary from case to case, we were unable to identify any other information that might bear on the

biological and ecological importance of these populations.

### Significant Portion of the Range

Pursuant to the Act and our implementing regulations, a species may warrant listing if it is threatened or endangered in a significant portion of its range. Consequently, we evaluated the three populations in Washington to determine if they collectively constitute a significant portion of the range of the subspecies. In our evaluation we considered whether the geographic extent of the range of the western gray squirrel in Washington is significant relative to the remainder of the subspecies' range. Based on the extent of the range of the western gray squirrel subspecies, from southern California north to Washington as discussed in the Background section of this notice, we do not believe that Washington constitutes a significant portion of the geographic extent of the subspecies, and subsequently the range of the subspecies. Further, the available information regarding the collective abundance of animals in the three populations in Washington does not indicate that the Washington population constitutes a significant portion of the western gray squirrel population rangewide. Consequently, we have determined that the population of the western gray squirrel in Washington does not constitute a significant portion of the subspecies or its range.

### Finding

We have carefully assessed the best scientific and commercial information available regarding the discreteness and significance of the western gray squirrel in Washington. We reviewed the petition, literature cited in the petition, information available in our files, peer-reviewed literature and other published and unpublished literature and information, and information submitted to us during the comment period following our 90-day petition finding. We have consulted with biologists and researchers, including geneticists familiar with the western gray squirrel, and reviewed the status of the western gray squirrel in light of the requirements of our DPS policy. On the basis of the best scientific and commercial information available, we conclude that the populations of western gray squirrel in Washington do not represent a DPS, and are therefore not a listable entity. Our review did indicate that these populations may be discrete from other western gray squirrel populations south of the Columbia River, but under our DPS policy, the Washington populations collectively or individually are not

significant to the remainder of the taxon. This finding is primarily based on the fact that available information does not demonstrate that the Washington populations have marked genetic, ecological, or behavioral differences when compared with the remainder of the subspecies. As such, we find that the petitioned action is not warranted. Further, we have concluded that the three populations in Washington are not significant to the remainder of the taxon, and consequently do not constitute a significant portion of the range of the subspecies.

#### References Cited

A complete list of all references cited in this document and additional references can be requested from the Western Washington Fish and Wildlife Office (*see ADDRESSES* section).

#### Author

This document was prepared by the Western Washington Fish and Wildlife Office (*see ADDRESSES* section).

#### Authority

The authority for this action is the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Dated: May 30, 2003.

**Marshall P. Jones, Jr.,**

*Acting Director, Fish and Wildlife Service.*  
[FR Doc. 03-14354 Filed 6-9-03; 8:45 am]

**BILLING CODE 4310-55-P**

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## DEPARTMENT OF THE INTERIOR

### Fish and Wildlife Service

#### Hanford Reach National Monument Federal Planning Advisory Committee Meetings

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

**ACTION:** Notice of Hanford Reach National Monument Federal Planning Advisory Committee Meetings.

**SUMMARY:** The U.S. Fish and Wildlife Service (Service) is announcing four meetings of the Hanford Reach National Monument (Monument) Federal Planning Advisory Committee (Committee). In the next four meetings, the Committee will continue their work on making recommendations to the Service and the Department of Energy (DOE) on the preparation of a Comprehensive Conservation Plan and associated Environmental Impact Statement (CCP/EIS) which will serve as a long-term management plan for the Hanford Reach National Monument.

The Committee is focusing on advice that identifies and reconciles land management issues while meeting the directives of Presidential Proclamation 7319 that established the Monument.

**DATES:** The Committee has scheduled the following meetings:

1. Tuesday, June 24, 2003, 12:30 p.m. to 4:30 p.m., Richland, WA.
2. Thursday, August 7, 2003, 12:30 p.m. to 4:30 p.m., Richland, WA.
3. Thursday, September 25, 2003, 12:30 p.m. to 4:30 p.m., Richland, WA.
4. Thursday, December 4, 2003, 12:30 p.m. to 4:30 p.m., Richland, WA.

