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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–HQ–ES–2020–0114; FF09E22000 FXES1111090FEDR 223]

RIN 1018–BD04

Endangered and Threatened Wildlife and Plants; Threatened Species Status with Section 4(d) Rule for Egyptian Tortoise

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), propose to list the Egyptian tortoise (*Testudo kleinmanni*), a terrestrial tortoise from Libya, Egypt, and Israel, as a threatened species under the Endangered Species Act of 1973, as amended (Act). This determination also serves as our 12-month finding on a petition requesting that the Egyptian tortoise be listed as an endangered or threatened species under the Act. After a review of the best scientific and commercial information available, we find that listing the species is warranted. Accordingly, we propose to list the Egyptian tortoise, as a threatened species with a rule issued under section 4(d) of the Act ("4(d) rule"). If we finalize this rule as proposed, it would add this species to the List of Endangered and Threatened Wildlife and extend the Act's protections to the species.

DATES: We will accept comments received or postmarked on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Comments submitted electronically using the Federal eRulemaking Portal (see **ADDRESSES**, below) must be received by 11:59 p.m. Eastern Time on the closing date. We must receive requests for a public hearing, in writing, at the address shown in **FOR FURTHER INFORMATION CONTACT** by [INSERT DATE 45 DAYS AFTER

DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments by one of the following methods:

(1) *Electronically*: Go to the Federal eRulemaking Portal: *http://www.regulations.gov*. In the Search box, enter FWS–HQ–ES–2020–0114, which is the docket number for this rulemaking. Then, click on the Search button. On the resulting page, in the Search panel on the left side of the screen, under the Document Type heading, check the Proposed Rule box to locate this document. You may submit a comment by clicking on "Comment."

(2) *By hard copy*: Submit by U.S. mail to: Public Comments Processing, Attn: FWS–HQ–ES–2020–0114, U.S. Fish and Wildlife Service, MS: PRB/3W, 5275 Leesburg Pike, Falls Church, VA 22041–3803.

We request that you send comments only by the methods described above. We will post all comments on *http://www.regulations.gov*. This generally means that we will post any personal information you provide us (see **Information Requested**, below, for more information).

Availability of supporting materials: Documentation used to prepare this proposed rule, including the species status assessment (SSA) report, are available on the Internet at *http://www.regulations.gov* under Docket No. FWS–HQ–ES–2020–0114.

FOR FURTHER INFORMATION CONTACT: Elizabeth Maclin, Chief, Branch of Delisting and Foreign Species, Ecological Services, U.S. Fish and Wildlife Service, MS: ES, 5275 Leesburg Pike, Falls Church, VA 22041–3803; telephone, 703–358–2171. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Relay Service at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Executive Summary

Why we need to publish a rule. Under the Act, if we determine that a species warrants listing as an endangered or threatened species throughout all or a significant portion of its range, we are required to promptly publish a proposal in the *Federal Register* and make a determination on our proposal within 1 year. Listing a species as an endangered or threatened species can only be completed by issuing a rule.

What this document does. We propose to list the Egyptian tortoise as a threatened species with a 4(d) rule under the Act.

The basis for our action. Under the Act, we may determine that a species is an endangered or threatened species because of any of 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. We have determined that the Egyptian tortoise is likely to become endangered throughout all of its range in the foreseeable future, meeting the definition of a threatened species. The primary threats to the Egyptian tortoise are loss and degradation of habitat and collection of the species for the pet trade. Habitat destruction throughout the range of the species caused by human activities is the major factor limiting the availability of suitable habitat necessary for the species' survival. Collection is a significant threat to the species in Libya.

We are also proposing a section 4(d) rule. When we list a species as threatened, section 4(d) of the Act (16 U.S.C. 1533(d)) allows us to issue regulations that are necessary and advisable to provide for the conservation of the species. Accordingly, we are proposing a 4(d) rule for the Egyptian tortoise that would prohibit import, export, take, possession and other acts with unlawfully taken specimens, interstate or foreign commerce in the course of a commercial activity, or sale or offer for sale. It would also

be unlawful to attempt to commit, to solicit another to commit, or to cause to be committed any such conduct. The proposed 4(d) rule would provide an exception for interstate commerce from public institutions to other public institutions, specifically museums, zoological parks, and scientific institutions that meet the definition of "public" at 50 CFR 10.12. We may issue permits to carry out otherwise prohibited activities, including those described above, involving threatened wildlife under certain circumstances, such as for scientific purposes, or the enhancement of propagation or survival of the species in the wild.

Peer review. In accordance with our joint policy on peer review published in the *Federal Register* on July 1, 1994 (59 FR 34270) and our August 22, 2016, memorandum updating and clarifying the role of peer review of listing actions under the Act, we sought the expert opinion of five appropriate specialists for peer review of the Species Status Assessment report. We received responses from three specialists, which informed this proposed rule. The purpose of peer review is to ensure that our listing determinations and 4(d) rules are based on scientifically sound data, assumptions, and analyses.

Information Requested

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from other concerned governmental agencies, wildlife management agencies in the range countries, the scientific community, industry, or any other interested parties concerning this proposed rule.

We particularly seek comments concerning:

(1) The species' biology, range, and population trends, including:

(a) Biological or ecological requirements of the species, including habitat requirements for feeding, breeding, and sheltering;

(b) Genetics and taxonomy;

(c) Historical and current range, including distribution patterns;

(d) Historical and current population levels, and current and projected trends; and

(e) Past and ongoing conservation measures for the species, its habitat, or both.

(2) Factors that may affect the continued existence of the species, which may include destruction, modification, or curtailment of habitat or range; overutilization for commercial, recreational, scientific, or educational purposes; disease; predation; the inadequacy of existing regulatory mechanisms; or other natural or manmade factors.

(3) Biological, commercial trade, or other relevant data concerning any threats (or lack thereof) to this species and existing regulations that may be addressing those threats.

(4) Additional information concerning the historical and current status, range, distribution, and population size of this species, including the locations of any additional populations of this species.

(5) Information on regulations that are necessary and advisable to provide for the conservation of the Egyptian tortoise and that the Service can consider in developing a 4(d) rule for the species. In particular, information concerning the extent to which we should include any of the section 9 prohibitions in the 4(d) rule or whether any exceptions from the prohibitions should be provided in the 4(d) rule.

Please include sufficient information with your submission (such as scientific journal articles or other publications) to allow us to verify any scientific or commercial information you include.

Please note that submissions merely stating support for, or opposition to, the action under consideration without providing supporting information, although noted, do not provide substantial information necessary to support a determination. Section 4(b)(1)(A) of the Act directs that determinations as to whether any species is an

endangered or a threatened species must be made "solely on the basis of the best scientific and commercial data available."

You may submit your comments and materials concerning this proposed rule by one of the methods listed in **ADDRESSES**. We request that you send comments only by the methods described in **ADDRESSES**.

If you submit information via *http://www.regulations.gov*, your entire submission—including any personal identifying information—will be posted on the website. If your submission is made via a hardcopy that includes personal identifying information, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so. We will post all hardcopy submissions on *http://www.regulations.gov*.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on *http://www.regulations.gov*.

Because we will consider all substantive comments and information received during the comment period, and base our determination on the best scientific and commercial data available, our final determinations may differ from this proposal. Upon consideration of comments and information we receive, we may conclude based on the best scientific and commercial data available after considering all of the relevant factors that the species is endangered instead of threatened, or we may conclude that the species does not warrant listing as either an endangered species or a threatened species. In addition, we may change the provisions in the 4(d) rule if we conclude it is appropriate in light of comments and new information we receive. For example, we may narrow the proposed exception to interstate commerce prohibitions for certain public institutions in order to prohibit additional activities if we conclude that those additional activities are not compatible with conservation of the species. Conversely, we may establish additional

exceptions to the interstate commerce prohibitions in the final rule if we conclude that the activities would facilitate the conservation and recovery of the species.

Public Hearing

Section 4(b)(5) of the Act provides for a public hearing on this proposal, if requested. Requests must be received by the date specified in **DATES**. Such requests must be sent to the address shown in **FOR FURTHER INFORMATION CONTACT**. We will schedule a public hearing on this proposal, if requested, and announce the date, time, and place of the hearing, as well as how to obtain reasonable accommodations, in the *Federal Register* at least 15 days before the hearing. For the immediate future, we will provide these public hearings using webinars that will be announced on the Service's website, in addition to the *Federal Register*. The use of these virtual public hearings is consistent with our regulations at 50 CFR 424.16(c)(3).

Previous Federal Actions

On June 9, 2014, we received a petition from Friends of Animals to list the Egyptian tortoise as threatened or endangered under the Act. On April 10, 2015, we published a 90-day finding that found that the petition presented substantial scientific and commercial information indicating that the petitioned action may be warranted and initiated a status review for the Egyptian tortoise (80 FR 19259).

Supporting Documents

We prepared an SSA report for the Egyptian tortoise, in consultation with species experts (Service 2020, entire). The SSA report represents a compilation of the best scientific and commercial data available concerning the status of the species, including the impacts of past, present, and future factors (both negative and beneficial) affecting the species. The Service sent the SSA report to five independent peer reviewers and received three responses.

I. Proposed Listing Determination

Background

A thorough review of the taxonomy, life history, and ecology of the Egyptian tortoise is presented in the SSA report (Service 2020, entire; available at *http://www.regulations.gov* under the FWS–HQ–ES–2020–0114 docket).

Taxonomy

The species Egyptian tortoise *(Testudo kleinmanni)* is a valid taxon (ITIS 2014, unpaginated) with *Testudo leithii* as a synonym (International Union for Conservation of Nature and Natural Resources (IUCN) 2014, p. 1), and *Testudo werneri* as a junior synonym (Attum *et al.* 2007a, p. 399).

Description

The Egyptian tortoise is the only dwarf tortoise occurring in the northern hemisphere, the smallest and least-known tortoise species inhabiting the Mediterranean basin (Buskirk 1985, pp. 35, 37), and the second smallest species of tortoise in the world (Woodland Park Zoo 2014, p. 1). The head, neck, limbs, feet, nails, and tail vary from yellow to yellowish-brown to ivory colored (Loveridge and Williams 1957, p. 280; Flower 1933, p. 748; Highfield and Martin 2014, p. 1; Ernst *et al.* 2014, p. 1). The high-domed carapace (top shell) is pale yellow with lemon and yellow-green shades, with each scute (bony plates) edged with brown or black (Buskirk 1985, p. 36; Loveridge and Williams 1957, p. 279; Woodland Park Zoo 2014, p. 1). These marks vary in individuals, regardless of sex or locality, and may be strong and broad, wide or narrow, or merely outlines to the shields (Flower 1933, p. 749; Loveridge and Williams 1957, p. 279; Ernst *et al.* 2014, p. 1). The plastron (bottom shell) is greenish to yellow and the vast majority of specimens feature two V-shaped brown or black markings upon the abdominal scutes (Buskirk 1985, p. 36; Loveridge and Williams 1957, p. 279). This feature is quite different from the abdominal marks seen on the plastron of other Palaearctic land-

tortoises (Greek tortoise (*Testudo graeca*), Hermann's tortoise (*Testudo hermanni*), Marginated tortoise (*Testudo marginata*), and Russian tortoise (*Testudo horsfieldii*); Flower 1933, p. 749; Highfield and Martin 2014, p. 1).

The most distinguishing characteristic of the Egyptian tortoise is its remarkably small size (Highfield and Martin 2014, p. 1). Females are generally a bit larger than males (Woodland Park Zoo, p. 1; Buskirk 1985, p. 36). Females usually have a carapace length over 110 millimeters (4.33 inches) and weigh approximately 300–350 grams (10.6–12.4 ounces). Male's carapace length is between 90 and 100 millimeters (3.54–3.93 inches), and weigh 160–250 grams (5.6–8.8 ounces).

Habitat

The Egyptian tortoise is mostly found in desert and semi-desert areas, shoreline grasses at the edges of salt lakes or salt marshes, and areas of scrub thorn in a narrow coastal zone along the southeast Mediterranean coast (Lortet 1887, and Werner 1982, in Buskirk 1985, p. 40; Maryland Zoo 2015, p. 1; Ernst et al 2014, p. 1; Mendelssohn 1982, p. 133). The species prefers areas ranging from sandy soils and dunes to solidified sands with fair to dense plant cover of bushes and small shrubs, and short-lived annual vegetation to eat (Baha El Din 1994, p. 4; Mendelssohn 1982, pp. 133–134).

Life History

Egyptian tortoises are active during the cooler part of the year. Peak activity is from December to March. By April, activity is reduced, although tracks are occasionally seen as early as October and as late as May (Geffen and Mendelssohn 1989, p. 405; Mendelssohn 1982, p. 134). During the summer, tortoises aestivate or experience prolonged dormancy from mid-May or early June through the end of September, a period characterized by extremely high ambient temperatures, no rainfall, and the lowest food availability (Attum *et al.* 2006, 2007b, 2008, in Attum *et al.* 2013, pp. 74, 76–77; Geffen and Mendelssohn 1989, p. 406). Bushes and shrubs provide cover and thermal refuges,

especially during prolonged dormancy during the summer, and are essential to the survival of the species (Geffen and Mendelssohn 1989, p. 408; Mendelssohn 1982, p. 134). Two major factors that seem to stimulate the onset of aestivation in the Egyptian tortoise are rising ambient temperature (over 30 °C (86 °F)) and withering of food plants (Ernst *et al.* 2014, p. 1; Geffen and Mendelssohn 1989, p. 408).

Reproductive potential is low. Female Egyptian tortoises produce a maximum of three eggs in one clutch with up to two clutches for the season (Baha El Din 2020, pers. comm.). Eggs are laid in a solitary nesting site that does not require specific location or structure, during a prolonged nesting period (Geffen and Mendelssohn 1991, p. 576). It is likely that Egyptian tortoises do not reproduce at all during years of low rainfall (Mendelssohn 1982, p. 136). Males reach maturity at 5 years old, and females take at least 8 years because of physical limitations of laying eggs (Baha El Din 2020, pers. comm.; Attum *et al*. 2011, p. 10). One generation in the wild is estimated to be about 20 years (Perälä 2006, p. 60; Macale *et al.* 2009, p. 143), although the average age can be much less (Egyptian Environmental Affairs Agency 2009, p. 222). Information of survival rate specific to Egyptian tortoises is lacking. Generally, survivorship for other closely related tortoise species in the genus *Testudo* spp. during the egg stage and first year of life is significantly lower than during later life stages (Iverson 1991, p. 385; Henry *et al.* 1998, p. 192).

Diet

The Egyptian tortoise is an herbivore (Maryland Zoo 2015, p. 1), although the diet of wild tortoises is not well understood. Because food is likely to be most abundant when Egyptian tortoises are active in the cooler part of the year, they feed intensely on annual vegetation and leaves of perennial bushes and shrubs when active; however, most parts of shrubs may be out of reach (Mendelssohn 1982, p. 134; Groombridge 1982, p. 134). Annual precipitation facilitates the growth of short-lived annual vegetation. The

relatively high level of precipitation of 100–200 mm (3.94–7.87 in) along the Mediterranean coast may be the main factor restricting the species to coastal areas that receive higher rainfall than areas further inland (Mendelssohn 1982, p. 134).

Range and Distribution

Historically, the Egyptian tortoise occurred on both sides of the Nile River, distributed along the southeast Mediterranean coast, in three regions (Tripolitania, Sirte, and Cyrenaica) in Libya, two regions (North Coast and North Sinai) in Egypt, and in the western Negev Desert in Israel. Rangewide surveys have never been conducted; however, based on hydrobasins and known records of the species throughout the range, the historical range was estimated at 79,288 km^2 (30,613 mi^2) (Rhodin 2020, pers. comm.). Taking into account areas lost to and degraded by human development activities, recent estimates state that the range has decreased to between 7,929 and 15,857 km^2 (3,061–6,122 mi^2) (Perälä 2005, p. 894; Perälä 2006, p. 61; Rhodin 2020, pers. comm.). The species currently exists in the three regions in Libya, in five small subpopulations in North Sinai in Egypt, and in the western Negev Desert in Israel. The Egyptian tortoise has been extirpated from the North Coast of Egypt, and no longer occupies the historical part of the range in Egypt from the Libyan border east to the Nile River.

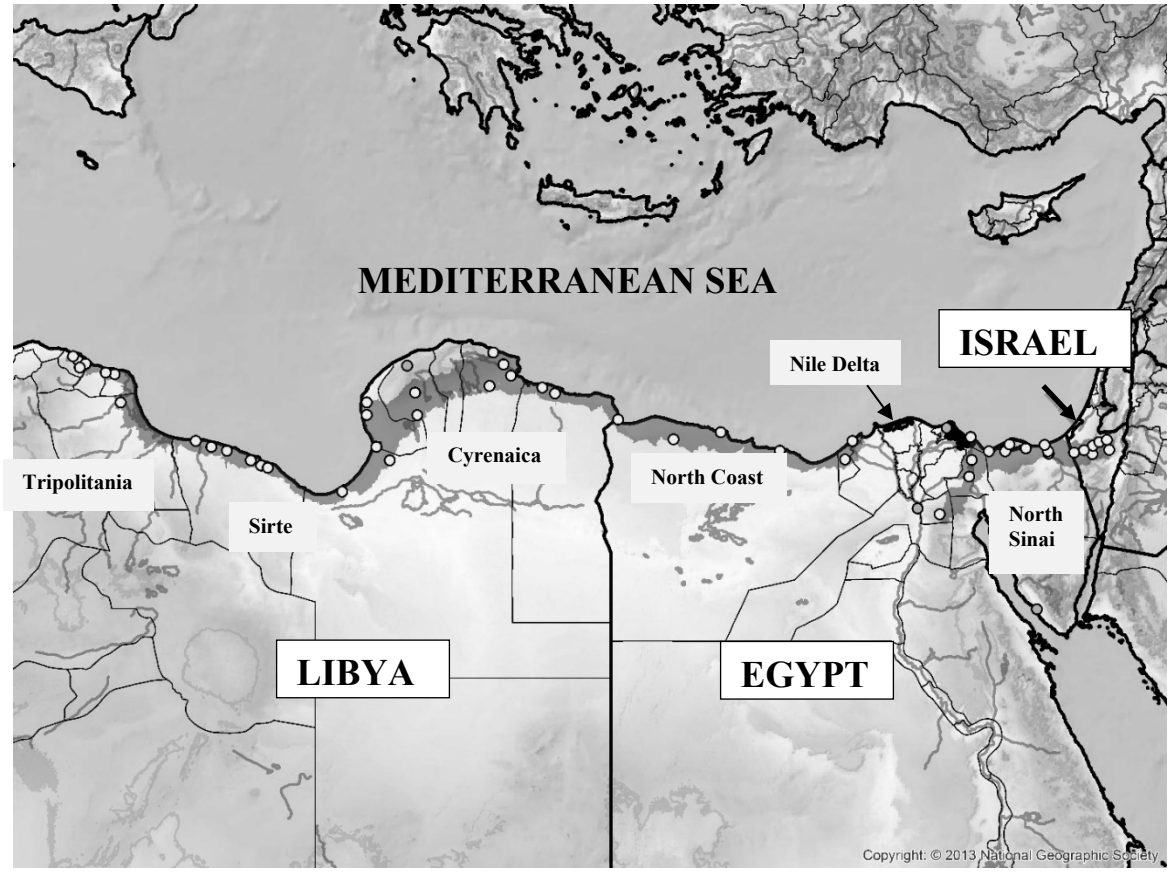

Figure 1. Distribution of the Egyptian tortoise, from Libya through Israel. The shaded area along the southeastern Mediterranean coast, on the coastline of Libya and Egypt, and into the Western Negev Desert in Israel on the map above reflects the approximate historical range of the species. The Egyptian tortoise has been extirpated from the North Coast of Egypt; therefore, the species no longer occupies the historical part of the range in Egypt from the Libyan border east to the Nile Delta. The dots are recorded locations from the literature including both historical and current occurrence of the species. (Rhodin 2020, pers. comm; Rhodin *et al*. 2017).

The Egyptian tortoise is restricted to a narrow coastal zone in North Africa and the western Negev Desert in Israel, in the southeast Mediterranean, and has the most restricted range of all tortoises in the Mediterranean Basin (Baha El Din 2003, entire). It currently occurs within scrub habitat (see *Habitat*) up to 40–50 km (25–31 mi) from the Mediterranean coast, depending on the location. Historically, the range of the species in Egypt potentially encompassed the whole Mediterranean coastal desert east and west of the Nile Delta as far as 100 km (62 mi) inland (Baha El Din 1994, p. 3).

Population Estimate

Over the last three generations (or about 60 years), the Egyptian tortoise population has been reduced by approximately 90 percent throughout its range, including the extirpation of the species in North Coast, Egypt, which accounted for about 30 percent of the species' historical population (Perälä 2005, p. 894; Perälä 2006, p. 61; Rhodin 2020, pers. comm; Rhodin *et al.* 2017, p. 154; Baha El Din 1994, p. 6; Baha El Din *et al.* 2003, p. 651). No accurate fieldwork-based data on population sizes exist for the species. Based on an average population density in Israel from a study in the 1980s, and the area of occupancy as defined by the IUCN, the rangewide population size was estimated in 2005 and 2006 to be approximately 10,650 individuals (Perälä 2005, p. 894; Perälä 2006, p. 61). Taking into account comments from peer reviewers of the SSA report, we estimate that the current population size is approximately 11,000 individuals, with at least 7,500 individuals in Libya, 200-250 individuals in North Sinai, Egypt, and approximately 3,000 individuals in Israel. However, we do not have any recent estimates of the population size in Israel (Perälä 2005, p. 894; Perälä 2006, p. 61; Attum 2019, pers. comm.; Baha El Din 2020, pers. comm.).

Table 1. Estimates of the historical and current populations for the Egyptian tortoise (Perälä 2005, p. 894; Perälä 2006, p. 61).

Population Name	**Historical Individuals (estimate of individuals present in the 1950s)[1]**	**Estimated Population in 2005 and 2006[2]**	**Best Estimate in 2020[3]**
Libya (Cyrenaica)	22,600	5,000	Libya: At least 7,500 adults, not including non-breeding adults
Libya (Sirte)	Unknown	unknown	
Libya (Tripolitania)	2,500	2,500	
Egypt (North Coast)	30,500	0 (was previously reintroduced in El Omayed Protected Area)	0
Egypt North Sinai and Israel	45,000	3,150, which are mostly in Israel	Israel: unknown. The best estimate is 3,000, based on the population estimated in 2005 and 2006.
		The population in North Sinai is about 100.	North Sinai: 5 very small subpopulations in one small population contain a total of 200–250 individuals.
Total Individuals	100,600	10,650	≈ 11,000*

*The current total population could be similar to the population estimated in 2005 and 2006. The population in Libya is uncertain due to a lack of any field surveys, and we do not have information regarding the population size in Israel since 2006. Egyptian tortoise populations have experienced habitat degradation because of human activities since the population estimates in 2005 and 2006.

[1](Perälä 2005; Perälä 2006)
[2](Perälä 2005; Perälä 2006; Schneider and Schneider 2008)
[3](Baha El Din 2020, pers. comm.; Attum 2019, pers. comm.; Attum 2020, pers. comm.)

Regulatory and Analytical Framework

Regulatory Framework

Section 4 of the Act (16 U.S.C. 1533) and its implementing regulations (50 CFR part 424) set forth the procedures for determining whether a species is an endangered species or a threatened species. The Act defines an endangered species as a species that is "in danger of extinction throughout all or a significant portion of its range," and a threatened species as a species that is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." The Act requires that we determine whether any species is an endangered species or a threatened species because of any of the following 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.

These factors represent broad categories of natural or human-caused actions or conditions that could have an effect on a species' continued existence. In evaluating these actions and conditions, we look for those that may have a negative effect on individuals of the species, as well as other actions or conditions that may ameliorate any negative effects or may have positive effects.

We use the term “threat” to refer in general to actions or conditions that are known to or are reasonably likely to negatively affect individuals of a species. The term “threat” includes actions or conditions that have a direct impact on individuals (direct impacts), as well as those that affect individuals through alteration of their habitat or required resources (stressors). The term “threat” may either encompass— together or separately— the source of the action or condition, or the action or condition itself.

However, the mere identification of any threat(s) does not necessarily mean that the species meets the statutory definition of an “endangered species” or a “threatened species.” In determining whether a species meets either definition, we must evaluate all identified threats by considering the expected response by the species, and the effects of the threats—in light of those actions and conditions that will ameliorate the threats—on an individual, population, and species level. We evaluate each threat and its expected effects on the species, and then analyze the cumulative effect of all of the threats on the species as a whole. We also consider the cumulative effect of the threats in light of those actions and conditions that will have positive effects on the species, such as any existing regulatory mechanisms or conservation efforts. The Secretary determines whether the species meets the definition of an “endangered species” or a “threatened species” only after conducting this cumulative analysis and describing the expected effect on the species now and in the foreseeable future.

The Act does not define the term “foreseeable future,” which appears in the statutory definition of “threatened species.” Our implementing regulations at 50 CFR 424.11(d) set forth a framework for evaluating the foreseeable future on a case-by-case basis. The term “foreseeable future” extends only so far into the future as the Service can reasonably determine that both the future threats and the species’ responses to those threats are likely. In other words, the foreseeable future is the period of time in which we can make reliable predictions. “Reliable” does not mean “certain”; it means sufficient to

provide a reasonable degree of confidence in the prediction. Thus, a prediction is reliable if it is reasonable to depend on it when making decisions.

It is not always possible or necessary to define foreseeable future as a particular number of years. Analysis of the foreseeable future uses the best scientific and commercial data available and should consider the timeframes applicable to the relevant threats and to the species' likely responses to those threats in view of its life-history characteristics. Data that are typically relevant to assessing the species' biological response include species-specific factors such as lifespan, reproductive rates or productivity, certain behaviors, and other demographic factors.

For the purposes of considering the future condition of Egyptian tortoise, we considered the threats of habitat loss and degradation and collection for the pet trade, along with demographic factors of Egyptian tortoises, and determined that the foreseeable future was approximately 60 years. This timeline for the foreseeable future is based on several factors. The Egyptian tortoise matures slowly, and in the best of conditions has a low reproductive rate. Thus, the species depends on high survival rates and long reproductive lifespans of adults to increase population size (Wilbur and Morin 1988, in Díaz-Paniagua *et al.* 2001, p. 707). Some threats to species manifest themselves through demographic changes to the species over a number of generations. Because of the long generation length (up to 20 years) and slow reproductive rate, demographic responses of the species to the threats that are already ongoing will manifest increasingly over a significant period of time. Existing studies already document the species' responses to threats over the past three generations, or approximately 60 years (Perälä 2005, p. 894; Perälä 2006, p. 61; Rhodin 2020, pers. comm; Rhodin *et al.* 2017, p. 154; Baha El Din 1994, p. 6; Baha El Din *et al.* 2003, p. 651). Therefore, we conclude that we can reasonably determine the response of the Egyptian tortoise to the threats described below for at least 60 years.

In addition, world experts have assessed factors relevant to the status of the species as far out as 60 years, and we conclude that it is reasonable to rely on that information. For example, as part of our review we considered and incorporated the information underlying IUCN's Red List assessment of the species that also takes into account the decline in abundance and range of the species, levels of exploitation, and direct observations by experts (IUCN 2012, unpaginated; Perälä 2005, p. 897; Perälä 2006, p. 65). The IUCN Red List is a membership organization of worldwide experts that assesses the conservation status of species throughout the world, and uses a set of qualitative criteria to evaluate extinction risk of species (IUCN 2021, unpaginated). IUCN's standards and criteria differ from those in the Act, and the designations are not interchangeable. However, we found the IUCN's information to be part of the best scientific and commercial information available for this species, and that predictions based on IUCN's information for this species can be reliable over approximately the next 60 years. We also note that IUCN reasonably projects that the species faces a greater-than-80-percent chance of extinction in the wild within the next 60 years.

Similarly, the human population is projected to increase within the range of the species, which will contribute to future habitat loss and continue the threat of collection of the Egyptian tortoise. The human population in the species' range has been reliably projected out to at least 2080 (World Population Review 2020a,b, unpaginated; Osman 2013, unpaginated; CIA World Fact Book – Israel 2019, unpaginated; World Population Review 2020c, unpaginated). Climate change projections reveal it is likely that warming and reduced precipitation across the region within the next 60 years will also contribute to habitat loss and affect the species because Egyptian tortoises are highly sensitive to thermal stress (IPCC 2013, p. 1266; Al-Olaimy 2017, unpaginated; Baha El Din 2020, pers. comm.). Therefore, based on the best scientific and commercial data available, we conclude that over a period of 60 years we can reasonably determine that both the future

threats to the species and the species' response to those threats are likely. Consequently, we identified 60 years, or 2080, as the foreseeable future for the Egyptian tortoise.

Analytical Framework

The SSA report documents the results of our comprehensive biological review of the best scientific and commercial data available regarding the status of the species, including an assessment of the potential threats to the species. The SSA report does not represent a decision by the Service on whether the species should be proposed for listing as an endangered or threatened species under the Act. However, it does provide the scientific basis that informs our regulatory decisions, which involve the further application of standards within the Act and its implementing regulations and policies. The following is a summary of the key results and conclusions from the SSA report; the full SSA report can be found at Docket FWS–HQ–ES–2020–0114 on *http://www.regulations.gov*.

To assess Egyptian tortoise viability, we used the three conservation-biology principles of resiliency, redundancy, and representation (Shaffer and Stein 2000, pp. 306–310). Resiliency supports the ability of the species to withstand environmental and demographic stochastic events (for example, those that arise from random factors), redundancy supports the ability of the species to withstand catastrophic events (for example, droughts, large pollution events), and representation supports the ability of the species to adapt over time to long-term changes in the environment (for example, climate changes). In general, the more resilient and redundant a species is and the more representation it has, the more likely it is to sustain populations over time, even under changing environmental conditions. Using these principles, we identified the species' ecological requirements for survival and reproduction at the individual, population, and species levels, and described the beneficial and risk factors influencing the species' viability.

The SSA process can be categorized into three sequential stages. During the first stage, we evaluated the species' life-history needs. The next stage involved an assessment of the historical and current condition of the species' demographics and habitat characteristics, including an explanation of how the species arrived at its current condition. The final stage of the SSA involved making predictions about the species' responses to positive and negative environmental and anthropogenic (human-caused) influences. Throughout all of these stages, we used the best available scientific and commercial information to characterize viability as the ability of a species to sustain populations in the wild over time. We use this information to inform our regulatory decision.

Summary of Biological Status and Threats

In this discussion, we review the biological condition of the species and its resources, and the threats that influence the species' current and future condition, in order to assess the species' overall viability and the risks to that viability.

The Egyptian tortoise needs areas of sandy dunes to more solidified sands with plant cover from bushes and small shrubs and annual plants to eat. Based on the Egyptian tortoise's life history and habitat needs, and in consultation with species' experts, we identified the stressors that likely affect the species' current condition and overall viability, as well as the sources of the stressors, and the existing conservation and regulatory measures that address certain stressors (Service 2020, pp. 29–51). We evaluated all the known stressors that may be currently affecting the species and to what extent the stressors may affect the species in the future (Service 2020, pp. 51–55).

Egyptian tortoises face similar threats to their viability throughout their range, although the magnitude may vary among Libya, Egypt, and Israel. The primary threats to the Egyptian tortoise are degradation and loss of habitat and collection of the species for the pet trade (Service 2020, pp. 30–39). Habitat destruction throughout the range of the

species caused by human activities is the major factor limiting the availability of suitable habitat necessary for the species' survival. Habitat loss may also occur because of changing environmental conditions from climate change.

Habitat Degradation and Loss

Ongoing threats to the species' habitat throughout its range include urban development, agriculture conversion, grazing activities, and military exercises (Baha El Din 1994, pp. 2, 6, 11–14; Attum 2019, pers. comm; Perälä 2006, p. 62; Baha El Din 2003, pp. 652–653; Schneider and Schneider 2008, p. 150; Baha El Din 2002, p. 2; Portnov and Safriel 2004, pp. 667–668; Service 2020, pp. 30–34). Much of the species' habitat along the Mediterranean coast has been altered by urban development and agriculture conversion. Additionally, livestock grazing has dramatically increased in any pockets of habitat not already converted for agriculture (Baha El Din 1994, p. 11). The impact of grazing is more subtle than conversion of habitat for agricultural purposes, but just as devastating because goats and sheep directly compete with tortoises for annual plants, the tortoise's main food resource (Baha El Din 1994, p. 12; Baha El Din 2003, p. 653; Schneider and Schneider 2008, p. 150). Agriculture and grazing are most intense in the spring, which coincides with peak activity of the Egyptian tortoise and the growth of annual plants (Baha El Din 1994, pp. 11, 14). Furthermore, military exercises cause considerable damage to habitat throughout the species' range (Baha El Din 1994, p. 2; Attum 2019, pers. comm; Perälä 2006, p. 62).

Most of the land-use changes (urbanization, agriculture conversion, and grazing) occur within 50 km (31 mi) of the coastline, where the species and its habitat occur. Over the last 25 years, shrub land decreased by approximately 22 percent throughout the Libyan and Egyptian coastline (USGS 2019, unpaginated). Throughout Libya, shrub land decreased between 9 and 21 percent, with more shrub land lost in eastern Libya (Cyrenaica). In North Coast and North Sinai, Egypt, shrub land decreased by 37 and 34

percent, respectively. No information was available for Israel. Because of the land-use changes and loss of habitat, the populations in each country have no connectivity across international borders, including the populations in North Sinai, Egypt and Israel that are both on the east side of the Nile and are relatively close in proximity.

Protected areas, national parks, and nature reserves offer some suitable habitat and protection for the Egyptian tortoise. However, even the habitat in these areas is degraded and is also used for pastoral livestock grazing that competes with Egyptian tortoise for vegetation (Attum et al. 2007b, entire; Baha El Din et al. 2003, p. 653; Attum et al. 2013, p. 74). In Egypt, suitable habitat for the species currently exists in a few protected areas that are designated to conserve natural habitats, biodiversity, and optimize economic and social value (see Figure 9; SSA Report, Service 2020; NCS 2006, pp. 8–10); however, the species only exists in and on the periphery of Zaranik Protected Area in North Sinai. In Israel, the species partially occurs within Holot Agur Nature Reserve (Perälä 2005, p. 895; Baha El Din 2003a, in Attum et al. 2007b); the reserve overlaps about one-fifth of the population in Israel and provides some protection for a portion of its habitat. Although one Egyptian tortoise was found 20 years ago in Kouf National Park in northeast Libya, we do not have recent information on the presence or absence of tortoises at this park. No other protected lands exist in areas of known tortoise activity in Libya.

Collection

Large numbers of Egyptian tortoises were collected from Egypt through much of the first half of the 20th century for sale as pets (Baha El Din 1994, p. 25). The mass collection of the species for the pet trade was recognized as early as 1933 (Flower 1933, p. 746) and continued until the late 1970s, by which time the species' population was extirpated from large parts of the North Coast of Egypt. With the return of Sinai to Egypt in 1982, another area was open for collectors, and by the late 1980s, the species'

population was severely depleted throughout Egypt (Baha El Din 1994, p. 25). The population of Egyptian tortoises in Egypt is very small and managed by locals in the Zaranik Protected Area and commercial collection of the species is not currently a factor for the population in North Sinai, Egypt. However, fear exists that poachers will target the tortoises in this area to collect for the pet trade (McGrath 2011, unpaginated). Egypt is a major conduit for smugglers, and Egyptian tortoises are smuggled from Libya into Egypt.

Currently, collection for the pet trade is the biggest threat to the species in Libya, which has the largest remaining population of the species. After political relations between Egypt and Libya improved and the border between the two countries opened in 1989, Egyptians working as herders in Libya collected tortoises (both Egyptian tortoises and Greek tortoises) and smuggled them across the border into Egypt for local markets and exporting to other countries (Baha El Din 1994, p. 25; CITES uplisting proposal 1995, p. 23). Historically, the species was exported to European and U.S. markets; now the main export destination is Asia (Attum 2020, pers. comm.). Collection pressure is higher in eastern Libya (Cyrenaica), which is considered the heart of the range, than in the western part of the country, although tortoises are collected in western Libya and sold to dealers that smuggle them into Egypt (Baha El Din 2002, p. 2; Baha El Din et al. 2003, p. 653; Schneider and Schneider 2008, p. 150).

It is common to see tens of Egyptian tortoises for sale in multiple pet stores or markets in many parts of Egypt as tortoises continue to be smuggled from Libya (Baha El Din 2020, pers. comm.). The uprising against the Libyan Government in 2011 temporarily brought smuggling operations to a halt (McGrath 2011, unpaginated). However, trade of Egyptian tortoises has returned to levels prior to 2011 (Baha El Din 2020; pers. comm.). Some level of enforcement in Egypt affects smuggling of Egyptian tortoises from Libya into Egypt (Attum 2020, pers. comm.; Baha El Din 2020, pers.

comm.). Collection of Egyptian tortoises for the pet trade is minimal in Israel, although some poaching by agricultural workers does occur.

Climate Change

In our analysis of potential climate-change impacts to the Egyptian tortoise, we used two scenarios, Representative Concentration Pathway (RCP) 4.5 and 8.5., to account for uncertainty regarding future atmospheric greenhouse-gas concentrations within the next century. RCP 4.5 is at the lower end of the intermediate range of conditions projected while RCP 8.5 is the high end of Intergovernmental Panel on Climate Change (IPCC) projections of atmospheric conditions. By using both a high and a lower emissions scenario in our projections, we bracketed the likely possibilities for effects from climate change over the next 60 years.

Climate-change projections for the Mediterranean region, which includes the Egyptian tortoise's range, reveal warming in all seasons and likely reduced precipitation projections across subregions and seasons. Confidence in model projections of mean temperature in this region is high; it is very likely that temperatures will continue to increase over the next 60 years in the Mediterranean region (IPCC 2013, p. 1266; Al-Olaimy 2017, unpaginated). The strongest warming is projected to take place close to the Mediterranean coast. Warming by at least 3 °C (5.4 °F) is projected by the end of the century under RCP 4.5. Under RCP 8.5, mean summer temperatures could be up to 8 °C (14.4 °F) warmer, including more heat extreme days during the summer (World Bank 2014, p. 114).

Winter mean temperature will rise moderately, whereas summer warming will likely be more intense. The length, frequency, and intensity of warm spells or heat waves are very likely to increase throughout the whole Mediterranean region (IPCC 2013, p. 1266). The summer months are currently characterized by daily, potentially lethal maximum daytime temperatures of approximately 32 °C (90 °F) along the Mediterranean

coast and even hotter in the desert and other interior areas (Weather Channel 2019, unpaginated; Weather and Climate 2019, unpaginated).

Tortoises aestivate under shrubs in the summer when the temperature is highest, food availability is least, and the warming is projected to be the most intense. This decrease in activity of Egyptian tortoises following rising mean ambient temperatures over 30 °C (86 °F) reflects the strong influence of environmental temperature on their activity. Egyptian tortoises are highly sensitive to thermal stress, particularly increased temperature. Therefore, any marginal increase caused by climatic change would have very limiting effects on their survival in the wild (Baha El Din 2020, pers. comm.). This impact has been observed first-hand in captive populations near Cairo, Egypt (only 100 km (62 mi) south of the natural range) (Baha El Din 2020, pers. comm.). Tortoises are more active during the winter and spring when the mean temperatures is approximately 15 to 25 °C (59–77 °F). Although temperature is projected to rise moderately during the winter, the temperature may not reach levels that are detrimental to the tortoise.

Regulatory Mechanisms

The Egyptian tortoise is afforded some protection based on existing regulations in each of the range countries. However, these regulations have had varying success protecting the species' habitat from destruction and the species from collection for the pet trade. Protected areas, national parks, and nature reserves offer some suitable habitat and protection for the Egyptian tortoise, although habitat in protected areas is degraded and is subject to livestock grazing. Additionally, lax enforcement in these areas may provide opportunities for tortoise poaching and smuggling.

In Egypt, Law 4 (enacted in 1994) became the primary legislation for environmental management, creating the Nature Conservation Sector under the Egyptian Environmental Affairs Agency (NCS 2006, p. 4). Law 4 gives protected status to the Egyptian tortoise; it is illegal to collect, possess, or sell protected species or wild animals,

dead or alive (Baha El Din et al 2003, p. 653). Though enforcement is sporadic, it is increasing, and implementation and screening at airports for species listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) has resulted in confiscation of some Egyptian tortoises intended for the illegal pet trade (Baha El Din et al 2003, p. 653). Egypt's Law 102 (enacted in 1983) provides the legislative framework for establishing and managing protected areas in Egypt.

Zaranik Protected Area in North Sinai, Egypt, contains Egyptian tortoise. Local Bedouins manage the native tortoise population in Zaranik and protect the species from habitat degradation and collection. A program operated by Bedouin women contributes to raising awareness for the species through the production of handicrafts with tortoise motifs (Baha El Din 2003, p. 654; Attum *et al.* 2007b, p. 399).

In Libya, Law 7 (enacted in 1982), subsequently repealed and replaced by Law 15 (enacted in 2003), prohibits the catching of endangered species, their sale, or export (Baha El Din 2002, p. 2; FAOLEX 2019a, unpaginated). However, lists of species protected in Libya do not include the Egyptian tortoise (Baha El Din 2002, p. 2; McGrath 2011, unpaginated). The Egyptian tortoise is covered by a resolution by the Minister of Agriculture in favor of their protection and to prevent trading and export (Khalifa *in litt*., to IUCN/SSC Trade Specialist Group 1993, in CITES uplisting proposal 1995, p. 25). However, we have no information to indicate the resolution is enforceable. Accordingly, domestic regulatory mechanisms for the conservation of the species in Libya are either non-existent or potentially lacking enforcement authority.

In Israel, the Wildlife Protection Law (enacted in 1955 and amended in 1999) has proved to be an effective instrument in the protection of wildlife. The law was designed to protect birds, mammals, reptiles, and amphibians. All species of wild animals anywhere in Israel are completely protected, except for designated pest species and declared game species (IMFA 1997, unpaginated; Wildlife Protection Law 5715-1955).

The nature reserve Holot Agur in Israel was established in 2010 (Protected Planet 2019, unpaginated). The reserve covers approximately 176 km^2 (68 mi^2) of the Holot Agur sands area in the western Negev Desert and overlaps about one-fifth of the best known and studied population of Egyptian tortoises in Israel (Buskirk 1993, unpaginated).

Libya, Egypt, and Israel are all Parties to CITES, and Egyptian tortoise is a CITES-protected species. The Egyptian tortoise was included in Appendix II of CITES in 1975 under the genus-level listing of *Testudo* spp., and the species subsequently was transferred to Appendix I on February 16, 1995. CITES Appendix I includes species threatened with extinction that are or may be affected by trade, and species included in Appendix I receive the highest level of protection under CITES (CITES Art. II(1), (4), Art. III; 50 CFR part 23). International trade is permitted only under exceptional circumstances, and international trade for primarily commercial purposes is prohibited, with limited exceptions for qualifying specimens bred in captivity for commercial purposes by CITES-registered facilities and pre-Convention specimens (CITES Art. II(1), (4), Art. III, Art. VII(2), (4); 50 CFR part 23). There are currently no CITES-registered breeding facilities for the species.

Including the Egyptian tortoise in Appendix I of CITES in 1995 was an important action for the conservation of the species, considering the decreasing population numbers and the amount of trade occurring up to the 1970s and 1980s. However, despite their status in Appendix I of CITES, the best available information indicates that Egyptian tortoises are illegally traded internationally. The collection pressure from this illegal trade continues to harm the species, though at a reduced level to the collection pressure previously attributed to the legal commercial trade while the species was included in Appendix II (CITES Trade Database 2020; Theile *et al*. 2004, p. iii; Stengel *et al.* 2011, pp. 10-11, 19).

Current Conditions

The Egyptian tortoise's viability is influenced by its resiliency, adaptive capacity (representation), and redundancy. Resiliency for the Egyptian tortoise is measured by population size, distribution, and health throughout its range. Population size, quality of habitat where the species occurs (taking into account anthropogenic effects), whether a population is in a protected area, and the collection pressure of a population all influence the resiliency of the Egyptian tortoise. Representation for the Egyptian tortoise can be measured by the distribution of the species on both sides of the Nile River because of some ecological diversity in habitat west and east of the river. Redundancy can be measured by the distribution of resilient populations across its range.

Under current conditions, the population in Libya has moderate resiliency. The population has the highest abundance of any population throughout the species' range; the population occurs in three regions, consisting of at least 7,500 tortoises. Suitable habitat remains in Libya; overall the habitat is degraded and the species does not reside in any protected areas in Libya. The magnitude of habitat loss because of development is smaller compared to Egypt and Israel. Collection pressure of the species for the pet trade is highest in Libya.

The population in North Sinai, Egypt, has moderate resiliency. This population is very small, made up of 5 even smaller subpopulations, totaling approximately 200-250 tortoises. Grazing of livestock degrades the habitat. The population in Egypt is not collected for the pet trade, and partially resides within Zaranik Protected Area that is managed and protected by the local people in the area.

Similarly, the Egyptian tortoise in Israel is insignificantly collected for the pet trade, and the population partially overlaps the Holot Agur Nature Reserve. This population has moderate resiliency because even though the population may consist of up to 3,000 tortoises (approximated in 2006), it only occurs within an area up to 1,000 km^2

(386 mi^2) in the western Negev Desert, and a suite of human activities, including urban and agricultural development, and grazing of livestock continues to degrade the habitat.

The Egyptian tortoise is represented in areas west and east of the Nile River with some ecological diversity because the substrates where populations occur vary across its range. West of the Nile, the species occurs in three regions in Libya with substrates varying from rocky to soft sand (Schneider and Schneider 2008, p. 145). The Egyptian tortoise was extirpated from the North Coast and has lost variability of all habitat types it historically occupied in this part of its range. In Egypt, the species only occurs east of the Nile in small subpopulations in North Sinai, in and near Zaranik Protected Area. Also east of the Nile, the distribution in Israel has not changed since the species was discovered in 1963, although suitable habitat for the species is likely reduced because of human activities in the western Negev Desert. The habitat where the Egyptian tortoise occurs in North Sinai, Egypt, and in the western Negev Desert in Israel is sandy dunes. Overall, the Egyptian tortoise occurs in each country (though with only five very small subpopulations making up one small population that totals approximately 200-250 specimens in Egypt), west and east of the Nile River, and maintains some ecological diversity across populations. The representative habitat types where the species occurs has declined and is much less than it was historically.

One population in each range country characterizes redundancy for the Egyptian tortoise. There is no connectivity or overlap (across international borders) between the Egyptian tortoise populations from each country. One population occurs in Libya, spread across three regions along the coast. The best available information provides one total population size in the country and does not distinguish the populations within each of the three regions in Libya. The population in Egypt consists of five very small subpopulations in and on the periphery of Zaranik Protected Area in North Sinai, in which the population size is provided as one total population size. One population occurs

in Israel in the western Negev Desert. The reduction of the overall population, including the extirpation of the species from North Coast, Egypt, and the fragmentation of the rangewide populations because of land-use changes that caused habitat loss and degradation across the species' range, compromises the species' ability to reoccupy areas within its historical range.

Overall, the Egyptian tortoise occurs in fragmented populations with moderate resiliency because there are multiple populations, some of which are partially in protected areas, and ongoing habitat degradation and collection pressure. The existence of multiple populations distributed throughout the tortoise's range reduces the likelihood that any single catastrophic event could affect one or more of the populations simultaneously. We have not identified any catastrophic events that would affect the Egyptian tortoise across its entire range. Therefore, the species has sufficient redundancy to withstand catastrophic events.

Future Conditions

We projected the resiliency, representation, and redundancy of the Egyptian tortoise under two plausible future scenarios: (1) a status quo scenario in which human-caused impacts and tortoise population responses continue as the current trends indicate; and (2) a reduced-collection scenario in which the collection of Egyptian tortoises for the pet trade from Libya decreases as a result of Libyan authorities enacting regulations that improve enforcement and reduce the collection of the species. Libyan authorities had been seeking to put an end to collection and exportation by enacting legislation that would prevent illegal removal from Libya (Schneider and Schneider 2008, p. 150). Despite efforts by the Environment General Authority, who along with local academics have interest in tortoise conservation and poaching prevention in Libya, the species is still being collected and showing up in Egyptian markets. Thus, implementing conservation

measures in Scenario 2 (reducing collection in Libya) is uncertain given the ongoing collection of Egyptian tortoises and geopolitical instability in Libya.

The two scenarios do not include variance or change in the rate of habitat loss caused by human activities such as development, agriculture and grazing, and military activities. The habitat is highly degraded and continues to degrade throughout the range of the species. With continued expansion of these activities resulting from an increasing human population that will increase demand for urban area and agricultural production, we project that suitable habitat for the species will continue to decrease in the future. Additionally, effects from a changing climate are likely to affect the Egyptian tortoise in the future. The temperature is likely to rise moderately in the winter with more intense warming in the summer. These effects would likely be at an earlier date in the future under RCP 8.5 than RCP 4.5 because warming is projected to be higher under RCP 8.5. However, we do not have information with a specific temperature threshold (beyond their preferred temperature range) where Egyptian tortoises would be affected. The best available information indicates that Egyptian tortoises are highly sensitive to thermal stress, particularly increased temperature. Therefore, any marginal increase because of climatic change under either RCP, combined with the loss of habitat (i.e., shrubs needed for thermal buffering), would likely limit their ability to survive in the wild (Baha El Din 2020, pers. comm.). Furthermore, reduced precipitation is projected in the Mediterranean region that will likely affect the quantity and quality of annual plants and woody shrubs that the Egyptian tortoise uses for food and shelter. We recognize the effects of climate change in the future but do not differentiate between RCP 4.5 and RCP 8.5 in the future scenarios because we could not distinguish between RCPs 4.5 and 8.5 at which temperature or timeframe the Egyptian tortoise would show signs of stress. Factors such as habitat loss and degradation and collection for the pet trade will have a more immediate and pronounced effect on the species and its habitat. Therefore, we focus the

future condition on habitat degradation and collection pressure because of human activities.

Scenario 1

Under Scenario 1, we project that rangewide habitat degradation, collection pressure in Libya will continue on the same trajectory as current conditions, and the tortoise population in Libya would be substantially reduced. The habitat in the North Coast of Egypt has been substantially degraded, and coupled with collection of the species for the pet trade, the Egyptian tortoise has been extirpated from the North Coast of Egypt. We recognize that the human population and development pressure are higher in North Coast than in Libya. Thus, we would not expect as much habitat loss from development in Libya. However, collection of the species for the pet trade in Libya would continue on the same trajectory resulting in a decrease in population resiliency from moderate to low.

The population resiliency in North Sinai, Egypt, may decrease from moderate to low-moderate. Even though about half of the total population is within a protected area (Zaranik) that is managed by the local population, and there is no commercial collection pressure, the population is very small and stressors such as grazing, military activities, and climate change will continue to degrade the habitat into the future.

In Israel, the population resiliency would decrease from moderate to low-moderate. The population partially overlaps a protected area (Holot Agur) and commercial collection is insignificant; however, the population only occurs in the western Negev Desert and a suite of human activities, including urban and agricultural development, will continue to degrade the habitat and likely reduce population abundance.

Populations in Libya (one population across three regions), North Sinai, Egypt (one small population made up of five very small subpopulations), and Israel (one

population in western Negev Desert) would decrease, be fragmented, and we conclude that the resiliency of the species will decrease from moderate to low-moderate within the foreseeable future because of ongoing habitat degradation and collection pressure. A decreasing population of Egyptian tortoise residing in increasingly degraded habitat reduces the species' ability to sustain populations in the event of stochastic variation. We project that the population in Libya would be substantially reduced because of ongoing collection, but would still occur within the three regions in Libya at much smaller population sizes. The tortoise populations in North Sinai, Egypt, and western Negev Desert in Israel would remain, but would decrease. Therefore, we project the species will continue to occupy the same areas as it currently occupies. The Egyptian tortoise would occur in each country, west and east of the Nile River, and maintain some ecological diversity between the populations, though at decreasing levels in each population. Thus, representation would likely be similar to current conditions. However, representative habitat types in which the species occurs would continue to be much less than it was historically, and continue to decline.

The Egyptian tortoise would occur in multiple populations distributed across its range. We have not identified any catastrophic events that would affect the Egyptian tortoise across its entire range. Therefore, the species would have redundancy to withstand catastrophic events.

Scenario 2

Under Scenario 2, we project that rangewide habitat degradation will continue, but collection pressure in Libya will be reduced. Libyan authorities and local academics had been seeking to end collection and exportation of Egyptian tortoise from Libya. We acknowledge that with the ongoing collection of the species for the pet trade and geopolitical instability in Libya, implementing conservation measures to reduce collection for the pet trade is uncertain. Nonetheless, if collection is reduced, the

population in Libya would not decline at the current trajectory, and at a minimum, the Libyan population of Egyptian tortoises would decline at a slower rate compared to current conditions. However, this population would have low to moderate resiliency within the foreseeable future because the habitat will continue to be degraded, the population is not in a protected area, and even if conservation measures are implemented, we conclude some collection for the pet trade will continue. The populations in North Sinai, Egypt, and western Negev Desert in Israel would experience a decrease in resiliency in the foreseeable future as described under Scenario 1.

