

no evidence that such exception would cause possible harmful interference to an authorized satellite system, said transmission path may be authorized on waiver basis where the maximum value of the equivalent isotropically radiated power (EIRP) does not exceed:

\* \* \* \* \*

(c) 12.7 to 13.25 GHz. No directional transmitting antenna utilized by a fixed station operating in this band with EIRP greater than 45 dBW may be aimed within 1.5 degrees of the geostationary-satellite orbit, taking into account atmospheric refraction.

\* \* \* \* \*

7. Amend § 101.147 by revising paragraph (i) introductory text, adding paragraph (i)(9), revising paragraph (o) introductory text, and adding paragraph (o)(8) to read as follows:

**§ 101.147 Frequency assignments.**

\* \* \* \* \*

(i) 5,925 to 6,425 MHz. 60 MHz authorized bandwidth.

\* \* \* \* \*

(9) 60 MHz bandwidth channels:

Transmit (receive) (MHz)	Receive (transmit) (MHz)
5964.97	6217.01
6024.27	6276.31
6083.57	6335.61
6142.87	6394.91

\* \* \* \* \*

(o) 10,700 to 11,700 MHz. 80 MHz authorized bandwidth.

(8) 80 MHz bandwidth channels:

Transmit (receive) (MHz)	Receive (transmit) (MHz)
10745	11235
10825	11315
10905	11395
10985	11475
11065	11555
11145	11635

\* \* \* \* \*

[FR Doc. 2011-23000 Filed 9-26-11; 8:45 am]

BILLING CODE 6712-01-P

**DEPARTMENT OF DEFENSE**

**Defense Acquisition Regulations System**

**48 CFR Parts 205, 208, 212, 213, 214, 215, 216, and 252**

**RIN 0750-AH11**

**Defense Federal Acquisition Regulation Supplement; Only One Offer (DFARS Case 2011-D013)**

**AGENCY:** Defense Acquisition Regulations System, Department of Defense (DoD).

**ACTION:** Proposed rule; reopening of comment period.

**SUMMARY:** DoD is proposing to amend the Defense FAR Supplement (DFARS) to address acquisitions using competitive procedures in which only one offer is received. With some exceptions, the contracting officer must resolicit for an additional period of at least 30 days, if the solicitation allowed fewer than 30 days for receipt of proposals and only one offer is received. If a period of at least 30 days was allowed for receipt of proposals, the contracting officer must determine prices to be fair and reasonable through price or cost analysis or enter negotiations with the offeror.

**DATES:** The comment period for the proposed rule that published on July 25, 2011, at 76 FR 44293 is reopened. Interested parties should submit written comments to the address shown below on or before October 7, 2011, to be considered in the formation of the final rule.

**ADDRESSES:** You may submit comments, identified by DFARS Case 2011-D013, using any of the following methods:

- *Regulations.gov:* <http://www.regulations.gov>.

Submit comments via the Federal eRulemaking portal by inserting “DFARS Case 2011-D013” under the heading “Enter keyword or ID” and selecting “Search.” Select the link “Submit a Comment” that corresponds with “DFARS Case 2011-D013.” Follow the instructions provided at the “Submit a Comment” screen. Please include your name, company name (if any), and “DFARS Case 2011-D013” on your attached document.

- *E-mail:* [dfars@osd.mil](mailto:dfars@osd.mil). Include DFARS Case 2011-D013 in the subject line of the message.
- *Fax:* 703-602-0350.
- *Mail:* Defense Acquisition Regulations System, Attn: Ms. Amy Williams, OUSD (AT&L) DPAP (DARS), Room 3B855, 3060 Defense Pentagon, Washington, DC 20301-3060.

Comments received generally will be posted without change to <http://www.regulations.gov>, including any personal and/or business confidential information provided. To confirm receipt of your comment(s), please check <http://www.regulations.gov> approximately two to three days after submission to verify posting (except allow 30 days for posting of comments submitted by mail).

**FOR FURTHER INFORMATION CONTACT:** Ms. Amy Williams, 703-602-0328.

**SUPPLEMENTARY INFORMATION:**

**I. Background**

DoD published a proposed rule in the **Federal Register** on July 25, 2011, at 76 FR 44293, with a request for comments on or before September 23, 2011. The comment period is being reopened through October 7, 2011, to provide an additional time for interested parties to review the proposed DFARS changes. Therefore, accordingly, the comment period for the proposed rule that published on July 25, 2011, at 76 FR 44293 is reopened.

**Ynette R. Shelkin,**

*Editor, Defense Acquisition Regulations System.*

[FR Doc. 2011-24783 Filed 9-26-11; 8:45 am]

BILLING CODE 5001-06-P

**DEPARTMENT OF THE INTERIOR**

**Fish and Wildlife Service**

**50 CFR Part 17**

**[Docket No. FWS-R2-ES-2011-0078; MO 92210-0-0008 B2]**

**Endangered and Threatened Wildlife and Plants; 12-Month Finding on a Petition To List the Tamaulipan Agapema, *Sphingicampa blanchardi* (No Common Name), and *Ursia furtiva* (No Common Name) as Endangered or Threatened**

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

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

**SUMMARY:** We, the U.S. Fish and Wildlife Service, announce a 12-month finding on a petition to list the Tamaulipan agapema (*Agapema galbina*), *Sphingicampa blanchardi* (no common name), and *Ursia furtiva* (no common name) as endangered or threatened and to designate critical habitat under the Endangered Species Act of 1973, as amended (Act). After review of all available scientific and commercial information, we find that

listing any of these three southwestern moth species is not warranted at this time. However, we ask the public to submit to us any new information that becomes available concerning the threats to these three species or their habitat at any time.

**DATES:** The finding announced in this document was made on September 27, 2011.

**ADDRESSES:** This finding is available on the Internet at <http://www.regulations.gov> at Docket No. [FWS-R2-ES-2011-0078].

Supporting documentation we used in preparing our finding for Tamaulipan agapema and *Sphingicampa blanchardi* is available for public inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service, Corpus Christi Ecological Services Field Office, c/o TAMU-CC, 6300 Ocean Drive, #5837, Corpus Christi, TX 78412. Please submit any new information, materials, comments, or questions concerning this finding for Tamaulipan agapema and *S. blanchardi* to the Corpus Christi Ecological Services Field Office address.

Supporting documentation we used in preparing our finding for *Ursia furtiva* is available for public inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service, Austin Ecological Services Field Office, 10711 Burnet Road, Suite 200, Austin, TX 78758. Please submit any new information, materials, comments, or questions concerning this finding for *U. furtiva* to the Austin Ecological Services Field Office address.

**FOR FURTHER INFORMATION CONTACT:** If you use a telecommunications device for the deaf (TDD), please call the Federal Information Relay Service (FIRS) at 800-877-8339.

For information regarding Tamaulipan agapema and *Sphingicampa blanchardi*, please contact Allan Strand, Field Supervisor, Corpus Christi Ecological Services Field Office (see **ADDRESSES**), by telephone at 361-994-9005; or by facsimile at 361-994-8262.

For information regarding *Ursia furtiva*, please contact Adam Zerrenner, Field Supervisor, Austin Ecological Services Field Office (see **ADDRESSES**), by telephone at 512-490-0057 extension 248; or by facsimile at 512-490-0974.

**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 Federal Lists

of Endangered and Threatened Wildlife and Plants that contains substantial scientific or commercial information that listing the species may be warranted, we make a finding within 12 months of the date of receipt of the petition. In this finding, we will determine that the petitioned action is: (1) Not warranted, (2) warranted, or (3) warranted, but the immediate proposal of a regulation implementing the petitioned action is precluded by other pending proposals to determine whether species are endangered or threatened, and expeditious progress is being made to add or remove qualified species from the Federal Lists of Endangered and Threatened Wildlife and Plants. Section 4(b)(3)(C) of the Act requires that we treat a petition for which the requested action is found to be warranted but precluded as though resubmitted on the date of such finding, that is, requiring a subsequent finding to be made within 12 months. We must publish these 12-month findings in the **Federal Register**.

*Previous Federal Actions*

On June 25, 2007, we received a petition dated June 18, 2007, from Forest Guardians (now WildEarth Guardians), requesting that 475 species in the southwestern United States, including the Tamaulipan agapema, *Sphingicampa blanchardi*, and *U. furtiva*, be listed under the Act and critical habitat be designated. We acknowledged the receipt of the petition in a letter to the petitioner dated July 11, 2007. In that letter we also stated that the petition was under review by staff in our Southwest Regional Office.

We received a second petition, dated June 12, 2008, from WildEarth Guardians on June 18, 2008, requesting emergency listing of 32 species under the Act, including one of the three moths addressed above, Tamaulipan agapema. We provided a response to this petition on July 22, 2008, indicating that we had reviewed the information presented in the petition and the immediacy of possible threats. We determined that issuing an emergency regulation temporarily listing the species under section 4(b)(7) of the Act was not warranted. We also noted that we would continue to review these species through the petition process.

On March 19, 2008, WildEarth Guardians filed a complaint alleging that the Service failed to comply with its mandatory duty to make a preliminary 90-day finding on the June 18, 2007, petition to list 475 southwestern species. We subsequently published an initial 90-day finding for 270 of the 475 petitioned species on January 6, 2009 (74 FR 419), concluding

that the petition did not present substantial information that listing of those 270 species may be warranted. This initial 90-day finding did not include the Tamaulipan agapema, *Sphingicampa blanchardi*, or *Ursia furtiva*. Subsequently, on March 13, 2009, the Service and WildEarth Guardians filed a stipulated settlement agreement, agreeing that the Service would submit to the **Federal Register** a finding as to whether their petition presented substantial information indicating that the petitioned action may be warranted for the remaining southwestern species by December 9, 2009. On December 4, 2009, we made a second 90-day finding for the remaining species, which included a determination that listing the Tamaulipan agapema, *S. blanchardi*, and *U. furtiva* may be warranted, and initiated a status review, which was published in the **Federal Register** on December 16, 2009 (74 FR 66866). This notice constitutes the 12-month finding on both petitions to list the Tamaulipan agapema, *S. blanchardi*, and *U. furtiva* as endangered or threatened.

*Evaluation of the Status of Each of the Three Moth Species*

Section 4 of the Act (16 U.S.C. 1533) and implementing regulations (50 CFR part 424) set forth procedures for adding species to, removing species from, or reclassifying species on the Federal Lists of Endangered and Threatened Wildlife and Plants. Under section 4(a)(1) of the Act, a species may be determined to be endangered or threatened based on any of the following five factors:

(A) The present or threatened destruction, modification, or curtailment of its habitat or range;

(B) Overutilization for commercial, recreational, scientific, or educational purposes;

(C) Disease or predation;

(D) The inadequacy of existing regulatory mechanisms; or

(E) Other natural or manmade factors affecting its continued existence.

In making this finding, we discuss below information pertaining to each species in relation to the five factors provided in section 4(a)(1) of the Act. In considering what factors might constitute threats, we must look beyond the mere exposure of the species to the factor to determine whether the species responds to the factor in a way that causes actual impacts to the species. If there is exposure to a factor, but no response, or only a positive response, that factor is not a threat. If there is exposure and the species responds negatively, the factor may be a threat

and we then attempt to determine how significant a threat it is. If the threat is significant, it may drive or contribute to the risk of extinction of the species such that the species warrants listing as endangered or threatened as those terms are defined by the Act. This does not necessarily require empirical proof of a threat. The combination of exposure and some corroborating evidence of how the species is likely impacted could suffice. The mere identification of factors that could negatively impact a species is not sufficient to compel a finding that listing is appropriate; we require evidence that these factors are operative threats that act on the species to the point that the species meets the definition of endangered or threatened under the Act.

In making our 12-month finding on the petition, we considered and evaluated the best available scientific and commercial information. We reviewed the petition, information available in our files, and other available published and unpublished information, and we consulted with recognized moth experts and biologists.

For each of the three species, we provide a description of the species and its life-history and habitat, an evaluation of listing factors for that species, and our finding of whether the petitioned action is warranted or not for that species.

### Species Information for Tamaulipan Agapema

#### Taxonomy and Species Description

The Tamaulipan agapema (*Agapema galbina*), a member of the silk moth family, Saturniidae, is one of seven currently recognized species in the *Agapema* genus. Moths of this genus are typically black, gray, brown, and white, and have eyespots on all four wings (Powell and Opler 2009, p. 240). Adult males' forewings are 0.9 to 1.1 inches (in) (25 to 30 millimeters (mm)) long, while females typically have 1.1 to 1.3 in (30 to 34 mm) long forewings (Tuskes *et al.* 1996, p. 171). In many cases, it is difficult to distinguish between the species based on morphological (body structure) differences (Tuskes *et al.* 1996, p. 171). However, the Tamaulipan agapema males have more white at the base of their forewing (the front wings on four-winged insects), which gives them a much lighter appearance than other species in the *Agapema* genus (Tuskes *et al.* 1996, p. 171). Another distinguishable feature of Tamaulipan agapema is the males' antennae, which are shorter, slightly narrower, and lighter in color (almost yellow) than those of other *Agapema* species (Tuskes

*et al.* 1996, p. 171). Also, compared to other species in the *Agapema* genus, minor differences in the male reproductive organs have been reported, but Tuskes *et al.* (1996, p. 171) did not note what those differences are.

#### Distribution and Status

Based on occurrence records from limited reports and survey efforts, the known distribution of the Tamaulipan agapema is from Cameron and Hidalgo Counties in the Lower Rio Grande Valley of south Texas to approximately 150 miles (241 kilometers) south into northern Tamaulipas, Mexico (Tuskes *et al.* 1996, p. 170). In Tamaulipas, Mexico, the Tamaulipan agapema was observed near Soto la Marina, about 150 miles (mi) (241 kilometers (km)) south of the United States border (Tuskes *et al.* 1996, p. 170). Unfortunately, there are no records of the species occurring in the intervening 150 mi (241 km) between Soto la Marina and its closest known record of occurrence in Cameron County, Texas.

We have no historic or current population estimates for this species. According to Tuskes *et al.* (1996, p. 170), this species was once fairly common, but "has not been reported north of Mexico since the 1960s." Tuskes *et al.* (1996, p. 170) did not define the term "fairly common," so we do not know what this means in a numerical or geographical context of population estimates. Tuskes *et al.* (1996, p. 170) also reported that attempts at searching for adults in areas that contain suitable habitat have been unsuccessful, but they did not give dates or the amount of survey effort that was involved. Wolfe (2010, pers. comm.) noted that when he visited a site west of Soto la Marina (in Mexico) in 1994 that there were "hundreds of cocoons matted along the trunks" of the host plant *Condalia hookeri* (brasil). Yet, when this site was visited again several years later, no cocoons were found (Wolfe 2010, pers. comm.). The information available does not allow us to assess whether the species is actually extirpated in the United States. We do not know if the limited survey efforts were thorough enough, conducted at the right time or in the right areas, or with enough frequency to actually document the species' occurrence. Failure to detect species when they are present is not uncommon in field surveys (Gu and Swihart 2004, p. 199). Failure to detect a species' presence in an occupied habitat patch is a common sampling problem when the population size is small, individuals are difficult to sample, or sampling effort is limited (Gu and Swihart 2004, p. 195). In the

absence of information, we are unable to determine the species' current distribution and historic or current population estimates.

#### Habitat and Biology

As adults, Tamaulipan agapema are nocturnal, do not feed as they have nonfunctional mouth parts, have only one brood per year, and are relatively short-lived (Powell and Opler 2009, p. 236). These moths fly from September to November, during which time they breed and lay eggs on *Condalia hookeri* (brasil) (Peigler and Kendall 1993, p. 5; Tuskes *et al.* 1996, p. 171). Eggs hatch in December and January, and larvae feed on *C. hookeri* (Peigler and Kendall 1993, p. 12). In a review of the genus *Agapema*, Peigler and Kendall (1993, p. 5) cited Collins and Weast's 1961 book *Wild Silk Moths of the United States, Saturniinae*, to report that cocoons of the Tamaulipan agapema have been observed in masses on *Pithecellobium ebano* (ebony) trees in the Rio Grande Valley of south Texas. Peigler and Kendall (1993, pp. 5, 12) also state that the larvae move from the *C. hookeri* shrubs to *P. ebano* to make their cocoons on the trunks. However, the larvae make their cocoons on *C. hookeri* as well as *P. ebano*. Wolfe (2010, pers. comm.) noted that when he visited a site west of Soto la Marina, Mexico, about 150 mi (241 km) south of the United States border, that there were "hundreds of cocoons matted along the trunks" of the host plant *C. hookeri*. It seems that Tamaulipan agapema are associated with *C. hookeri* and *P. ebano* during the early stages of their life cycle.

Moths and butterflies are typically associated with host plants, and are often specifically linked to one or more plant species in order to complete their life cycle. As noted above, the known host plants of Tamaulipan agapema are *Condalia hookeri* (brasil) and *Pithecellobium ebano* (ebony) trees (Peigler and Kendall 1993, p. 12). Both of these plants are part of the Tamaulipan thornscrub vegetative community. They are associated with the deep alluvial soils of the southern Rio Grande River, and are found in the Lower Rio Grande Valley of Texas and Tamaulipas, Mexico (NatureServe 2003, pp. 1–2). Both plants are prevalent in residential settings, because they are deliberately planted or started by bird droppings (Cobb 2011, pers. comm.).

Because the host plants are prevalent in residential settings, it may be possible for the Tamaulipan agapema to live in an urban environment. Peigler and Kendall (1993, p. 4) noted that adults of this species were often collected at night near artificial light

sources in the Brownsville area. However, we do not know if this species was residing on host plants transplanted into the residential area of Brownsville or if it was drawn to the artificial lights from a nearby native Tamaulipan thornscrub habitat.

#### Five-Factor Evaluation for the Tamaulipan Agapema

In making this finding, information pertaining to the Tamaulipan agapema in relation to the five factors provided in section 4(a)(1) of the Act is discussed below.

##### *Factor A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range*

We evaluate historic threats in respect to current and future populations, because historic threats can be evidence of current or future threats if those activities, or effects of those activities, are still occurring in such a way that current or future populations are being significantly affected. We use the best available scientific and commercial information to make reasonable connections between the historic impacts and current or future declines of the species in order to determine whether the species is in danger of extinction now or in the foreseeable future. The mere identification of factors that could negatively impact a species is not sufficient to compel a finding that listing is warranted. We require evidence that these factors are operative threats that act on the species to the point that the species meets the definition of endangered or threatened under the Act. Potential factors that may affect the habitat or range of the Tamaulipan agapema are (1) Agricultural development, (2) urban development, and (3) climate change.

##### Agricultural Development

The loss of Tamaulipan thornscrub habitat has occurred historically within the Lower Rio Grande Valley of south Texas and northern Tamaulipas, Mexico. With the conversion of Tamaulipan thornscrub to agricultural field crops and urban areas, only about 5 percent of the native vegetation remained in the Lower Rio Grande Valley by the 1980s (Jahrsdoerfer and Leslie 1988, p. 1). Much of the habitat loss that has occurred has been attributed to agricultural development (Tremblay *et al.* 2005, p. 479). In the context of this finding, we consider agricultural development to be the conversion of native habitat to agricultural croplands. In Cameron County, Texas, Tremblay *et al.* (2005, p. 481) noted that approximately 75

percent of native habitat loss was due to agricultural development. Tremblay *et al.* (2005, p. 481) also noted that the extent of overall habitat loss had occurred by 1983. Subsequently, Jurado *et al.* (1999, p. 272) noted that over 90 percent of Tamaulipan thornscrub in northeastern Mexico has been cleared for agriculture or to create grasslands for cattle, but they did not give a date by when this loss had occurred. Where the conversion of native Tamaulipan thornscrub habitat to agricultural field crops has occurred, it has resulted in habitat loss for the Tamaulipan agapema because its host plants, *Condalia hookeri* (brasil) and *Pithecellobium ebano* (ebony), are no longer available. Tremblay *et al.* (2005, p. 481) noted that the extent of overall habitat loss had occurred by 1983 in Cameron County, Texas, and Jurado *et al.* (1999, p. 272) did not give a date by when habitat loss had occurred in northeastern Mexico. Because we have no information to indicate that additional conversion of native habitat to agricultural croplands has occurred since the 1980s, we have no evidence that it will happen in the foreseeable future.

While there may have been historical impacts to the Tamaulipan agapema from agricultural development due to its host plants being removed for crop fields, the magnitude of historic, current, or future threats from this activity is difficult to determine, because we have no historic or current population estimates with which to make a comparison, other than anecdotal reports. The information available does not allow us to assess the extent to which the Tamaulipan agapema occurred throughout the Tamaulipan thornscrub, or if the loss of habitat has caused a decline in population numbers. However, we have information to indicate that its host plants, which are associated with Tamaulipan thornscrub, have been lost to some extent. But, we have no information to indicate that additional conversion of native habitat to agricultural croplands has occurred since the 1980s, and we have no evidence that it will happen in the foreseeable future. Tremblay *et al.* (2005, p. 481) noted that the extent of overall habitat loss in Cameron County, Texas, had occurred by 1983, and Jurado *et al.* (1999, p. 272) did not give a date when overall habitat loss had occurred in northeastern Mexico. In the absence of information, we are unable to evaluate the historic loss of habitat with respect to current population numbers. Historic threats can be evidence of current or future threats if those

activities, or effects of those activities, are still occurring in such a way that current or future populations will decline to the point of extinction. Because we lack sufficient information related to habitat loss and Tamaulipan agapema population numbers, we are not able to determine whether agricultural development may be a threat to the species. Therefore, based on the best available information, which does not indicate that habitat loss due to agricultural development is occurring now or likely to occur in the remaining areas of native habitat, we do not consider agricultural development to be a current or future threat to the Tamaulipan agapema.

##### Urban Development

As previously noted, urban development was identified as a cause for the loss of native Tamaulipan thornscrub in the Lower Rio Grande Valley (Jahrsdoerfer and Leslie 1988, p. 1). The human population in the Lower Rio Grande Valley of south Texas increased by 40 percent from 1990 to 2000, compared to an increase of 13 percent throughout the United States during the same period (Murdock *et al.* 2002, p. 34). Human population levels in the Lower Rio Grande Valley of Texas are projected to increase by between 130 and 181 percent from 2000 to 2040 (Murdock *et al.* 2002, pp. 40–43). As the human population grows, it is reasonable to expect a concurrent increase in urban development. Many areas where this species was once found in south Texas, such as the Esperanza Ranch near Brownsville, Texas, have been converted to residential subdivisions (Tuskes *et al.* 1996, p. 170).

However, there is an absence of information that allows us to make a reasonable connection between impacts of urban development and current or future declines of Tamaulipa agapema. Pockets of habitat may remain along roadways and on private land (Tuskes *et al.* 1996, p. 170). Also, the known host plants, *Condalia hookeri* (brasil) and *Pithecellobium ebano* (ebony) trees, are prevalent in residential settings, because they are intentionally planted or started by bird droppings (Cobb 2011, pers. comm.). Peigler and Kendall (1993, p. 4) noted that this species was often collected at night near artificial light sources, so it may be able to live in urban areas. But, we do not know whether or not the species may survive in urban areas. Because we lack sufficient information regarding this species' biology, we are unable to conclude whether residential areas can harbor adequate habitat patches. In the

absence of information that allows us to assess the impacts of urban development on current or future declines of Tamaulipan agapema, we have no evidence linking urban development with Tamaulipan agapema's population status.

Furthermore, most of the remaining woodland areas of the Lower Rio Grande Valley within the United States are managed by the Service's National Wildlife Refuge System and other resource agencies and organizations (Tremblay *et al.* 2005, pp. 481–482). During the period 1979–2009, the South Texas Refuge Complex, which consists of Santa Ana, Laguna Atascosa, and the Lower Rio Grande Valley National Wildlife Refuges, has acquired over 106,000 ac (42,896 ha) of land via fee title or conservation easements in the Lower Rio Grande Valley of Texas to create habitat corridors between pre-existing lands of Santa Ana and Laguna Atascosa National Wildlife Refuges (Service 2011, pp. 1–2). In addition to acquiring land, the South Texas Refuge Complex has replanted over 9,000 ac (3,642 ha) of agricultural land with over 2,750,000 native plant species, including the Tamaulipan agapema's host plants, *Condalia hookeri* (brasil) and *Pithecellobium ebano* (ebony). In Cameron and Hidalgo Counties alone, the South Texas Refuge Complex currently manages 140,661 ac (56,923 ha) of native habitat (Sternberg 2011, pers. comm., p. 1), which is protected from urban development.

In summary, urban development may have resulted in some historic habitat loss for the Tamaulipan agapema, but there is no information that allows us to make a reasonable connection between impacts of urban development and current or future declines of the species. Urban development is expected to occur over the next 30 years in the Lower Rio Grande Valley of south Texas, but we have no information that it will occur in the remaining woodland areas of the Lower Rio Grande Valley within the United States or at a rate or magnitude that would result in population-level impacts. Because most of the remaining woodland areas of the Lower Rio Grande Valley within the United States are managed by the Service's National Wildlife Refuge System and other resource agencies and organizations (Tremblay *et al.* 2005, pp. 481–482), we expect that current and future urban development will occur on agricultural lands that have already been cleared of native vegetation. Also, this species' host plants are prevalent in residential settings and much of the remaining woodland areas managed by the Service's National Wildlife Refuge

System. Therefore, in the absence of information that allows us to assess the impacts of urban development on current or future declines of Tamaulipan agapema, we concluded that urban development is not a threat to the Tamaulipan agapema now or in the foreseeable future.

#### Climate Change

Consideration of the effects of climate change is a component of our analyses of species under the Endangered Species Act. Here we provide a brief overview of the general topic of climate change as a way of providing a broad context for the more detailed consideration that follows with respect to the Tamaulipan agapema.

Described in general terms, “climate” refers to average weather conditions, as well as associated variability, over a long period of time (*e.g.* decades, centuries, or thousands of years). Climate variables most often described are temperature and precipitation, and the typical period for calculating the mean of these properties is 20 or 30 years. The term “climate change” thus refers to a change in the state of the climate (whether due to natural variability, human activity, or both) that can be identified by changes in the mean or variability of its properties and that persists for an extended period—typically decades or longer. (See Intergovernmental Panel on Climate Change (IPCC), 2007a, pp. 30, 78, for technical definitions that are the basis for our description of these terms.)

Analyses of observed trends in climate demonstrate that climate change is occurring, as illustrated by examples such as an increase in the global mean surface air temperature (SAT) (“global warming”), substantial increases in precipitation in some regions of the world and decreases in other regions, and increases in tropical cyclone activity in some oceanic areas (IPCC 2007a, p. 30). Because relatively small but sustained changes in temperature can have substantial direct and indirect effects on natural processes and human populations, temperature is one of the most widely used indicators of climate change. Based on extensive analyses, the IPCC concluded that warming of the global climate system over the past several decades is “unequivocal” (IPCC 2007a, p. 2). These changes in global climate are affecting many natural systems (see IPCC 2007a, pp. 2–4, 30–33 for global and regional examples, and Global Climate Change Impacts in the United States (GCCIOUS) 2009, pp. 27, 79–88, for examples in the United States).

Analyses of natural variability in climate conditions and the effects of human activities led the IPCC to conclude that most of the increase in global mean surface air temperature that has been observed since the mid-20th century is very likely due to the observed increase in greenhouse gas (GHG) concentrations related to human activities, particularly emissions of CO<sub>2</sub> from fossil fuel use (IPCC 2007a, p. 5 and Figure SPM.3). Extensive analyses point to continued changes in climate and considerable efforts are occurring to make projections of the magnitude, rate, and variability of future changes and to understand the mechanisms underlying them, including the role of greenhouse gases.

Projections by the IPCC in 2007 for climate change for the earth as a whole and for broad regions were based on simulations from more than 20 Atmospheric-Ocean General Circulation Models used in conjunction with various scenarios of different levels and timing of greenhouse gas emissions (Randall *et al.* 2007, pp. 596–599; Meehl *et al.* 2007, pp. 753–796; Christensen *et al.* 2007, pp. 847–917). The emissions scenarios were developed in the late 1990s and described in the Special Report on Emissions Scenarios (SRES) published in 2000 (Carter *et al.* 2007, p. 160 and references therein). The scenarios span a broad range of potential GHG emissions over the coming decades based on a wide spectrum of economic, technological, and human demographic possibilities for the planet; the SRES made no judgment as to which of the scenarios are more likely to occur, and although they cover a very broad range it is possible that emissions could be higher or lower than the range covered by the scenarios.

The IPCC's projections of change in global mean warming (global annual mean surface air temperature (SAT)) and how they differ over time across emissions scenarios as compared to the observed SAT from 1980–1999, are described by Meehl *et al.* (2007, pp. 760–764). Several key points emerge from their projections. First, the projected changes in magnitude of warming are similar under all emissions scenarios to about 2030 and to some degree even to about mid-Century although more divergence is evident then, and the divergence continues to increase over time, *i.e.*, in the near-term the projections differ by only 0.05° C (0.09° F), but by the last decade of the century the difference across scenarios is 1.6° C (0.9° F); as noted by Cox and Stephenson (2007, p. 208) total uncertainty in projected decadal mean

temperature is lowest 30 to 50 years in the future. Second, the magnitude of projected warming increases across each scenario including the lowest emission scenario, under which projected average change in SAT increases from 0.66 °C (1.19° F) in the near term to 1.8° C (3.24° F) for the last decade of the century. Third, the pattern of projected increases is relatively consistent whether considering the average across all models for a given scenario or the projections from the individual models, including consideration of ± one standard deviation around the mean projection for each scenario (see Meehl *et al.* 2007, pp. 762–763, Figures 10.4 and 10.5, and Table 10.5). Thus although differences in projections reflect some uncertainty about the precise magnitude of warming, we conclude there is little uncertainty that warming will continue through the end of century, even under the lower emissions scenario. We note also that more recent analyses using additional global models and comparing other emissions scenarios have resulted in projections of global temperature change that are similar to those reported in 2007 by the IPCC (Prinn *et al.* 2011, pp. 527, 529).

While projections from global climate model simulations are informative, their resolution is coarse and it is helpful to have higher-resolution projections that are more relevant to the spatial scales used for various assessments involving climate change. Various methods to “downscale” climate information have been developed to generate projections that are more specific to regional or relatively local areas (see Glick *et al.* 2011, pp. 58–61 for a summary description of downscaling). In conducting status assessments of species, we use downscaled projections when they are the best scientific information available regarding future climate change.

However, we have no information for the local geographic area of south Texas or northern Mexico. While it appears reasonable to assume that climate change will occur within the range of the Tamaulipan agapema, we lack sufficient information to know specifically how climate change may affect the species or its habitat. We have not identified, nor are we aware of, any data on an appropriate scale to evaluate habitat or population trends for the species, or to make predictions on future trends and whether the species will actually be impacted. Therefore, we have no evidence to conclude that climate change is a threat to the Tamaulipan agapema now or in the foreseeable future.

#### Summary of Factor A

Based on the best available information, the Tamaulipan agapema's current and historical population size and distribution are unknown. Because we have no historic or current population estimates for the Tamaulipan agapema, we are unable to correlate land use impacts with current or future species' abundance. While the loss of Tamaulipan thornscrub habitat has occurred historically, there is an absence of information that allows us to make a reasonable connection between the impacts of habitat loss and current or future declines of the species. We have no evidence that current or future urban development will result in detrimental impacts to the Tamaulipan agapema or its habitat. The information available does not allow us to assess the magnitude of impacts from urban development on the species, nor the extent of the occupied range. Also, we lack sufficient certainty to know specifically how climate change affects the species now or in the foreseeable future. Therefore, we conclude that the Tamaulipan agapema is not threatened by the destruction, modification, or curtailment of its habitat or range now or likely to become so.

#### Factor B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

There is no information suggesting that overutilization for commercial, recreational, scientific, or educational purposes pose a threat to the species. Therefore, we find that the Tamaulipan agapema is not threatened by overutilization now or likely to become so.

#### Factor C. Disease or Predation

The Tamaulipan agapema may be preyed upon by natural predators at various life stages. In 1961 in a suburb of Brownsville, Texas, large ants were observed preying upon Tamaulipan agapema cocoon masses in *Pithecellobium ebano* (ebony) trees (Peigler and Kendall 1993, p. 5). At that time, the impact of ants on populations of this moth was undetermined (Peigler and Kendall 1993, p. 5). While predation by ants may occur on Tamaulipan agapema cocoon masses, we have no information that the loss of cocoon masses presents a threat to the species. In fact, we have no information linking ant predation to Tamaulipan agapema population estimates.

Parasitic flies, such as *Euphorocera* sp. and *Lespesia* sp., have also been reported to prey on the Tamaulipan agapema (Peigler and Kendall 1993, p.

18). However, there is no information on the extent or level of impact that parasitic flies have had on the species.

In summary, although predation by ants and parasitic flies may be occurring, we have no information to indicate that they are occurring at levels that result in negative impacts to the species. Therefore, in the absence of evidence that predation or disease may constitute threats to the species, we conclude that the Tamaulipan agapema is not threatened by disease or predation now or likely to become so.

#### Factor D. The Inadequacy of Existing Regulatory Mechanisms

We are not aware of any existing regulatory mechanisms that protect the Tamaulipan agapema or its habitat in the United States or Mexico. However, because we have not identified any threat to the species under the other four listing factors that would require regulatory protection, we do not find that the absence of regulatory mechanisms constitutes an independent threat to the species. Therefore, we find that the Tamaulipan agapema is not threatened by the inadequacy of existing regulatory mechanisms now or likely to become so.

#### Factor E. Other Natural or Manmade Factors Affecting Its Continued Existence

##### Pesticide Use

We looked at pesticides as a potential factor that has an impact on the Tamaulipan agapema, due to the extent of agricultural croplands that occur within the range of the species. The Lower Rio Grande Valley of Texas is a major agriculture production area, with over 75 percent of its geographic area devoted to cropland (White *et al.* 1983, p. 331; Wainwright *et al.* 2001, p. 101). As in many agricultural areas, pesticides are commonly used on croplands, and have been found at relatively high levels in the Lower Rio Grande Valley (White *et al.* 1983, p. 325; Wainwright *et al.* 2001, p. 109). However, pesticides have not been linked to population declines of the Tamaulipan agapema. We have no information to indicate that the Tamaulipan agapema use croplands and are thus exposed to pesticides. Because we have no link between pesticide use and population abundance, we have no evidence that the Tamaulipan agapema is threatened by pesticide use now or likely to become so.

##### Small Population Size

Historical habitat loss due to agricultural development may have reduced the Tamaulipan agapema's

range to small, isolated patches of habitat. In many cases, small, isolated populations are subject to increased risk of extinction from stochastic (random) environmental, genetic, or demographic events (Brewer 1994, p. 616). Environmental changes, such as drought or severe storms, can have severe consequences if affected populations are small and clumped together (Brewer 1994, p. 616). Loss of genetic diversity can lead to inbreeding depression and an increased risk of extinction (Allendorf and Luikart 2007, pp. 338–343). Populations with small effective size show reductions in population growth rates, loss of genetic variability, and increases in extinction probabilities (Leberg 1990, p. 194; Jimenez *et al.* 1994, p. 272; Allendorf and Luikart 2007, pp. 338–339). Because the information available does not allow us to assess historic or current population estimates, nor the extent of the species' current range, we are not able to determine if the species' range has been reduced to small, isolated patches of habitat.

Additionally, there is no information to indicate that Tamaulipan agapema population numbers or population dynamics are vulnerable to the effects of small populations. We have no information to estimate historic or current population sizes for this species. We have no information on the number of individuals, population dynamics, or evidence of genetic structuring and inbreeding for the Tamaulipan agapema. Additionally, we do not currently have sufficient information on environmental or any other factors to know whether they affect the species to an extent that a threat exists. The information available does not allow us to assess the magnitude or immediacy of these impacts on the species. We have no information that allows us to make a reasonable connection between the impacts of stochastic (random) environmental, genetic, or demographic events and current or future declines of the Tamaulipan agapema. We have no evidence that Tamaulipan agapema is threatened by small population size now or likely to become so.

#### Summary of Factor E

In summary, based on the best available information, we have no evidence that natural or other manmade factors are likely to significantly threaten the existence of the Tamaulipan agapema. We have no information to indicate that the Tamaulipan agapema uses croplands and is exposed to pesticides. Also, we have no information on historic or current population sizes, so we are

unable to determine if there may be inherent vulnerabilities of small populations and restricted geographic range. Therefore, we find that the Tamaulipan agapema is not threatened by natural or other manmade factors now or likely to become so.

#### Finding for the Tamaulipan Agapema

As required by the Act, we considered the five factors in assessing whether the Tamaulipan agapema is endangered or threatened throughout all of its range. We examined the best scientific and commercial information available regarding the past, present, and future threats faced by the Tamaulipan agapema. We reviewed the petition, information available in our files, other available published and unpublished information, and we consulted with recognized moth experts and State agencies. We evaluated historic threats with respect to current and future populations, and used the best available scientific and commercial information to make reasonable connections between the historic impacts and current or future declines of the species, in order to determine whether the species is in danger of extinction now or in the foreseeable future. The mere identification of factors that could negatively impact a species is not sufficient to compel a finding that listing is appropriate. We require evidence that these factors are operative threats that act on the species to the point that the species meets the definition of endangered or threatened under the Act.

Based on the best available information, there may have been historical impacts to the Tamaulipan agapema from agricultural development, which is the conversion of native Tamaulipan thornscrub habitat to cropland; but in the absence of information, we are unable to determine the magnitude of historic, current, or future threats from this activity. The small amount of information available is not sufficient to assess the extent to which the Tamaulipan agapema's range may have been reduced, or if the loss of habitat has caused a decline in population numbers. Also, we have no information to indicate that the conversion of native habitat is occurring now or in the foreseeable future. Historic habitat loss can be evidence of current or future threats if those activities, or effects of those activities, are still occurring in such a way that current or future populations will decline to the point of extinction. In the absence of information that allows us to make a reasonable connection between historic habitat loss and current or

future declines of the species, we have determined that Tamaulipan agapema is not in danger of extinction now or in the foreseeable future due to agricultural development.

Urban development is expected to occur as human populations in Texas continue to increase, but we have no information that it will occur in the remaining woodland areas of the Lower Rio Grande Valley within the United States. Also, we do not have the information needed to assess whether climate change is a threat to this species. And, we have no evidence that overutilization, predation, disease, inadequacy of existing regulatory mechanisms, pesticide use, and small population size are threats to the species. In the absence of information that allows us to make a reasonable connection between the impacts of these activities and current or future declines of the Tamaulipan agapema, we conclude that this species is not in danger of extinction now or in the foreseeable future due to any of these factors.

Therefore, based on our review of the best available scientific and commercial information pertaining to the five factors, we find that the potential threats are not of sufficient imminence, intensity, or magnitude to indicate that Tamaulipan agapema is in danger of extinction (endangered), or likely to become endangered within the foreseeable future (threatened), throughout all of its range.

#### Significant Portion of the Range

Having determined that Tamaulipan agapema is not in danger of extinction or likely to become so throughout its range, we must next consider whether there are any significant portions of the range where it is in danger of extinction or is likely to become endangered in the foreseeable future.

In determining whether Tamaulipan agapema is endangered or threatened in a significant portion of its range, we first addressed whether any portions of the range warrant further consideration. We evaluated the current range of Tamaulipan agapema to determine if there is any apparent geographic concentration of the primary stressors potentially affecting the species, such as habitat loss, climate change, predation, pesticide use, and small population size. However, we found the stressors are not of sufficient imminence, intensity, magnitude, or geographic concentration that would warrant evaluating whether a portion of the range is significant under the Act. We do not find that Tamaulipan agapema is in danger of extinction now, nor is it

likely to become endangered within the foreseeable future, throughout all or a significant portion of its range. Therefore, listing *Tamualipan agapema* as endangered or threatened under the Act is not warranted at this time.

We request that you submit any new information concerning the status of, or threats to, the Tamaulipan agapema to our Corpus Christi Ecological Services Field Office (see **ADDRESSES**) whenever it becomes available. New information will help us monitor the species and encourage its conservation. If an emergency situation develops for Tamaulipan agapema, or any other species, we will act to provide immediate protection.

### Species Information for *Sphingicampa blanchardi* (No Common Name)

#### Taxonomy and Species Description

*Sphingicampa blanchardi* is another silk moth that occurs in the family Saturniidae (Tuskes *et al.* 1996; p. 88). Three other *Sphingicampa* species occur sympatrically (they occupy the same or overlapping geographic areas, but do not interbreed) with *S. blanchardi*. *Sphingicampa blanchardi* is distinguished from these related species by its brown-to-light-yellow forewings with shades of pink (Tuskes *et al.* 1996, p. 89). *Sphingicampa blanchardi* males have 0.9 to 1.1 in (24 to 28 mm) long forewings, and females have 1.2 to 1.4 in (31 to 36 mm) long forewings (Tuskes *et al.* 1996, p. 89).

#### Distribution and Status

*Sphingicampa blanchardi* is known to occur in a few isolated localities in Cameron and Hidalgo Counties, Texas (Ferguson 1971, pp. 49–50; E. Riley 2010, pers. comm., pp. 1–2; Tuskes *et al.* 1996, p. 88). This moth is commonly found at the Audubon Palm Grove Sanctuary in Cameron County, Texas, and is also known from a few other localities along the United States and Mexico border in south Texas, such as the Santa Ana National Wildlife Refuge (Ferguson 1971, p. 50; E. Knudson 2010, pers. comm., p. 1). The range of the moth likely extends into Mexico; however, despite survey efforts, no occurrences have been documented in Mexico (Ferguson 1971, pp. 49–50). However, failure to detect species when they are present is not uncommon in field surveys (Gu and Swihart 2004, p. 199).

Although this moth has been reported to be commonly found at the Audubon Palm Grove Sanctuary, Cameron County, Texas (Ferguson 1971, p. 50; E. Knudson 2010, pers. comm., p. 1), we

have no historic or current population estimates for this species. In the absence of information, we are unable to determine the species' current distribution and historic or current population estimates.

#### Habitat and Biology

Little is known regarding the habitat and biology of *Sphingicampa blanchardi*, and the majority of this information can be found in the book titled *Wild Silk Moths of North America*, by Tuskes *et al.* (1996, pp. 88–90). Within this book, it is noted that adults are associated with *Pithecellobium ebano* (ebony) woodland communities, and larvae raised in captivity are known to feed on several legume trees (trees that produce seed pods) associated with *P. ebano* woodlands, such as *Acacia farnesiana* (huisache), *Leucaena pulverulenta* (tepeguiaje), and *Pithecellobium flexicaule* (ebony) (Tuskes *et al.* 1996; p. 88). As noted above for Tamaulipan agapema, moths are typically associated with host plants, and are often specifically linked to one or more plant species in order to complete their life cycle. However, we do not know if *S. blanchardi* are like other moth species that are often specifically linked to one or more plant species.

#### Five-Factor Evaluation for *Sphingicampa blanchardi*

In making this finding, information pertaining to the *Sphingicampa blanchardi* in relation to the five factors provided in section 4(a)(1) of the Act is discussed below.

##### Factor A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

We evaluate historic threats in respect to current and future populations, because historic threats can be evidence of current or future threats if those activities, or effects of those activities, are still occurring in such a way that current or future populations are being significantly affected. We use the best available scientific and commercial information to make reasonable connections between the historic impacts and current or future declines of the species in order to determine whether the species is in danger of extinction now or in the foreseeable future. The mere identification of factors that could negatively impact a species is not sufficient to compel a finding that listing is appropriate. We require evidence that these factors are operative threats that act on the species to the point that the species meets the definition of endangered or threatened

under the Act. Potential factors that may affect the habitat or range of the *S. blanchardi* are discussed in this section, including: (1) Agricultural development, (2) urban development, and (3) climate change.

#### Agricultural Development

The loss of Tamaulipan thornscrub habitat has occurred historically within the Lower Rio Grande Valley of south Texas and northern Tamaulipas, Mexico. With the conversion of Tamaulipan thornscrub to agricultural field crops and urban areas, it has only about 5 percent of the native vegetation remaining in the Lower Rio Grande Valley by the 1980s (Jahrsdoerfer and Leslie 1988, p. 1). Much of the habitat loss that has occurred has been attributed to agricultural development (Tremblay *et al.* 2005, p. 479). In the context of this finding, we consider agricultural development to be the conversion of native habitat to agricultural croplands. In Cameron County, Texas, Tremblay *et al.* (2005, p. 481) noted that approximately 75 percent of native habitat loss was due to agricultural development. Tremblay *et al.* (2005, p. 481) also noted that the extent of overall habitat loss had occurred by 1983. Subsequently, Jurado *et al.* (1999, p. 272) noted that over 90 percent of Tamaulipan thornscrub in northeastern Mexico has been cleared for agriculture or to create grasslands for cattle, but they did not give a date by when this loss had occurred. Where the conversion of native Tamaulipan thornscrub habitat to agricultural field crops has occurred, it is reasonable to assume that habitat loss for the *Sphingicampa blanchardi* has occurred because the native plant species are no longer available. However, we have no information to indicate that additional conversion of native habitat to agricultural croplands has occurred since the 1980s, and we have no evidence that it will happen in the foreseeable future.

While there may have been historical impacts to the *Sphingicampa blanchardi* from agricultural development, the magnitude of historic, current, or future threats from this activity is difficult to determine, because we have no historic or current population estimates with which to make a comparison. The information available does not allow us to assess the extent to which the *S. blanchardi* occurred throughout the Tamaulipan thornscrub, or if the loss of habitat has caused a decline in population numbers. Also, we have no information to indicate that additional conversion of native habitat to agricultural croplands



has occurred since the 1980s, and we have no evidence that it will happen in the foreseeable future. Tremblay *et al.* (2005, p. 481) noted that the extent of overall habitat loss had occurred by 1983 in Cameron County, Texas, and Jurado *et al.* (1999, p. 272) did not give a date by when habitat loss had occurred in northeastern Mexico. In the absence of information, we are unable to evaluate the historic loss of habitat with respect to current population numbers. Historic threats can be evidence of current or future threats if those activities, or effects of those activities, are still occurring in such a way that current or future populations will decline to the point of extinction. Because we lack sufficient information related to habitat loss and *S. blanchardi* population numbers, we are not able to determine whether habitat loss due to agricultural development may be a threat to the species. Therefore, based on the best available information, the loss of Tamaulipan thornscrub due to agricultural development does not seem to have caused a decline in *S. blanchardi* to the point of extinction. Although we lack the information to determine historic or current population estimates, this moth has been reported to be commonly found at certain localities, such as the Audubon Palm Grove Sanctuary (Ferguson 1971, p. 50; E. Knudson 2010, pers. comm., p. 1). Therefore, we do not consider agricultural development to be a current or future threat to *S. blanchardi*.

#### Urban Development

As previously noted for Tamaulipan agapema above, urban development was identified as a cause for the loss of Tamaulipan thornscrub in the Lower Rio Grande Valley (Jahrsdoerfer and Leslie 1988, p. 1). The human population in the Lower Rio Grande Valley of south Texas increased by 40 percent from 1990 to 2000, compared to an increase of 13 percent throughout the United States during the same period (Murdock *et al.* 2002, p. 34). Human population levels in the Lower Rio Grande Valley of Texas are projected to increase by between 130 and 181 percent from 2000 to 2040 (Murdock *et al.* 2002, pp. 40–43). As the human population grows, it is reasonable to expect a concurrent increase in urban development. As noted for the Tamaulipan agapema, many areas in the Lower Rio Grande Valley of south Texas where similar species of moths once were found have been converted to residential subdivisions (Tuskes *et al.* 1996, p. 170). However, there is no information demonstrating a reasonable connection between impacts of urban

development and current or future declines of *Sphingicampa blanchardi*. Pockets of habitat may remain along roadways and on private land (Tuskes *et al.* 1996, p. 170). But, we do not know whether or not the species may survive in these pockets of habitat within urban areas. Because we lack sufficient information regarding the species' biology, we are unable to conclude whether urban areas can harbor adequate habitat patches. In the absence of information that allows us to assess the impacts of urban development on current or future declines of *S. blanchardi*, we have no evidence linking urban development with the species' population status.

Furthermore, most of the remaining woodland areas of the Lower Rio Grande Valley within the United States are managed by the Service's National Wildlife Refuge System and other resource agencies and organizations (Tremblay *et al.* 2005, pp. 481–482). The South Texas Refuge Complex—which consists of Santa Ana, Laguna Atascosa, and the Lower Rio Grande Valley National Wildlife Refuges—during the period 1979–2009, has acquired over 106,000 ac (42,896 ha) of land via fee title or conservation easements in the Lower Rio Grande Valley of Texas to create habitat corridors between pre-existing lands of Santa Ana and Laguna Atascosa National Wildlife Refuges (Service 2011, pp. 1–2). In addition to acquiring land, the South Texas Refuge Complex has replanted over 9,000 ac (3,642 ha) of agricultural land with over 2,750,000 native Tamaulipan thornscrub plant species. In Cameron and Hidalgo Counties alone, the South Texas Refuge Complex currently manages 140,661 ac (56,923 ha) of native habitat (Sternberg 2011, pers. comm., p. 1), which is protected from urban development.

In summary, urban development may have resulted in some historic habitat loss for the *Sphingicampa blanchardi*, but there is no information that allows us to make a reasonable connection between impacts of urban development and current or future declines of the species. Urban development is expected to occur over the next 30 years in the Lower Rio Grande Valley of south Texas, but we have no information that it will occur in the remaining woodland areas or at a rate or magnitude that would result in population level impacts. Because most of the remaining woodland areas of the Lower Rio Grande Valley within the United States are managed by the Service's National Wildlife Refuge System and other resource agencies and organizations (Tremblay *et al.* 2005, pp. 481–482), we expect that current and future urban

development will occur on agricultural lands that have already been cleared of native vegetation. Therefore, in the absence of information that allows us to assess the impacts of urban development on current or future declines of *S. blanchardi*, we concluded that urban development is not a threat to the *S. blanchardi* now or likely to become so.

#### Climate Change

For a more detailed description of how we consider the effects of climate change as a component of our analyses of species under the Act, please see Factor A, Climate Change, above under the Tamaulipan agapema. In regards to the *Sphingicampa blanchardi*, we have no information for the local geographic area of south Texas or northern Mexico. While it appears reasonable to assume that climate change will occur within the range of the *Sphingicampa blanchardi*, we lack sufficient information to know specifically how climate change may affect the species. We have not identified, nor are we aware of, any data on an appropriate scale to evaluate habitat or population trends for the species, or to make predictions on future trends and whether the species will actually be impacted. Therefore, we have no evidence to conclude that climate change is a threat to the *S. blanchardi* now or likely to become so.

#### Summary of Factor A

Based on the best available information, the *Sphingicampa blanchardi*'s current and historical population size and distribution are unknown. Because we have no historic or current population estimates for *S. blanchardi*, we are unable to correlate land use impacts with current or future species abundance, and, therefore, are unable to determine if those impacts would cause the species to decline to the point of extinction. While the loss of native Tamaulipan thornscrub has occurred historically, there is an absence of information that allows us to make a reasonable connection between the impacts of habitat loss and current or future declines of the species. We have no evidence that current or future urban development will result in detrimental impacts to *S. blanchardi* or its habitat. The information available does not allow us to assess the magnitude of impacts from urban development on the species, nor the extent of the occupied range. Also, we lack sufficient certainty to know specifically how climate change affects the species now or in the foreseeable future. Therefore, we conclude that the

Tamaulipan agapema is not threatened by destruction, modification, or curtailment of its habitat or range now or likely to become so.

*Factor B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes*

There is no information suggesting that overutilization for commercial, recreational, scientific, or educational purposes poses a threat to the species. Therefore, we find that the *Sphingicampa blanchardi* is not threatened by overutilization now or likely to become so.

*Factor C. Disease or Predation*

We have no information to indicate that the *Sphingicampa blanchardi* is subject to disease or predation. Therefore, we find that *S. blanchardi* is not threatened by disease or predation now or likely to become so.

*Factor D. The Inadequacy of Existing Regulatory Mechanisms*

We are not aware of any existing regulatory mechanisms that protect *Sphingicampa blanchardi* or its habitat in the United States or Mexico. However, because we have not identified any threat to the species under the other four listing factors requiring regulatory protection, we do not find that the absence of regulatory mechanisms constitutes an independent threat to the species. Therefore, we find that the *S. blanchardi* is not threatened by the inadequacy of existing regulations now or likely to become so.

*Factor E. Other Natural or Manmade Factors Affecting Its Continued Existence*

**Pesticide Use**

We looked at pesticides as a potential factor that has an impact on the *Sphingicampa blanchardi* due to the extent of agricultural croplands that occur within the range of the species. The Lower Rio Grande Valley of Texas is a major agriculture production area (White *et al.* 1983, p. 331; Wainwright *et al.* 2001, p. 101), and pesticides have been found at relatively high levels in this area (White *et al.* 1983, p. 325; Wainwright *et al.* 2001, p. 109). However, we are not aware of any *S. blanchardi* mortalities that have resulted from the use of pesticides, or any information linking pesticides to population declines of the *S. blanchardi*. We have no information that *S. blanchardi* use croplands and are thus exposed to pesticides. Because we have no link between pesticide use and population abundance, we have no evidence that the *S. blanchardi* is

threatened by pesticide use now or likely to become so.

**Small Population Size**

The historical loss of Tamaulipan thornscrub habitat due to agricultural development may have reduced the *Sphingicampa blanchardi*'s range to small, isolated patches of habitat, but we have no information on where or how many may occur. In many cases, small, isolated populations are subject to increased risk of extinction from stochastic (random) environmental, genetic, or demographic events (Brewer 1994, p. 616). Environmental changes, such as drought or severe storms, can have severe consequences if affected populations are small and clumped together (Brewer 1994, p. 616). Loss of genetic diversity can lead to inbreeding depression and an increased risk of extinction (Allendorf and Luikart 2007, pp. 338–343). Populations with small effective size show reductions in population growth rates, loss of genetic variability, and increases in extinction probabilities (Leberg 1990, p. 194; Jimenez *et al.* 1994, p. 272; Allendorf and Luikart 2007, pp. 338–339). Because the information available does not allow us to assess historic or current population estimates, nor the extent of the species' current range, we are not able to determine the extent if the species' range has been reduced to small, isolated patches of habitat.

Additionally, there is no information to indicate that *Sphingicampa blanchardi* population numbers or population dynamics are vulnerable to the effects of small populations. We have no information to estimate historic or current population sizes for this species. We have no information on the number of individuals, population dynamics, or evidence of genetic structuring and inbreeding for the *S. blanchardi*. Additionally, we do not currently have sufficient information on environmental or any other factors to know whether they affect the species to an extent that a threat exists. The information available does not allow us to assess the magnitude or immediacy of these impacts on the species. In summary, we have no information that allows us to make a reasonable connection between the impacts of stochastic (random) environmental, genetic, or demographic events and current or future declines of the *S. blanchardi*. Therefore, we conclude that *S. blanchardi* is not threatened by small population size now or likely to become so.

**Summary of Factor E**

In summary, based on the best available information, we have no evidence that natural or other manmade factors are likely to significantly threaten the existence of the *Sphingicampa blanchardi*. We have no information to indicate that the *S. blanchardi* uses croplands and is exposed to pesticides. Also, we no information on historic or current population sizes, so we are unable to determine if there may be inherent vulnerabilities of small populations and restricted geographic range. Therefore, we find that the *S. blanchardi* is not threatened as a result of natural or other manmade factors now or likely to become so.

**Finding for the *Sphingicampa blanchardi***

As required by the Act, we considered the five factors in assessing whether the *Sphingicampa blanchardi* is endangered or threatened throughout all of its range. We examined the best scientific and commercial information available regarding the past, present, and future threats faced by the *S. blanchardi*. We reviewed the petition, information available in our files, and other available published and unpublished information, and we consulted with recognized moth experts and State agencies. We evaluated historic threats in respect to current and future populations, and used the best available scientific and commercial information to make reasonable connections between the historic impacts and current or future declines of the species in order to determine whether the species is in danger of extinction now or in the foreseeable future. The mere identification of factors that could negatively impact a species is not sufficient to compel a finding that listing is appropriate. We require evidence that these factors are operative threats that act on the species to the point that the species meets the definition of endangered or threatened under the Act.

Based on the best available information, there may have been historic habitat impacts to the *Sphingicampa blanchardi* from agricultural development, but in the absence of information on historic or current species range or abundance, we are unable to determine the magnitude of historic, current, or future threats from this activity. The small amount of information available is not sufficient to assess the extent to which the *S. blanchardi*'s range may have been reduced, or if the loss of native

Tamaulipan thornscrub has caused a decline in population numbers. Also, we have no evidence that the native Tamaulipan thornscrub is being converted to agricultural crop fields now or in the foreseeable future. In the absence of information that allows us to make a reasonable connection between historic agricultural conversion of native Tamaulipan thornscrub to crop fields and current or future declines of the species, we have determined that *S. blanchardi* is not in danger of extinction now or in the foreseeable future due to agricultural development.

Urban development is expected to occur as human populations in Texas continue to increase, but we have no information that it will occur within the remaining woodland areas of the Lower Rio Grande Valley. Also, we do not have the information needed to assess whether climate change is a threat to this species. And, we have no evidence that overutilization, predation, disease, inadequacy of existing regulatory mechanisms, pesticide use, and small population size are threats to the species. In the absence of information that allows us to make a reasonable connection between the impacts of these activities and current or future declines of the *S. blanchardi*, we conclude that this species is not in danger of extinction now or in the foreseeable future due to any of these factors.

Therefore, based on our review of the best available scientific and commercial information pertaining to the five factors, we find that the potential threats are not of sufficient imminence, intensity, or magnitude to indicate that *Sphingicampa blanchardi* is in danger of extinction (endangered), or likely to become endangered, within the foreseeable future (threatened) throughout all of its range.

#### Significant Portion of the Range

Having determined that *Sphingicampa blanchardi* is not in danger of extinction or likely to become so throughout its range, we must next consider whether there are any significant portions of the range where it is in danger of extinction or is likely to become endangered in the foreseeable future.

In determining whether *Sphingicampa blanchardi* is endangered or threatened in a significant portion of its range, we first addressed whether any portions of the range warrant further consideration. We evaluated the current range of *S. blanchardi* to determine if there is any apparent geographic concentration of the primary stressors potentially affecting the species, such as habitat loss, climate

change, pesticide use, and small population size. However, we found the stressors are not of sufficient imminence, intensity, magnitude, or geographic concentration that would warrant evaluating whether a portion of the range is significant under the Act. We do not find that *S. blanchardi* is in danger of extinction now, nor is it likely to become endangered within the foreseeable future, throughout all or a significant portion of its range. Therefore, listing *S. blanchardi* as endangered or threatened under the Act is not warranted at this time.