**ADDRESSES:** The meeting locations are:

1. Washington State University Tri-Cities Consolidated Information Center, 2770 University Drive, Rooms 120 and 120 A, Richland, WA.
2. Washington State University Tri-Cities Consolidated Information Center, 2770 University Drive, Rooms 210, 212 and 214, Richland, WA.
3. Washington State University Tri-Cities Consolidated Information Center, 2770 University Drive, Rooms 120 and 120 A, Richland, WA.
4. Washington State University Tri-Cities Consolidated Information Center, 2770 University Drive, Rooms 120 and 120 A, Richland, WA.

Any member of the public wishing to submit written comments should send those to Mr. Greg Hughes, Designated Federal Official for the Hanford Reach National Monument Federal Planning Advisory Committee, Hanford Reach National Monument/Saddle Mountain National Wildlife Refuge, 3250 Port of Benton Blvd., Richland, WA 99352; fax (509) 375-0196. Copies of the draft meeting agenda can be obtained from the Designated Federal Official. Comments may be submitted via e-mail to [hanfordreach@fws.gov](mailto:hanfordreach@fws.gov).

**FOR FURTHER INFORMATION CONTACT:** Any member of the public wishing further information concerning the meeting should contact Mr. Greg Hughes, Designated Federal Official for the Hanford Reach National Monument Federal Planning Advisory Committee; phone (509) 371-1801, fax (509) 375-0196.

**SUPPLEMENTARY INFORMATION:** Verbal comments will be considered during the course of the meeting and written comments will be accepted at the close of the meeting. Comments may also be submitted via e-mail or mail to the Monument office addresses above. The meetings are open to the public. Over the next several months, the Committee will receive information from Planning Workshops and present advice to the Service and Department of Energy on draft products from those Workshops

that will be considered in the CCP/EIS. The Committee will also nominate and elect a chair and vice-chair.

Dated: May 29, 2003.

**David J. Wesley,**

*Deputy Regional Director.*

[FR Doc. 03-14668 Filed 6-9-03; 8:45 am]

**BILLING CODE 4310-55-P**

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## DEPARTMENT OF THE INTERIOR

### Bureau of Indian Affairs

#### Proposed Renewal of Loan Guaranty, Insurance, and Interest Subsidy, Request for Comments

**AGENCY:** Bureau of Indian Affairs, Interior.

**ACTION:** Notice of renewal of information collection.

**SUMMARY:** The Bureau of Indian Affairs (BIA) is seeking comments on the collection of information necessary for utilization of the Loan Guaranty, Insurance, and Interest Subsidy Program. This is necessary to continue the use of forms for this program approved by the Office of Management and Budget under the Paperwork Reduction Act of 1995. The public will have the opportunity to comment on the time and expense required by these forms to access the program.

**DATES:** Submit comments on or before August 11, 2003.

**ADDRESSES:** Send comments to Ray Brown, Acting Director, Office of Economic Development, Bureau of Indian Affairs, Department of the Interior, 1849 C St., NW., Mail Stop 2412-MIB, Washington, DC 20240; or hand deliver them to Room 2412 at the above address. We cannot use e-mail but you may comment by telefacsimile at (202) 208-7419.

**FOR FURTHER INFORMATION CONTACT:** David B. Johnson, Division of Indian Affairs, Office of the Solicitor, (202) 208-340.

**SUPPLEMENTARY INFORMATION:** The Loan Guaranty, Insurance, and Interest Subsidy Program (Program) was established in the Act of April 12, 1974, as amended, 88 Stat. 79, 25 U.S.C. 1481 *et seq.* and 25 U.S.C. 1511 *et seq.* The Program has existed since 1974 and the regulations implementing it have existed since 1975, with significant revision in 2001. It is necessary to collect information from users of this program in order to determine eligibility and credit worthiness of respondents.

*Request for Comments:* The Bureau of Indian Affairs requests your comments on this collection concerning: