

**FINDINGS AND RECOMMENDATIONS
FOR ISSUANCE OF SECTION 10(a)(1)(A) ENHANCEMENT OF SURVIVAL PERMITS
(TE082923-0,TE082922-0,TE034590-0, and TE082920-0)
ASSOCIATED WITH THE
THREEMILE CANYON FARMS MULTI-SPECIES
CANDIDATE CONSERVATION AGREEMENT WITH ASSURANCES**

I. DESCRIPTION OF THE PROPOSED ACTION

The Fish and Wildlife Service (Service) proposes to issue enhancement of survival permits to Threemile Canyon Farms, LLC, Portland General Electric (PGE), The Nature Conservancy (TNC), and the Oregon Department of Fish and Wildlife (ODFW) under the authority of section 10(a)(1)(A) and section 10(a)(2) of the Endangered Species Act (ESA), as amended, and the Services Final Policy for Candidate Conservation Agreements with Assurances (64 FR 32726, June 17, 1999). The permits would be in effect for a period of 25 years. Documents used in the preparation of this statement of Findings and Recommendations include the Threemile Canyon Farms Multi-species Candidate Conservation Agreement with Assurances (MSCCAA) (Threemile Canyon Farms *et al.* 2003), associated environmental assessment (EA) and finding of no significant impact (FONSI) (Fish and Wildlife Service 2003a), and the Service's conference opinion on the permit applications (Fish and Wildlife Service 2003b). All of these documents are incorporated by reference as described in 40 CFR § 1508.13.

Under the permits, Threemile Canyon Farms, PGE, TNC, and the ODFW (collectively referred to as the Permittees) would receive incidental take authorization for certain covered activities as identified in the MSCCAA. The Permittees are requesting coverage under the permits for the following four non-listed species should they become listed during the term of the permits: the Washington ground squirrel (*Spermophilus washingtoni*); ferruginous hawk (*Buteo regalis*); loggerhead shrike (*Lanius ludovicianus gambeli*); and sage sparrow (*Amphispiza belli*) (Covered Species).

Actions conducted under the MSCCAA will comply with the provisions of the Migratory Bird Treaty Act (MBTA) with avoidance measures for actions affecting MBTA Covered Species, which include the ferruginous hawk, loggerhead shrike, and sage sparrow. The MBTA prohibits the killing or possessing of migratory birds and identifies a variety of prohibited actions including the taking of individual birds, young, feathers, eggs, nests, etc. There are currently no MBTA Covered Species that are subject to a Special Purpose Permit at this time. Should any of the MBTA Covered Species become listed under the ESA during the life of the Permits, the Permits would also constitute an MBTA Special Purpose Permit for that species for a three-year term as specified under 50 CFR § 21.27 subject to renewal by the Permittees.

The Permits would authorize for a period of 25 years the incidental take of Covered Species associated with certain farm operations, habitat management, and other conservation measures on a total of approximately 93,000 acres. There are currently about 35,000 center pivot-irrigated farm acres, with another 2,560 acres scheduled to be developed. There are approximately 9,500

acres in-between the irrigated crop circles that have mostly been disturbed, with 1,000 of those acres planted with native grasses. An additional 3,400 acres on Threemile Canyon Farms have been developed for offices, crop processing, dairy operations, food storage, roads, and other infrastructure. The Boeing Company continues to hold a lease on approximately 2,700 acres within the borders of Threemile Canyon Farms in the area known as the radar range. This lease is set to expire in the year 2040. Conversion of parts of this research area to agriculture may occur prior to the year 2040 if Boeing relinquishes its rights under lease. The primary mitigation for the impacts of take resulting from the farm, the operation of PGE's coal-fired power plant, and other land management activities is the establishment of managed conservation areas. Threemile Canyon Farms has established a 22,600 acre conservation area that will be permanently set aside and is currently managed for this purpose by TNC. This conservation area will require intensive management to restore native vegetation that has been displaced by non-native weed species. Threemile Canyon Farms will also be providing up to \$130,000 annually to the manager of the 22,600 acre conservation area based upon the level of management activities that occur. This amount will be adjusted for inflation over the term of the MSCCAA. PGE has set aside a conservation area of 880 acres for the duration of the agreement. In addition, Threemile Canyon Farms has established a 250-foot buffer area between its conservation area and agricultural activities within its development area. This linear buffer area amounts to about 550 acres. The MSCCAA also includes minimization measures to reduce impacts on the Covered Species and their habitats resulting from covered activities.

Types of Covered Activities

Activities proposed to be covered under the Permits are the otherwise lawful activities which are described in detail in Chapter 6 of the MSCCAA. The following is a brief summary. The covered activities generally include agricultural-related actions on the developed farm area, habitat management actions on the conservation areas, maintenance and operation of the power generation facilities of PGE's coal-fired power plant, and habitat management on PGE's conservation area. The Permittees are seeking coverage over a contiguous area of 93,000 acres, although much of that area is not suitable habitat or would not be subject to activities that would result in incidental take of the Covered Species. The Permit's coverage would include activities on the existing approximately 35,000 acres of irrigated crops; about 4,000 acres of other farm-related facilities including the dairy operations, buildings, parking areas, etc.; the conversion of 2,560 acres of shrub-steppe vegetation to irrigated farmland; the potential conversion of some portion of the Boeing radar range which is currently under lease by Boeing until the year 2040; and, other development activities on the remaining approximately 26,000 acres of undeveloped land that is largely located in Threemile Canyon, Sixmile Canyon, Willow Creek Canyon, and the northern sections of the farm property, adjacent to Interstate 84. PGE owns and controls 3,520 acres within the covered area, which includes a small portion of the 1,400 acre Carty Reservoir that serves as a cooling and storage reservoir. However, PGE is responsible for management of the reservoir. The primary land-use change by PGE that may affect habitat of the Covered Species is the expansion of the ash-disposal area up to a maximum of 220 acres, which will occur 40 acres at a time, as needed. In addition, PGE seeks coverage for existing coal storage and handling facilities. TNC is seeking coverage for potential impacts associated with habitat management activities, biological monitoring, fire suppression, pedestrian access, and fence maintenance.

Relationship of Plan to Section 7 Consultations

Private or public actions that are covered activities under the MSCCAA may also be subject to separate section 7 review if those actions are authorized, funded, or carried out by Federal agencies. Incidental take coverage for the Federal action agency will be granted through the incidental take statement issued with the Service's section 7 biological opinion. Incidental take of listed species for covered activities carried out by the Permittees will be granted under the section 10 permits and will be subject to the take minimization, mitigation, and avoidance measures provided for under the MSCCAA.

Threemile Canyon Farms' wholly-owned subsidiary, Boeing Agri-Industrial Company (BAIC), Inc., received a permit from the U.S. Army Corps of Engineers (COE) to dredge the two existing irrigation pump stations in the Willow Creek Arm of the Columbia River that supply the farm with the majority of its irrigation water. Prior to issuing the dredging permit the COE consulted with the National Oceanographic and Atmospheric Association (NOAA) under section 7 of the ESA on potential impacts to federally-listed Snake River fall-run chinook salmon (*Oncorhynchus tshawytscha*), spring/summer-run chinook salmon, Upper Columbia River spring-run chinook salmon, Snake River sockeye salmon (*O. nerka*), Upper Columbia River steelhead (*O. mykiss*), Snake River steelhead, and Middle Columbia River steelhead, and their respective designated critical habitats. On April 26, 2002, NOAA issued a non-jeopardy biological opinion to the COE on the dredge permit. NOAA had previously sent a letter to the COE and BAIC, Inc., stating that continued operation of the pump stations at a maximum rate of 480 cfs or less pending completion of consultation on the effects of pumping is not likely prohibited by the ESA.

Term of the Permits

The permits and MSCCAA would be in effect for a period of 25 years. In accordance with 50 CFR § 17.22(d)(8), we believe the duration of the permit is sufficient to achieve conservation benefits that, when combined with those benefits that would be achieved if it is assumed that the conservation measures would also be implemented on other necessary properties, would preclude the need to list the species covered by the MSCCAA.

Background of Agreement

On July 2, 1963, the State of Oregon entered into an agreement with the Boeing Company to lease an approximately 93,000-acre tract of land, identified on Figures 1 and 2 of the MSCCAA, in north central Oregon for a term of 77 years. On January 1, 1973, the Boeing Company, with the consent of the State of Oregon, assigned all of its rights and duties under the lease to BAIC. In May 2000, the R.D. Offutt Company Northwest (RDO) purchased BAIC and renamed the company BAIC, Inc. Finally, in July 2000, RDO assigned its leasehold interests in the land to Threemile Canyon Farms.

As part of the efforts to further develop the property, various Federal and state permits relating to water development and use were applied for and received by The Boeing Company, BAIC, and

various subtenants between the 1970s and the late 1990s. In the course of developing the property and planning for its future use, BAIC and others sought various additional water right transfers, permits, licenses, and extensions.

Beginning in 1999, environmental organizations, including WaterWatch and Oregon Trout, initiated a series of administrative protests and judicial challenges to these permits under the ESA, Clean Water Act, and state water laws. On January 15, 1999, environmental organizations, including the Northwest Environmental Defense Center, Defenders of Wildlife, and the Oregon Natural Desert Association, filed a petition for emergency listing of the Washington ground squirrel under the Oregon ESA. In June 1999, WaterWatch, Defenders of Wildlife, Northwest Environmental Defense Center, Oregon Trout, Trout Unlimited, Idaho Rivers United, and Oregon Natural Desert Association, and a private individual, Ted Hallock, filed suit against the COE over water withdrawals proposed by Threemile Canyon Farms from the Willow Creek arm of the Columbia River. On January 21, 2000, the Oregon Fish and Wildlife Commission listed the Washington ground squirrel as endangered and adopted survival guidelines, which only pertain to state lands, effective February 14, 2000. On February 29, 2000, environmental organizations submitted a petition to the Service for an emergency listing of the Washington ground squirrel under the ESA. The Service had designated the Washington ground squirrel a candidate species on October 25, 1999.

In late 1999, principal BAIC representatives joined with several environmental organizations to discuss, negotiate, and construct a comprehensive settlement agreement that would allow development and utilization of portions of the property and associated water resources in a manner that preserves the ecological integrity of areas with high conservation values and specifically protects the Washington ground squirrel as well as other species.

A settlement agreement and associated agreement for the creation of a conservation area (collectively referred to as settlement agreement herein) were signed in December of 2000 by BAIC and the conservation parties. The settlement agreement provided for a conservation plan that would be consistent with section 10 of the ESA. During the preparation of the conservation plan, the Service and participating parties determined that a candidate conservation agreement with assurances under section 10 of the ESA would be an appropriate vehicle to implement conservation planning. The agreement resulted in the implementation of several conservation measures and commitments which are included within the MSCCAA, specifically:

- purchasing the leased property of 93,000 acres from the State of Oregon
- dedicating 22,600 acres as Conservation Areas
- managing the 22,600-acre Conservation Areas under a sublease with TNC to initiate conservation measures and develop baseline inventories
- protecting the 22,600-acre Conservation Areas under conservation easements
- funding for conservation efforts
- immediately implementing fire management measures to complement conservation objectives

Threemile Canyon Farms purchased the property from the state of Oregon in November 2002 but the state (through ODFW as the holder) retained a conservation easement (see appendix D of the

MSCCAA) on the 22,600 acre conservation area. This conservation easement calls for conservation of the native shrub-steppe habitat and wildlife species, protection and management of ecological values, providing for recovery of native species, and preservation of, and controlled public access to, the historic Oregon Trail. The conservation easement also requires a written conservation plan to be approved by ODFW or the approval of a candidate conservation agreement with assurances by the Service.

PGE owns and controls 3,520 acres within the boundaries of the Farm's property as described in Appendix A of the MSCCAA. This area is referred to as the PGE-Boardman Plant. PGE leases another 200 acres from Threemile Canyon Farms for plant-related equipment and operation. In addition, PGE has existing easements from Threemile Canyon Farms and additional transmission lines on lands under the control of Threemile Canyon Farms. PGE leases 580 acres of their property to Threemile Canyon Farms for agricultural production. On its Boardman Plant property, PGE operates the Boardman Coal Plant, which is the largest power plant owned and operated by PGE and is the only coal-fired power plant in Oregon. The Boardman Coal Plant has been producing electricity commercially since 1980. Adjacent to the power plant is the 1,400-acre Carty Reservoir, which provides water critical for power plant condenser cooling as well as storage for agricultural irrigation. PGE is responsible for Carty Reservoir operations.

Conservation Strategy

The overall goal for the MSCCAA is to conserve and restore the Columbia Basin shrub-steppe and grassland ecosystems within the conservation areas. Management activities will be focused on four native vegetation communities: grassland, sagebrush-steppe, bitterbrush, and western juniper. These vegetation communities are utilized to varying degrees by the four Covered Species. Management goals include controlling and minimizing the spread of weeds, minimizing the adverse effects of wildfire, revegetating areas with native species, and maintaining or increasing the numbers and distribution of the Covered Species.

A total of 22,600 acres within Threemile Canyon Farms has been designated as Farm Conservation Areas. As part of Threemile Canyon Farm's conservation planning and commitments relating to the MSCCAA and the provisions of the sale of the property by the state of Oregon, these areas are subject to a permanent conservation easement held by ODFW. The conservation easement will ensure the permanent protection of the Farm Conservation Areas.

Threemile Canyon Farms will create and maintain a 250-foot buffer zone separating the Farm Conservation Areas from farm activities. There will be no development within the buffer zones; however, vehicle access and emergency fire control and suppression activities are allowed. Threemile Canyon Farms will continue to control weeds within the buffer zone.

TNC entered into a lease with Threemile Canyon Farms over the Farm Conservation Area as an interim protection measure in January 2001. The lease authorizes TNC to use the Farm Conservation Area for survey and scientific purposes, consistent with the settlement/conservation agreement. The MSCCAA includes additional, more specific conservation commitments by Threemile Canyon Farms in cooperation with TNC and ODFW. Threemile Canyon Farms will fund TNC's management activities within the Farm Conservation

Areas up to a maximum of \$130,000 (indexed for inflation) annually. TNC's actual costs will determine the specific level of annual funding up to the maximum \$130,000, and will continue until an endowment is in place to meet annual funding needs. Alternatively, Threemile Canyon Farms is committed to fund up to a maximum of \$2,500,000 (dependent upon the sale price) for the endowment from the proceeds of the sale of the Conservation Areas for long-term funding security.

Threemile Canyon Farms has first response responsibility for controlling and suppressing wildfire on the Farm Conservation Areas and the undeveloped portions of the Farm. Threemile Canyon Farms will implement fire control and suppression measures according to the Wildfire Response Plan, which is included as Appendix I in the MSCCAA. The Wildfire Response Plan was developed in association with TNC. Fire control and suppression measures will benefit most species by protecting large shrub patches, nesting trees, and native grasses, while minimizing the potential for invasion of cheatgrass (*Bromus tectorum*), yellow starthistle (*Centaurea solstitialis*), Russian knapweed (*Acroptilon repens*), diffuse knapweed (*Centaurea diffusa*), medusahead rye (*Taeniatherum caput-medusae*) and other noxious weed species.

Subject to the terms of the existing grazing lease agreement with a private party that expires at the end of June 2005, Threemile Canyon Farms will not allow grazing on the undeveloped portions of the farm and the Conservation Areas between May 15 and November 1 beginning in 2003. This timeframe for grazing was suggested by ODFW because it helps to minimize impacts to native vegetation. In addition, Threemile Canyon Farms will coordinate between the grazing lessee, TNC, and the Service to recommend sound grazing practices on the Farm Conservation Areas. Changes may result in improvements in the control of non-native species, reduction of the risk of wildfire, minimization of disturbance to native habitats and Covered Species associated with access, and fence maintenance activities required to manage livestock on the Farm Conservation Areas. Once the grazing lease on the Conservation Areas is terminated in 2005, grazing will only be allowed if it is shown to have a net positive benefit to the Covered Species. The timing and location of grazing would be tailored to maximize benefits and minimize impacts to the Covered Species.

PGE has designated an 880-acre conservation area within its Boardman Plant property boundaries. This area is illustrated in Figure 2 of the MSCCAA. The PGE Conservation Area is adjacent to the Farm Conservation Area and increases the amount of area managed as native habitat for all of the Covered Species. PGE will develop a management plan for the PGE Conservation Area within the first six months of the Agreement. The management plan will identify the various specific management actions PGE will implement on their Conservation Area to fulfill the goals and objectives of the MSCCAA. The plan will emphasize adaptive management.

The PGE Conservation Area has a long history of previous livestock grazing. When grazing is permitted, PGE Environmental Services staff will coordinate with the Service and use professional judgment to determine the actual length of the grazing period and number of livestock permitted. Much of the PGE Conservation Area is dominated by relatively healthy stands of native grasses, including western needle-and-thread grass (*Hesperostipa comata*), Sandberg's bluegrass (*Poa sandbergii*), and bluebunch wheatgrass (*Pseudoroegneria spicata*).

However, non-native cheatgrass is also present. Antelope bitterbrush (*Purshia tridentata*), big sagebrush (*Artemisia tridentata* spp. *tridentata*), and gray rabbitbrush (*Chrysothamnus nauseosus*) occur as scattered populations throughout the area. Designation of this area for conservation purposes protects Washington ground squirrels that have been observed in the area. PGE will actively manage their Conservation Area to maintain and protect the native grassland, and also promote the establishment, growth, and expansion of bitterbrush and sagebrush in areas where these shrub species would naturally occur. A portion of the PGE Conservation Area is downwind of the Plant's coal yard; however, most of the fugitive coal dust deposition occurs within approximately 2,500 feet of the coal yard, with very little reaching the designated PGE Conservation Area. Researchers monitoring the effects of coal dust on vascular plants, mosses, and lichens within the actual deposition zone mentioned above have detected very little impact on the frequency, cover, and growth characteristics of vascular plants.

PGE will implement an expanded weed management program to control the establishment and spread of noxious weeds throughout its Boardman Plant property, with an emphasis on the PGE Conservation Area. Weed control in the past has focused entirely on controlling the spread of yellow starthistle. This program will be broadened to include an integrated approach to pest management. The new program will address more than one weed species, employ a range of control measures, and promote preventative practices.

PGE will implement measures to protect habitats on the PGE Conservation Area from damaging range fires. These measures will be identified by a Boardman Plant Wildfire Management Response Plan (see Appendix J in the MSCCAA). Fire control measures will benefit most species by protecting large shrub patches, nesting trees, and native grasses, while minimizing the potential for invasion of cheatgrass and other noxious plant species.

Portions of the designated by-product disposal area south of Carty Reservoir will be developed incrementally and only as needed, rather than all at once. Landfill sites will be kept to approximately 40 acres in size. Once a landfill has reached its full capacity, it will be decommissioned. This will involve covering the site with at least 24 inches of soil and planting vegetation. When it becomes necessary to decommission a landfill, PGE will meet with the Service, ODFW, and TNC to develop a revegetation plan. If PGE eventually develops the by-product disposal area east of the coal yard, a 250-foot buffer will be maintained between the disposal area and the PGE Conservation Area.

ODFW will assist with conducting surveys for the Covered Species and monitoring their status and distribution within the Threemile Canyon Farms' and PGE's Conservation Areas. They will assist with monitoring reports as necessary. ODFW will also be responsible for managing any hunting that might be allowed on the Conservation Areas provided that hunting activities are not detrimental to the Covered Species or their habitats.

Monitoring and Reporting

A complete listing of monitoring and reporting provisions for the Permittees is located in Section 13 of the MSCCAA. The following is a brief summary.

Threemile Canyon Farms will prepare an annual monitoring report. The farm will document all activities that may impact the Covered Species in the 250-foot buffer zone separating the Farm Conservation Areas from farm activities. The farm will document financial contributions to TNC. The farm will document wildfires, including control and response measures. The farm will notify the Service at least 30-days prior to any likely incidental take of Covered Species.

TNC will prepare an annual monitoring report that will include descriptions of plant community maintenance and restoration efforts. TNC will implement fire control measures and coordinate with the farm to report on fire management activities. Vegetation on the Farm Conservation Area will be remapped at least every eight years, or more frequently in areas receiving experimental treatments and/or where large habitat modifying events such as fire occur. The four Covered Species will be monitored to detect changes in distribution and abundance. The Washington ground squirrel will be censused every two to five years, the ferruginous hawk every three years, the loggerhead shrike every five years, and the sage sparrow every three years, or more frequently following major habitat modifying events such as wildfire. ODFW may assist in these surveys.

PGE will provide an annual monitoring report for activities on their properties or areas they control. They will document activities that occurred within their Conservation Area and known impacts to Covered Species. PGE will submit an annual report documenting noxious weed control and any grazing activities that take place. PGE will document fires, including control and response measures. They will notify the Service at least 30 days prior to any incidental take of Covered Species that may occur in areas outside of their Conservation Area. PGE will conduct monthly raptor surveys along established transects and monitor the breeding outcome of known nests. They will conduct breeding bird counts in April, May, and June using the point-count method. PGE will conduct presence/absence surveys for Washington ground squirrels on an every-other-year basis on their conservation area. They will also conduct vegetation community mapping once every eight years, or two years following a fire.

ODFW will provide TNC with documentation of methods to manage hunting and minimize potential impacts to the Covered Species, if hunting is deemed consistent with the conservation objectives of the Farm Conservation Area.

Species to be Covered Under the Conservation Agreement

The Washington ground squirrel is currently designated as a candidate species under the ESA and is an endangered species under the Oregon Endangered Species Act. The Washington ground squirrel has a very limited distribution in Oregon that is centered upon Threemile Canyon Farms and the adjacent Naval Bombing Range. The ferruginous hawk is a species of concern and an Oregon state-sensitive species. While the ferruginous hawk is still fairly common in Oregon, they were likely more abundant in the early 1900s. The loss of shrub-steppe and grassland communities and suitable nest trees has likely contributed to their lower densities. The loggerhead shrike and sage sparrow are Oregon state-sensitive species. The loggerhead shrike within the Interior Columbia Basin has declined about 2.7 percent annually based upon Breeding Bird Survey (BBS) data between 1968 and 1994. Sage sparrow population estimates indicate a 2.5 percent increase in Oregon populations between 1966 and 1999 based upon BBS data. While

local population trend estimates are not available, sage sparrows are closely associated with shrub-steppe habitat which has declined within the area around Threemile Canyon Farms. The local dependence of the Covered Species on shrub-steppe and grassland communities, the declines of these community types in the region, and the existence of a large block of these habitat types within Threemile Canyon Farms, made them appropriate species to be covered by the MSCCAA. Refer to Appendix G of the MSCCAA for more background information on the status and threats of the Covered Species.

Threats Analysis in Making a Listing Determination

Threats to the Covered Species include: habitat deterioration and fragmentation, direct killing from shooting, trapping or poisoning, predation, competition with other ground squirrels, and inadequacy of existing regulatory mechanisms. As identified in the Service's Candidate Conservation Agreement with Assurances Final Policy (64 *FR* 32726, June 17, 1999), the Service must determine that the conservation measures and the expected benefits, when combined with those benefits that would be achieved if it is assumed that similar conservation measures were also implemented on other necessary properties, would preclude or remove the need to list the Covered Species.

When making a decision to list a species under the ESA, the Service is required to determine whether the species is threatened by any of the following factors: 1) the present or threatened destruction, modification, or curtailment of its habitat or range, 2) overutilization for commercial, recreational, scientific, or educational purposes, 3) disease or predation, 4) the inadequacy of existing regulatory mechanisms, or 5) other natural or manmade factors affecting the species continued existence.

Present or Threatened Destruction, Modification, or Curtailment of Habitat or Range

Washington ground squirrel

Agricultural conversion of shrub-steppe habitat is the primary cause of the decline of the Washington ground squirrel. They seldom construct burrows in areas of heavily disturbed soils, such as areas affected by plowing, discing, or other activities associated with soil preparation for crop production. While conversion to annual crops can eliminate habitat entirely, intensive grazing can reduce available cover and forage. In addition to such direct impacts, agricultural and other development has led to fragmentation of habitat and isolation of colonies. Continued agricultural conversion further fragments suitable habitat and isolates otherwise healthy populations, which increases the vulnerability to extinction of squirrel colonies depending on their size, isolation, and adjacent land use. The species has disappeared from 74 percent of the certain study sites previously visited in Washington and 77 percent of the sites previously visited in Oregon.

Ferruginous hawk

Habitat loss and degradation are key factors in the decline of the ferruginous hawk's range. Specifically, the conversion of native habitat to monotypic stands for grazing and agriculture can decrease ferruginous hawk density and reproductive success due to decreased prey, fewer nest

sites, and increased nest disturbance. Nest sites are lost from the cutting of mature trees and grazing (or trampling) of potential nesting trees.

Loggerhead shrike

In a 2000 status assessment for loggerhead shrikes, Oregon natural resource managers indicated habitat loss as the most important factor in the decline of Oregon populations. Habitat loss is attributed primarily to the conversion of native vegetation to agricultural use, and the introduction of exotic forbs and annual grasses. Conversion to non-native species is exacerbated by the susceptibility of annuals to increased frequency of wildfire and improper grazing practices.

Sage sparrow

Observed population declines are attributed to loss of sagebrush habitat quality and quantity because sage sparrows are dependent upon these communities. Declines in sage sparrow habitat are moderately high (40 percent) in the Columbia Plateau and within the interior Columbia Basin, over 48 percent of watersheds show moderately or strongly declining trends in source habitats for sage sparrows. Grazing can have an adverse effect on sage sparrow habitat because it decreases the amount of shrubby vegetation and prompts the invasion of exotic weeds.

Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

Washington ground squirrel

Washington ground squirrels, as well as most other ground squirrels in the area are targets for recreational shooting. Specialized equipment is used to shoot the ground squirrels at great distances such that many can be shot from a single location. Ranchers who believe their might be a potential loss of forage or the potential for cattle to trip on burrows will allow persons onto their property to shoot ground squirrels.

This factor is not known to significantly affect the ferruginous hawk, loggerhead shrike, or sage sparrow.

Disease or Predation

Washington ground squirrel

Predation appears to be a major source of mortality for Washington ground squirrels. Badgers (*Taxidea taxus*) appear to be a significant predator and are a particular threat to small, isolated colonies and may cause local extirpations. Long-tailed weasels (*Mustela frenata*) are frequently observed near colonies and have been observed hunting and feeding on Washington ground squirrels. Other observed predators include: northern harriers (*Circus cyaneus*), golden eagles (*Aquila chrysaetos*), red-tailed hawks (*Buteo jamaicensis*), Swainson's hawks (*Buteo swainsoni*), ferruginous hawks, prairie falcons, (*Falco mexicanus*), rough-legged hawks (*Buteo lagopus*), short-eared owls (*Asio flammeus*), gopher snakes (*Pituophis melanoleucus*), and western rattlesnakes.

Ectoparasites (fleas, mites, etc.) are frequently observed on captured individuals but seldom appear to be problematic (Carlson et al. 1980; Sherman 1999, 2000). Townsend's ground

squirrels (*Spermophilus townsendii*) were seriously reduced by an outbreak of sylvatic plague in Washington in 1936. Fleas found on Washington ground squirrels were tested for sylvatic plague, known to affect other related ground squirrels, but none have tested positive. Sylvatic plague is a continuing threat and could be devastating to the species.

Ferruginous hawk

This factor is not known to significantly affect the ferruginous hawk at this time.

Loggerhead shrike

Predation is considered a leading cause of nest failure in many populations. However, predation seems to be a more significant threat in wintering populations. The covered area is primarily used in the spring and summer for breeding and development of young. Habitat fragmentation and linear habitats can increase the threat of predation by making shrikes more susceptible and noticeable to predators. This is especially true for populations that may nest in shrubs along the fences of roadsides. Inclement weather can also increase predation by causing shrikes to move from more suitable habitat to areas where they are more prone to predation. Loggerhead shrike predators include feral cats, coyotes, badgers, sharp-shinned hawks, common ravens, black-billed magpies, gopher snakes, western rattlesnakes, least chipmunks, and Townsend's ground squirrels.

Sage sparrow

Sage sparrows are vulnerable to nest predation, and it is a major cause of nest mortality at the nestling stage. Nest predation can strongly reduce reproductive success and threaten population persistence. Predation plays a large role in reducing reproductive sage sparrow success in shrub-steppe habitats during high densities of Townsend's ground squirrels. Nest predation is exacerbated by habitat fragmentation and degradation. Anything resulting in increased predation pressure is a threat that can result in low sage sparrow productivity, thereby threatening the long-term viability of this species.

Inadequacy of Existing Regulatory Mechanisms

Washington ground squirrel

The species is often viewed as an agricultural pest such that in addition to recreational shooting, poisoning is commonly used to attempt to eradicate the ground squirrels. As late as 1999, the Oregon Department of Agriculture received applications to apply pesticides to reduce Washington ground squirrel predation on crops. Other rodent species occur within and adjacent to the range of the Washington ground squirrel that are also considered agricultural and residential pests and are targeted with pesticides that could incidentally impact Washington ground squirrels.

The ferruginous hawk, loggerhead shrike, sage sparrow receive no additional protection on private land in Oregon other than the take prohibitions under the Migratory Bird Treaty which are significant, but generally do not protect their habitat when the species are not present.

Other Natural or Manmade Factors Affecting the Species Continued Existence

Washington ground squirrel

We have not identified other factors affecting the Washington ground squirrel at this time.

Ferruginous hawk

Studies of ferruginous hawk population trends indicate the fluctuation in population correlates with prey availability, especially jackrabbits and ground squirrels. In north-central Oregon, one of their primary prey species is the Washington ground squirrel. Recreational shooting and poisoning of ground squirrels or other potential prey species can therefore have adverse impacts on ferruginous hawk populations. There may also be secondary poisoning if a ferruginous hawk were to eat a prey item that has ingested a pesticide that is also toxic to the hawk.

Loggerhead shrike

Pesticides as a potential factor for decline, second to habitat loss. Oregon did not specify pesticides as a potential threat (USFWS 2000). However, data is still inconclusive. The direct impacts of pesticides on adults and juveniles have been observed. However, the use of pesticides may also affect the availability of insect, rodent, and avian prey species. Collisions with vehicles and man-made objects are also a threat to shrike populations. There is a higher frequency of road-kills for shrikes compared to other species, especially where habitat is limited to roadsides. Loggerhead shrikes are known to perch on utility poles and power lines and fly just above the ground between the perches (over the road) when foraging. They forage for insects on road surfaces, picking up insects killed by cars at night.

Sage sparrow

We have not identified other factors affecting the sage sparrow at this time.

Changes Made Between Draft and Final Conservation Agreement

Very few changes have been made to the final version of the MSCCAA. In addition to the correction of some typographical errors that did not change the content or meaning of the agreement, the following changes were made.

Language was added that clarified the coverage for the Threemile Canyon Farms' non-affiliated subtenants with amended subleases. Changes occurred on page vii revising the definition of "Permittees"; the word "subtenants" was added to the heading of section 6.1; added "or subtenants" to page 39; added language to section 7.1.2 to address commitments and coverage for subsidiaries and subleases; and, added "subtenants" to section 9.1.1 on page 67.

The phrase "on the Farm Conservation Areas" was added to sections 7.2.1.4 and 7.2.1.5 on pages 57-58, and section 13.1.2 on page 84 for purposes of consistency.

Language was added to sections 7.6.2 on page 63, and section 11 on page 81, to clarify that the Permittees will be treated individually should they no longer receive permit coverage (e.g., permit revocation or cancellation), and that the permits for the remaining Permittees would not be affected.

Section 7.6.7 was modified and language added to clarify the rights of successors and assigns.

In Table 4, "Threemile Canyon Farms Agricultural Areas" was changed to "Threemile Canyon Farms Development Areas".

II. PUBLIC COMMENT

A notice of availability of the Threemile Canyon Farms MSCCAA and draft environmental assessment was published in the Federal Register on August 27, 2003 (see 68 *FR* 51589). Public comments on the permit applications, the proposed MSCCAA, and the draft environmental assessment were requested by October 14, 2003. Three comments letters and 857 electronic mails were received. All of the electronic mails were similar and supported the position of one of the letters sent by the United Farm Workers of America. Responses to the comments are contained in the Finding Of No Significant Impact (FONSI) associated with the subject environmental assessment.

III. INCIDENTAL TAKE PERMIT CRITERIA – ANALYSIS AND FINDINGS

The final CCAA policy and associated regulations specifying the issuance criteria were published in the Federal Register on June 17, 1999 (see 64 *FR* 32706 and 32726). As set forth in this policy, the MSCCAA does include: the population levels of the Covered Species and existing habitat characteristics that sustain the current use by the Covered Species (see section 5); the conservation measures the Permittees are willing to undertake to conserve the Covered Species (see section 7); the benefits expected to result from those conservation measures (summarized in section 8); assurances provided by the Service (see section 10); monitoring provisions (see section 13); a notification requirement to provide the Service or state agency reasonable opportunity to rescue individuals subject to incidental take (see section 13).

As set forth in 50 CFR § 17.32(d)(2), the Service finds that the section 10(a)(1)(A) permit issuance criteria for a candidate conservation agreement with assurances are met as outlined below:

A. The taking will be incidental.

The Service finds that the taking of the Covered Species under the MSCCAA will be incidental to otherwise lawful activities. The activities for which incidental take coverage is sought under the permits include routine farming activities (other than crop pesticide application), grazing, weed management, native plant restoration activities such as seeding and controlled burning, operation of a dairy, infrastructure construction and removal, facility maintenance activities, fire suppression, vehicle access, biological monitoring and research, hunting and recreational public access, electric power generation, coal ash handling and disposal, mammal control by PGE, and operation of Carty Reservoir. Any take of Covered Species resulting from these activities will be incidental to, and not the purpose of, these lawful activities.

B. The MSCCAA complies with the Candidate Conservation Agreement with Assurances Policy.

The Service finds that the benefits of the conservation measures implemented by Threemile Canyon Farms, TNC, PGE, and ODFW under the MSCCAA, when combined with those benefits that would be achieved if we assumed that similar conservation measures were also to be implemented on other necessary properties, would preclude or remove the need to list the Covered Species under the ESA.

For all the Covered Species, there will be 22,600 acres permanently set aside and managed for the purpose of maintaining and restoring their native habitats. Aside from the developed portions of Threemile Canyon Farms (which includes areas between crop circles), there are about 25,000 acres outside of the conservation areas that are currently vegetated with native and non-native species. Much of this area does not currently support or contain suitable habitat for the Covered Species. Threemile Canyon Farms plans on farming 2,560 of these acres in the near future. There will also be 880 acres owned by PGE that will be managed for the species for the term of the agreement.

Washington ground squirrel

Except for the radar range, there are no known Washington ground squirrel sites outside of the Farm Conservation Area or the PGE Conservation Area, which total about 23,480 acres. In 1999, an ODFW survey identified 104 active sites, being either colonies or individuals on the southern portion of the Farm Conservation Area. In 2001, TNC surveyed the area north of Carty Reservoir and found 17 active sites. One ground squirrel was seen on PGE property within their conservation area. Therefore, the MSCCAA will result in the protection of at least 122 Washington ground squirrel sites. The number of active sites or colonies will vary from year to year, and the number of individuals even more so.

The radar range, under lease by Boeing until 2040, contains about 2,700 acres and has never been surveyed for Washington ground squirrels, largely because of access issues. Approximately 350 of these acres have been previously disturbed and are unlikely to contain suitable habitat for the squirrel. The radar range is currently a restricted access facility with on-going radar testing by Boeing and was once part of the Naval Bombing Range. A large portion of the existing Naval Bombing Range adjacent to the Covered Area has been surveyed and has about 220 identified Washington ground squirrel sites. The soils on the radar range are primarily Koehler and Quincy loamy fine sands. The areas with the highest densities of Washington ground squirrels on the Farm Conservation Area and the Naval Bombing Range are composed of Warden silt loam and Sagehill fine sandy loam.

In order to estimate the number of active squirrel sites anticipated to occur on the Radar Range, we used survey data collected in similar habitat on the adjacent Naval Bombing Range (Fish and Wildlife Service 2004b). We estimate a maximum of 6.5 active sites may occur on the 2,350 acres of preferred habitat (maximum expected to occur) within the Radar Range. Therefore, we anticipate a maximum of 6.5 Washington ground squirrel sites may be impacted as a result of ground disturbance in the Radar Range. Ground disturbance would be in the form of grading

and/or discing which would remove existing native vegetation, destroy existing burrows, and alter the soil profile so as to reduce the suitability for future burrow creation. Threemile Canyon Farms will survey for Washington ground squirrels prior to ground disturbance on the radar range as well as provide an opportunity to translocate any individuals prior to ground disturbance for conservation or research purposes.

Fire suppression activities may involve discing, although direct attack with water is generally used. Using a worse case scenario for fire frequency, a major fire event could occur every 3-5 years, resulting in eight discing events over the term of the permit. We estimate that up to five sites might be impacted if discing occurred along the entire length of the Farm Conservation Area (2.5-3 miles). Thus, up to 40 sites might be impacted over the term of the permit due to discing associated with fire suppression. However, since wildfire can negatively impact the vegetation community and thus affect the habitat and food resources available to the Washington ground squirrel, discing should actually reduce the net adverse effects to ground squirrels that could occur from wildfire.

Most of PGE's covered activities do not include ground-disturbing activities within areas of preferred habitat. Power generation, transmission, coal storage and handling, fence maintenance, vehicle access, and the operation of Carty Reservoir are not anticipated to further impact preferred habitat for the ground squirrel. PGE's methods for conducting its currently required environmental monitoring are not anticipated to result in any measurable impacts to the ground squirrel.

The need for additional by-product storage may impact the ground squirrel over time by changing the condition of approximately 220 acres of preferred habitat on PGE Boardman Plant property south of Carty Reservoir. Of the 220 acres required for additional by-product storage, approximately 152 acres are identified as preferred habitat. Approximately 40 acres of the 220-acre area will be developed and in use at any one time. New landfills of a similar size will be developed incrementally over time as needed. When an existing landfill becomes full, it will be decommissioned, covered with at least 24 inches of soil, and revegetated with native species. PGE's removal of 152 acres of preferred squirrel habitat is anticipated to modify habitat enough to cause harm of individuals by impairing essential behavioral patterns including dispersal, breeding, feeding, and sheltering. Over the life of the Agreement, we estimate (based on occupancy of adjacent habitat) 152 acres could support less than one active squirrel site, and therefore, harm of one active site is anticipated to occur as a result of PGE's developing additional by-product storage. However, it is likely that only one additional landfill (40 acres) will be needed during the term of this Agreement.

In addition to the by-product disposal area south of Carty Reservoir, approximately 350 acres of undeveloped land east of the coal yard has been designated as a future "scrubber" by-product disposal area. This area currently serves as a deposition zone for fugitive coal dust and may include about 180 acres of preferred habitat. In the event that "scrubbers" become necessary to remove sulfur dioxide (SO₂) from boiler exhaust gas, a portion of the by-product disposal area east of the coal yard may need to be developed. The disposal area would be developed incrementally, similar to the disposal area south of Carty Reservoir. The principal by-product from the "scrubber" process is gypsum (calcium sulfate), which may be sold for off-site use as a

product for manufacturing wallboard, or be solidified and deposited on site in a landfill. The landfill will be constructed to prevent leakage of gypsum residues into the soil or surrounding areas. Apart from the conversion of preferred habitat to a landfill, the disposal of "scrubber" by-product is not expected to adversely affect the Washington ground squirrel. Over the life of the Agreement, we estimate (based on occupancy of adjacent habitat) 180 acres could support less than one active squirrel site, and therefore, harm of one active site is anticipated to occur as a result of PGE's developing "scrubber" by-product storage.

The MSCCAA provides some conservation benefits for all known Washington ground squirrels currently under the direct control of the Permittees within the boundaries of the MSCCAA by protecting those sites within a conservation area. However, approximately 7 out of a total of approximately 129 sites may eventually be lost due to habitat destruction and/or failure of translocation efforts within the radar range should Boeing allow some development to occur prior to the expiration of their lease within the permit term. We believe the setting aside and management of 23,480 acres for 25 years with the protection of 95 percent (122 out of 129) of the known sites, and fire suppression activities to maintain habitat, would preclude or remove the need to list the Washington ground squirrel if we assumed that similar conservation measures were also to be implemented on other necessary properties.

Ferruginous Hawk

There have been 16 nest trees located on the Farm Conservation Area and 6 nest trees on the Farm Development Area. However, 1 of the 16 on the Farm Conservation Area was destroyed sometime between last year and April 2003 when the tree fell, leaving 15 potential nest trees. To be considered a nest tree, there had to be evidence of a nest in the tree. Four of these six nest trees occur on the future agricultural area that will be developed in the near future. However, ferruginous hawks may use more than one nest tree (i.e., they don't occupy the same nest every year) and other hawks may occupy former ferruginous hawk nests. For example, while seven active ferruginous hawk nests occurred in the Covered Area based upon ODFW surveys from 1991 to 1993 (Morgan 1997), in 2001 two of these nest sites were occupied by Swainson's hawks (*Buteo swainsoni*) (Nelson 2001). There were five, six, and two occupied ferruginous hawk nests in the Covered Area in 2001, 2002, and 2003, respectively.

Under the MSCCAA, 6 of the known 21 nest trees that have been occupied at least once over the past several years may be lost. Most recently in 2003, there were only two active ferruginous hawk nests and both were located in the Farm Conservation Area. In 2002, when there were 6 active nests (one of which has been lost due to the nest tree falling over), only 1 was located outside of the Farm Conservation Area. The MSCCAA will preserve 15 of the 21 potential Ferruginous hawk nest trees.

Since one of the Farm's Covered Activities includes the development of all undeveloped portions of the Farm Development Areas, it is assumed that all ferruginous hawk nesting, foraging and roosting habitat will be removed from the future development areas. Over the term of the agreement (assuming hawk saturation in this area), this area is estimated to support a maximum of five breeding pairs; therefore, harm of five breeding pairs is anticipated to occur as a result of implementation of the Farm's Covered Activities.

Under the MSCCAA, fire management will reduce the likelihood of losing potential nest trees, both current and future, to wildfire. Wildfire control, including discing (as described above) could result in abandonment from disturbance or loss of nests. We estimate that up to one nest and four nestlings might be affected as a result of fire suppression activities during the term of the agreement (Fish and Wildlife Service 2004b). A buffer zone of 0.6 miles will be established around known active hawk nests where human use will be limited to essential travel (which includes fire control). The areas surrounding the nest trees in the Farm Conservation Areas will be managed for native perennial grasses and shrubs to promote healthy prey populations and improved foraging. TNC will also manage and protect juniper trees within the Farm Conservation Areas, increasing the likelihood of future suitable nest trees becoming established.

There have been no ferruginous hawk nests located on the PGE Plant property; however, there is potential ferruginous hawk foraging habitat within the Plant Property south of Carty Reservoir. PGE will eventually need to develop a portion of this area for by-product disposal. This will occur incrementally over time and could eventually result in the removal of scattered juniper trees found over approximately 220 acres. Over the term of the agreement (assuming hawk saturation in this area), this area is capable of supporting a maximum of one breeding pair; therefore, harm of one breeding pair is anticipated to occur as a result of implementation of PGE's covered activities.

We believe these measures to set aside and manage lands containing the majority of potential known nest trees would preclude or remove the need to list the Ferruginous hawk if we assumed that similar conservation measures were also to be implemented on other necessary properties.

Loggerhead shrike

Loggerhead shrike surveys have only been regularly conducted on the PGE property and the adjacent Naval Bombing Range. A population estimate for the Covered Area was based upon the availability of suitable habitat and the observed territory densities on the Naval Bombing Range between 1995 and 2001 (Morgan 2002). Territory densities were also calculated for pre- and post-fire conditions. Suitable loggerhead shrike habitat was assessed on the covered area and divided into low, medium, and high quality (see Table 2 in MSCCAA). There was no high quality habitat identified. Total habitat on the Covered Area outside of the conservation areas is about 5,429 acres. However, about 3,335 acres of this total is low quality, burned habitat. Total habitat within the conservation areas is about 5,741 acres with no low quality, burned habitat. There are approximately 723 acres of medium quality habitat with juniper outside of the conservation areas compared to 1,907 acres within the conservation areas, all of which occurs on Threemile Canyon Farms. There are about 1,371 acres of low and medium quality habitat without a juniper component outside of the conservation areas, but 3,834 acres of this type within the conservation areas.

Territory estimates were derived from surveys conducted on the adjacent Naval Bombing Range. The territory estimate outside of the conservation areas is 21.9. The number of territories estimated within the conservation areas is 34.7. TNC surveyed the Threemile Canyon Farms Conservation Area in 2003 and detected 24 nests. However, many other pairs were detected

displaying nesting behaviors, but their nests were not found. Detecting all of nesting pairs during any given breeding season may not be possible.

Given the above information, while the acreage of habitat distributed between the areas inside the conservation areas versus outside the conservation areas may be similar, the quality is higher in the conservation areas. The 3,335 acres of low quality habitat that was burned in 2000 and entirely located on Threemile Canyon Farms and outside of the conservation area would not develop into high quality habitat for many years if not decades. Additionally, wildfire could again degrade the quality of habitat and increase the time to which high quality habitat would be established. If this low quality, burned habitat is subtracted from the total being lost, there would remain about 2,094 acres of suitable habitat being lost within the covered area compared to the 5,741 acres being managed in the conservation areas.

Threemile Canyon Farm's removal of 4,990 acres of suitable shrike habitat is anticipated to modify habitat enough to cause harm of individuals by impairing essential behavioral patterns including breeding, feeding and sheltering. Over the life of the agreement this 4,990 acres may support a maximum of 19 breeding pairs, and therefore, harm of 19 breeding pairs is anticipated to occur as a result of implementation of the farm's covered activities.

The biggest threat to loggerhead shrike habitat loss, other than direct conversion to other land uses such as agriculture, is wildfire. The conservation areas will have aggressive fire control measures in place and will also include post-fire habitat management. Fire encourages the development and spread of cheatgrass. Cheatgrass then provides additional fuel for wildfires. By specifically managing to control cheatgrass, habitat acres should increase and quality should improve on the conservation areas under the MSCCAA. Using a fire frequency of 3-5 years, we estimate that up to eight fires potentially requiring discing to occur over the permit term. Each discing might result in the loss one nest and up to six nestlings over the life of the agreement (Fish and Wildlife Service 2004b). However, fire control measures should reduce the net number of nests and acres of habitat being negatively affected. By managing habitat, the majority of which is set aside in perpetuity, controlling fires, and restoring habitat, the acreage and quality of loggerhead shrike habitat should increase, resulting in increased shrike populations and distribution within the conservation areas and surrounding habitat.

There are approximately 439 acres of suitable shrike habitat within the PGE plant property which represents approximately 4 percent of the suitable habitat within the Covered Area. This area is estimated to support approximately 2.7 shrike territories. Additionally, approximately 78 acres of suitable habitat and 0.5 territories are located in the PGE Conservation Area.

PGE's need for additional by-product storage is anticipated to have an adverse effect on the shrike by changing the condition of approximately 220 acres (2 percent of the total within the Covered Area) of suitable habitat on PGE Plant Property south of Carty Reservoir. Approximately 40 acres of the total area will be developed and in use at any one time as a by-product disposal site, or landfill. New landfills of a similar size will be developed incrementally over time as needed. When an existing landfill becomes full, it will be decommissioned, covered with at least 24 inches of soil, and revegetated. PGE's removal of 220 acres of suitable shrike habitat is anticipated to modify habitat enough to cause harm of individuals by impairing

essential behavioral patterns including breeding, feeding, and sheltering. Over the life of the Agreement this 220 acres could support a maximum of two breeding pairs; therefore, harm of two breeding pairs is anticipated to occur as a result of implementation of PGE's covered activities.

We believe that setting aside and managing the majority of the best quality habitat with the greatest potential to provide high quality habitat over the term of the agreement would preclude or remove the need to list the loggerhead shrike if we assumed that similar conservation measures were also to be implemented on other necessary properties.

Sage Sparrow

The sage sparrow in Oregon is associated with sagebrush and open ground. Sage sparrow surveys have only been regularly conducted on the PGE property and the adjacent Naval Bombing Range. In the MSCCAA the population estimate was based upon the identification of suitable habitat using vegetation data and an ODFW biologist's site-specific knowledge of the area (see MSCCAA 5.2.4 for further details). Suitable habitats were separated into low, medium, and high quality. There was a total of 710 acres of suitable habitat found outside of the conservation areas, and a total of 2634 acres found within the designated conservation areas. No suitable habitat was identified on any PGE properties. All of the 710 acres found outside of the Farm Conservation Area were considered low quality habitat, whereas 2,186 acres within the Threemile Canyon Farms Conservation Area was considered low quality. Of the remaining habitat within the conservation area, 179 acres were considered medium quality and 269 were considered high quality.

Territory estimates were derived from surveys conducted on the adjacent Naval Bombing Range. The estimate for potential territories occurring within the Covered Area outside of the conservation areas was 7.1. Therefore, harm of seven breeding pairs is anticipated to occur as a result of implementation of the farm's covered activities over the term of the agreement. The estimate for number of territories within the conservation areas was 30.5. TNC did survey for sage sparrows in the Threemile Canyon Farms Conservation Area in 2003 and only nine individual or sage sparrow pairs were detected. We have no information to explain why the observed number of territories differs from that expected based upon the densities present on the Naval Bombing Range. However, based upon the assessment of potential habitat, we believe that about 79 percent of what has been estimated to be suitable habitat will be preserved within the conservation areas under the MSCCAA. Furthermore, management of the conservation areas should improve the quantity and quality of habitat by reducing the competition from non-native species and by fire management. Assuming that discing for wildfire control may be needed eight times over the life of the permit, we estimate the loss of one nest for each discing event (Fish and Wildlife Service 2004b). However, fire control measures should reduce the net number of nests and acres of habitat being negatively affected.

We believe that setting aside and managing a majority of the existing habitat, including the best quality habitat, would preclude or remove the need to list the sage sparrow if we assumed that similar conservation measures were also to be implemented on other necessary properties.

C. The probable direct and indirect effects of any authorized take will not appreciably reduce the likelihood of survival and recovery in the wild of any species.

The Service has determined that the proposed MSCCAA will not jeopardize the continued existence of any of the Covered Species (Fish and Wildlife Service 2004b). *Jeopardize the continued existence of* means to engage in an action that would be expected to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild (50 CFR § 402.02). This determination was based upon reviewing the current status of the species, the environmental baseline for the action area, and the direct and indirect effects of the proposed action.

The Service finds that the taking to be authorized under the proposed Permits will not appreciably reduce the likelihood of the survival and recovery of the Covered Species in the wild. The ESA's legislative history establishes the intent of Congress that this issuance criterion be identical to a finding of "no jeopardy" pursuant to section 7(a)(2) of the ESA and the implementing regulations pertaining thereto (50 CFR 402.02). As a result, the Service has reviewed the MSCCAA under section 7 of the ESA. In a Biological and Conference Opinion (Service 2004b), which is incorporated herein by reference, the Service has concluded that the issuance of the proposed Permits is not likely to jeopardize the continued existence of the four species covered under the Permits. The Service's finding that the Covered Species will not be jeopardized as a result of the take authorized under the proposed permits is discussed in detail in the Service's Biological and Conference Opinion (Service 2004b).

D. Implementation of the terms of the candidate conservation agreement is consistent with applicable Federal, State, and Tribal laws.

The MSCCAA does not preclude the need to comply with any Federal, state, or tribal laws, but solely serves as an instrument to comply with certain provisions of the ESA under which an incidental take permit is being sought. The MSCCAA states that "activities taken pursuant to this Agreement or the permits must be otherwise lawful and in compliance with all applicable state and Federal laws and regulations." (section 7.6.6). The MSCCAA addresses many on-going activities and existing facilities for which any legal compliance measures have not changed as a result of the agreement. Continued operations and future operations will continue to be regulated by applicable laws.

The MSCCAA was developed in close coordination with affected state agencies and Tribes, as appropriate. ODFW has primary responsibilities in the state of Oregon for fish and wildlife, including all of the Covered Species. The Washington ground squirrel is state listed as endangered by Oregon. ODFW is a signatory to the MSCCAA and has been involved in discussions about the agreement and management of the conservation areas. Furthermore, ODFW holds a conservation easement over the Threemile Canyon Farms Conservation Area.

We have coordinated with the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). We sent them a letter on October 16, 2002, advising them of the proposed candidate conservation agreement and provided them with some background information. This was followed up by a phone call from our Regional Tribal liaison.

On behalf of Section 106 of the National Historic Preservation Act (NHPA), as amended, a record search, conducted at the Oregon State Historic Preservation Office in Salem, revealed that a few surveys have been conducted over the last 20 years and that five prehistoric and historic sites have been identified within the MSCCAA area. These sites, however, will not be impacted by project activities. Given that much of the MSCCAA area has been developed for agricultural purposes for over six decades, the potential for intact sites in those areas are not very likely. The Farm, however, will ensure that cultural resource surveys will be conducted in the undeveloped portion of the MSCCAA where intact sites may be located. A letter dated April 28, 2003, was sent to the CTUIR to inform them of the project and whether they had any issues or concerns. No issues or concerns were raised by CTUIR; however, they have requested a copy of the cultural resources report when completed.

E. Implementation of the terms of the candidate conservation agreement will not be in conflict with any on-going conservation programs.

We are not aware of any on-going conservation programs within the Covered Area, or involving the Covered Species for which the MSCCAA might be in conflict, outside of those begun as a consequence of negotiations on the MSCCAA. The settlement agreement referred to above that was signed in December of 2000 by BAIC and the conservation parties provided for a conservation plan that would be consistent with section 10 of the ESA. We do not believe the MSCCAA is in conflict with this settlement agreement.

F. The applicants have shown capability for and commitment to implementing all the terms of the candidate conservation agreement.

The applicants have all shown capability for and commitment to implementing all the terms of the MSCCAA. Threemile Canyon Farms has already begun to implement some of the provisions of the MSCCAA including setting aside the conservation area under a conservation easement with the State of Oregon and a lease to TNC for management, providing funds for the management of the conservation areas, and contributing to wildfire management. TNC has already begun to inventory and manage the farm's conservation area. PGE has been conducting biological monitoring on their property for the past several years and has biologists on staff to support management of their conservation area. ODFW has been involved in monitoring habitat and wildlife populations on Threemile Canyon Farms for the past few years and they oversee the protection of the Washington ground squirrel as a state-listed species.

IV. MIGRATORY BIRD SPECIAL PURPOSE PERMIT

Pursuant to the Migratory Bird Treaty Act, 16 U.S.C. 703 - 712, and 50 C.F.R. 21.27, the Service finds that the Threemile Canyon Farms, PGE, TNC, and ODFW have made a sufficient showing that each of the three Covered Species currently listed under the Migratory Bird Treaty Act will benefit from the conservation measures included in the MSCCAA to minimize disturbance and enhance the habitat of these species. The section 10(a)(1)(A) permit applications submitted by the Threemile Canyon Farms, PGE, TNC, and ODFW, including the MSCCAA, provide detailed information regarding the MBTA related activities, the purpose of such activities, the permit

areas, the effects of those activities on the MBTA Covered Species, and other information relevant to the issuance of the Special Purpose Permits required under 50 C.F.R. 21.27. Therefore, the section 10(a)(1)(A) permits, if issued, shall also constitute Special Purpose Permits under the MBTA and 50 C.F.R. 21.27 for each MBTA Covered Species that may become listed under the ESA during the term of the section 10(a)(1)(A) permits. Therefore, any incidental take covered by the Section 10(a)(1)(A) permits, if issued, will not be in violation of the MBTA, as amended. Such Special Purpose Permit shall become effective concurrent with the listing of the MBTA Covered Species under the ESA.

V. GENERAL CRITERIA AND DISQUALIFYING FACTORS - FINDINGS

The Service has no evidence that the Permit applications should be denied on the basis of the criteria and conditions set forth in 50 CFR 13.21(b) through (c). The applicants have met the criteria for the issuance of the permits and approval of the MSCCAA, and do not have any disqualifying factor that would prevent the permits from being approved under current regulations.

VI. RECOMMENDATION ON PERMIT ISSUANCE

Based on the foregoing findings with respect to the proposed action, I recommend approval and the issuance of enhancement of survival permits (Permit Numbers TE082923-0, TE082922-0, TE034590-0, and TE082920-0) to authorize the incidental take of four unlisted species in accordance with the MSCCAA.


Deputy Regional Director
Region 1

3/1/04
Date

References

- Carlson L., G. Geupel, J. Kjelmyr, J. Maciver, M. Morton, and N. Shishido. 1980. Geographical range, habitat requirements, and a preliminary population study of *Spermophilus washingtoni*. Final Technical Report, National Science Foundation Student-originated Studies Program. 24 pp.
- Fish and Wildlife Service. 2004a. Environment Assessment and Finding of No Significant Impact. Portland, Oregon. February, 2004.
- Fish and Wildlife Service. 2004b. Intra-Service Conference Opinion on the Issuance of an Incidental Take Permit under the Threemile Canyon Farms Multi-Species Candidate Conservation Agreement with Assurances. February, 2004.
- Morgan, R.L. 1997. Memo to Claire Puchy concerning Boeing Lease Property, Species Information. Oregon Department of Fish and Wildlife, Heppner District Office. August 12.
- Nelson, L. 2001. The Nature Conservancy. Personal communication. September 17, October 25, 2001.
- Sherman, P.W. 1999. Behavioral ecology of Washington ground squirrels (*Spermophilus washingtoni*). Unpublished report, Cornell University, Ithaca, NY. 9 pp.
- Sherman, P.W. 2000. Distribution and behavior of Washington ground squirrels (*Spermophilus washingtoni*) in Central Washington. Unpublished report, Cornell University, Ithaca, NY. 13 pp.
- Threemile Canyon Farms, The Nature Conservancy, Fish and Wildlife Service, Oregon Department of Fish and Wildlife, Portland General Electric. 2003. Multi-Species Candidate Conservation Agreement with Assurances. August.