We request that you submit any new information concerning the status of, or threats to, the *Sphingicampa blanchardi* to our Corpus Christi Ecological Services Field Office (see **ADDRESSES** section) whenever it becomes available. New information will help us monitor the species and encourage its conservation. If an emergency situation develops for *S. blanchardi*, or any other species, we will act to provide immediate protection.

#### Species Information for *Ursia furtiva* (No Common Name)

##### Taxonomy and Species Description

The genus of moths, *Ursia*, was originally described in 1911 by Barnes and McDunnough (1911, pp. 160–161) as belonging to the family Notodontidae. The species *Ursia furtiva* (no common name) was not described until 1971, and was based on a single male specimen collected in the Big Bend National Park, Texas (Blanchard 1971, pp. 303–305).

##### Distribution

Even though there are anecdotal reports of *Ursia furtiva* occurring in San Antonio, Bexar County, Texas, and Lufkin, Angelina County, Texas (<http://www.butterfliesandmoths.org/species/Ursia-furtiva>), we are aware of only one confirmed specimen, which was collected in the Big Bend National Park, Texas (Blanchard 1971, pp. 303–305). Because reports of the species' occurrence outside Big Bend National Park have not been confirmed, we are not accepting those reports as records of occurrence. Therefore, we acknowledge only the single documented specimen from the Chisos Mountains of Big Bend National Park, Texas (Blanchard 1971, pp. 303–305). Thus, the distribution of a species cannot be described based on a single specimen. Therefore, we are not able to determine the distribution of *Ursia furtiva*.

##### Habitat and Biology

We have no information about the habitat or biology of *Ursia furtiva*.

Because we lack any information on the species, we cannot reach conclusions about the biology or the habitat needs of the species.

#### Five-Factor Evaluation for *Ursia furtiva*

In making this finding, information pertaining to the *Ursia furtiva* in relation to the five factors provided in section 4(a)(1) of the Act is discussed below.

##### Factor A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

The description of *Ursia furtiva* is based on a single male specimen collected in the Big Bend National Park, Texas (Blanchard 1971, pp. 303–305). Because we have no information about the species, its habitat, and current or historic distributions or population levels, we conclude that the species is not threatened by the destruction, modification, or curtailment of its habitat or range now or likely to become so.

##### Factor B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

We acknowledge that only the single documented specimen is from Big Bend National Park, Texas (Blanchard 1971, pp. 303–305). Therefore, any commercial, recreational, scientific, or educational collection activities would require a permit by the National Park Service (36 CFR 2.5). Because of this regulation and the lack of information suggesting that overutilization for commercial, recreational, scientific, or educational purposes poses a threat to the species, we find that the *Ursia furtiva* is not threatened by overutilization now or likely to become so.

##### Factor C. Disease or Predation

We have no information to indicate that the *Ursia furtiva* is subject to disease or predation. We have not encountered any information that indicates the contrary; however, in the absence of evidence that this may constitute a threat to the species, we conclude that the *U. furtiva* is not threatened by disease or predation now or likely to become so.

##### Factor D. The Inadequacy of Existing Regulatory Mechanisms

We have no information to indicate that the *Ursia furtiva* may be affected by the inadequacy of existing regulatory mechanisms. As noted above under *Factor B* and according to Title 32 Section 2.5 in the Code of Federal

Regulations, any commercial, recreational, scientific, or educational collection activities, including the collection of *Ursia furtiva*, would require a permit by the National Park Service. Also, we have not identified any threat to the species under the other four listing factors requiring regulatory protection. Consequently, we do not find that the lack of regulatory mechanisms, other than the National Park Service's permit requirement, constitutes an independent threat to the species. We conclude that the *U. furtiva* is not threatened by the inadequacy of existing regulatory mechanisms now or likely to become so.

#### *Factor E. Other Natural or Manmade Factors Affecting Its Continued Existence*

For a more detailed description of how we consider the effects of climate change as a component of our analyses of species under the Act, please see *Factor A, Climate Change*, above under the Tamaulipan agapema. While it appears reasonable to assume that climate change will occur within Big Bend National Park where the only specimen of *Ursia furtiva* has been documented, we lack sufficient information to know specifically how climate change will affect the species. In addition, since we have no information of the habitat required by this species, we cannot make any predictions about the effects of climate change on the habitat. We have not identified, nor are we aware of, any data on an appropriate scale to evaluate habitat or population trends for the species, or to make predictions on future trends and whether the species will actually be impacted. Therefore, based on the best available information, we conclude that *U. furtiva* is not threatened by climate change now or likely to become so.

#### **Finding for the *Ursia furtiva***

As required by the Act, we considered the five factors in assessing whether the *Ursia furtiva* is endangered or threatened throughout all of its range. We examined the best scientific and commercial information available regarding the past, present, and future threats faced by the *U. furtiva*. We reviewed the petition, information available in our files, and other available published and unpublished information, and we consulted with recognized moth experts and State agencies.

Based on our review of the best available scientific and commercial information pertaining to the five factors, we found no information to indicate that there are threats to the

species or its habitat, from any of the five factors. This species is known from only one documented specimen. Therefore, we lack data about *Ursia furtiva*'s habitat, current or historical distributions, and susceptibility to threats. Based on the very limited information about this species, we have determined that *U. furtiva* is not in danger of extinction or likely to become so.

#### *Significant Portion of the Range*

Having determined that *Ursia furtiva* is not in danger of extinction or likely to become so throughout its range, we must next consider whether there are any significant portions of the range where the species is in danger of extinction or is likely to become endangered in the foreseeable future. Because the species is known from only one documented specimen, we lack information about *U. furtiva*'s habitat, current or historical distributions, and susceptibility to threats. There is nothing to suggest that threats are disproportionately acting on any portion of the species' range such that the species is at risk of extinction now or in the foreseeable future. Therefore, we find that listing the *U. furtiva* as an endangered or threatened species is not warranted throughout all or a significant portion of its range.

#### **Conclusion of 12-Month Finding**

We find the Tamaulipan agapema, *Sphingicampa blanchardi*, and *Ursia furtiva* are not in danger of extinction now, nor is any of these three species likely to become so throughout all or a significant portion of its range. Therefore, listing any of these three species as endangered or threatened under the Act is not warranted at this time.

We request that you submit any new information concerning the status of, or threats to, the Tamaulipan agapema or *Sphingicampa blanchardi* to our Corpus Christi Ecological Services Field Office (see **ADDRESSES**) whenever it becomes available. New information will help us monitor the species and encourage its conservation. If an emergency situation develops for either the Tamaulipan agapema, *S. blanchardi*, or any other species, we will act to provide immediate protection.

Also, we request that you submit any new information concerning the status of, or threats to, *Ursia furtiva* to our Austin Ecological Services Field Office (see **ADDRESSES**) whenever it becomes available. New information will help us monitor *U. furtiva* and encourage its conservation. If an emergency situation develops for *U. furtiva*, or any other

species, we will act to provide immediate protection.

#### **References Cited**

A complete list of references cited is available on the Internet at <http://www.regulations.gov> and upon request from the Austin and Corpus Christi Ecological Services Field Offices (see **ADDRESSES**).

#### **Author**

The primary author of this notice is a staff member of the Southwest Regional Office.

**Authority:** The authority for this section is section 4 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Dated: September 7, 2011.

#### **Rowan W. Gould,**

*Acting Director, Fish and Wildlife Service.*

[FR Doc. 2011-24528 Filed 9-26-11; 8:45 am]

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## **DEPARTMENT OF COMMERCE**

### **National Oceanic and Atmospheric Administration**

#### **50 CFR Part 660**

[Docket No. 110908575-1573-01]

**RIN 0648-BB27**

#### **Fisheries Off West Coast States; Pacific Coast Groundfish Fishery; 2012 Specifications and Management Measures and Secretarial Amendment 1**

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Proposed rule; request for comments.

**SUMMARY:** This proposed action would establish the 2012 harvest specifications and management measures for certain groundfish species taken in the U.S. exclusive economic zone (EEZ) off the coasts of Washington, Oregon, and California consistent with the Magnuson-Stevens Fishery Conservation and Management Act and the Pacific Coast Groundfish Fishery Management Plan (PCGFMP). This action includes regulations to implement Secretarial Amendment 1 to the PCGFMP. Secretarial Amendment 1 contains the rebuilding plans for overfished species and new reference points for assessed flatfish species.

**DATES:** Comments must be received no later than 5 p.m., local time on November 8, 2011.