Because the populations in Libya, North Sinai in Egypt, and the western Negev Desert in Israel would remain, the Egyptian tortoise would occur in each country, west and east of the Nile River, and represent the same ecological diversity and habitats between the populations as current conditions, though at decreasing levels in each population. The species would occupy the same areas as it currently occupies. Human activities will continue to degrade and encroach on the tortoise's habitat. Therefore, representative habitat types in which the species occurs would continue to be much less than it was historically, and continue to decline. Because we have not identified any catastrophic event that would affect the species throughout its range, and the Egyptian tortoise would continue to be distributed from Libya to Israel, the species will have redundancy to withstand catastrophic events.

We note that, by using the SSA framework to guide our analysis of the scientific information documented in the SSA report, we have not only analyzed individual effects on the Egyptian tortoise, but we have also analyzed their potential cumulative effects. We incorporate the cumulative effects into our SSA analysis when we characterize the current and future condition of the species. Our assessment of the current and future conditions encompasses and incorporates the threats individually and cumulatively. Our current- and future-condition assessment is iterative because it accumulates and evaluates

the effects of all the factors that may be influencing the species, including threats and conservation efforts. Because the SSA framework considers not just the presence of the factors, but to what degree they collectively influence risk to the entire species, our assessment integrates the cumulative effects of the factors and replaces a standalone cumulative-effects analysis.

Determination of Egyptian Tortoise Status

Section 4 of the Act (16 U.S.C. 1533) and its implementing regulations (50 CFR part 424) set forth the procedures for determining whether a species meets the definition of an endangered species or a threatened species. The Act defines "endangered species" as a species in danger of extinction throughout all or a significant portion of its range, and "threatened species" as a species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The Act requires that we determine whether a species meets the definition of "endangered species" or "threatened species" because of any of the following 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.

Status Throughout All of Its Range

After evaluating threats to the species and assessing the cumulative effect of the threats under the section 4(a)(1) factors, we found that habitat loss and degradation continues throughout the species' range because of a suite of ongoing human activities, and is the major factor limiting the availability of suitable habitat (Factor A). Collection of the species is ongoing and a significant threat in Libya where the largest remaining population of Egyptian tortoise occurs (Factor B). Collection for the pet trade is not known to be a major factor in the North Sinai in Egypt or in Israel, although minimal

poaching likely occurs in Israel. Additionally, the potential exists that commercial collectors may target Egyptian tortoises in Zaranik Protected Area in the future. The Egyptian tortoise is afforded some protection in Egypt and Israel based on existing regulations; however, these regulations have had minimal success protecting the species and its habitat. No enforceable conservation measures for the species are in place in Libya. Including the species in Appendix I of CITES has substantially reduced the international trade in wild specimens for primarily commercial purposes since 1995, though some illegal commercial trade continues despite their status in Appendix I of CITES.

Despite losses in numbers and habitat, approximately 11,000 Egyptian tortoises occur within 7,929–15,857 km^2 (3,061–6,122 mi^2) of suitable habitat across a range that covers the Mediterranean coastal area of Libya, the North Sinai in Egypt, and the western Negev Desert in Israel (Perälä 2005, p. 894; Perälä 2006, p. 61; Rhodin 2020, pers. comm.).

Collection for the pet trade is significant in Libya and ongoing, and the habitat has experienced rangewide degradation because of human activities. However, the total population is estimated to be about the same in 2020 as it was in 2005–2006. Based on best available information, the population over the last 15 years appears to be steady. This appearance could be an artifact of uncertainty in the data. It could reflect the possibility that more tortoises exist in Libya than previously understood or that collection for the pet trade briefly slowed at the start of the uprising against the Libyan Government in 2011. A combination of factors could be responsible for the apparent steadiness of the population. In any case, the species has representation across its historical range even though it has been extirpated from North Coast, Egypt. The two populations east of the Nile River in North Sinai, Egypt, and western Negev Desert, Israel, are partially in protected areas with varying levels of enforcement. Therefore, after assessing the best

available information, we conclude the Egyptian tortoise has sufficient resiliency, redundancy, and representation that with its current numbers and distribution it is not in danger of extinction throughout all of its range at this time.

We next considered whether the Egyptian tortoise is likely to become in danger of extinction throughout all of its range within the foreseeable future, which we determined for the species to be three generations of the species (approximately 60 years). Based on projected increases in the human population along the Mediterranean coast within the range of the species, we expect both the species' population and habitat to decline into the future because of ongoing habitat degradation and collection for the pet trade. Additionally, habitat loss and degradation is likely to be intensified by synergistic effects associated with the consequences of climate change (Baha El Din 2020, pers. comm.; IPCC 2013, p. 1266; Al-Olaimy 2017, unpaginated). Projections for the Mediterranean region reveal warming in all seasons and reduced precipitation throughout the year. Egyptian tortoises are highly sensitive to thermal stress, particularly increased temperature. Therefore, any marginal increase resulting from climatic change, combined with the loss of habitat (i.e., shrubs needed for thermal buffering), would limit the species' ability to survive in the wild (Baha El Din 2020, pers. comm.).

The Egyptian tortoise population appears steady and maintains sufficient redundancy and representation to maintain viability throughout its range. Two of the three populations are partially protected with varying levels of enforcement, though one of these populations is very small (200-250 specimens) and consists of 5 smaller subpopulations. However, the species is restricted to the Mediterranean coast and multiple threats to the species and its habitat that will cause the population to decline are ongoing. These threats will reduce the species' population and quality of habitat that remains, thereby decreasing the resilience of the population into the future. Existing regulatory measures have had minimal success conserving the species' habitat and

reducing the number of tortoises collected for the pet trade. Although the species is not in danger of extinction throughout all of its range now, the factors identified above continue to negatively affect the Egyptian tortoise and its habitat such that it is likely to become in danger of extinction within the foreseeable future throughout all of its range. Based on the best available scientific studies and information assessing land-use trends, collection pressure, adequacy of enforcement of laws, projections of temperature increases because of climate change, and predictions about how those threats may affect the Egyptian tortoise, we conclude that the Egyptian tortoise will lack sufficient resiliency, redundancy, and representation for its continued existence to be secure within the foreseeable future. We therefore determine that the Egyptian tortoise is likely to be in danger of extinction within the foreseeable future throughout all of its range.

Status Throughout a Significant Portion of Its Range

Under the Act and our implementing regulations, a species may warrant listing if it is in danger of extinction or likely to become so in the foreseeable future throughout all or a significant portion of its range. The court in *Center for Biological Diversity* v. *Everson*, 2020 WL 437289 (D.D.C. Jan. 28, 2020) (*Center for Biological Diversity*), vacated the aspect of the Final Policy on Interpretation of the Phrase "Significant Portion of Its Range" in the Endangered Species Act's Definitions of "Endangered Species" and "Threatened Species" (79 FR 37578; July 1, 2014) that provided that the Service does not undertake an analysis of significant portions of a species' range if the species warrants listing as threatened throughout all of its range. Therefore, we proceed to evaluating whether the species is endangered in a significant portion of its range—that is, whether there is any portion of the species' range for which both (1) the portion is significant; and (2) the species is in danger of extinction in that portion. Depending on the case, it might be more efficient for us to address the "significance" question or the "status" question first. We can choose to address either question first. Regardless of which question we

address first, if we reach a negative answer with respect to the first question that we address, we do not need to evaluate the other question for that portion of the species' range.

Following the court's holding in *Center for Biological Diversity*, we now consider whether there are any significant portions of the species' range where the species is in danger of extinction now (i.e., endangered). In undertaking this analysis for Egyptian tortoise, we choose to address the status question first—we consider information pertaining to the geographic distribution of both the species and the threats that the species faces to identify any portions of the range where the species may be endangered.

For the Egyptian tortoise, we considered whether the threats are geographically concentrated in any portion of the species' range at a biologically meaningful scale. We examined the following threats: habitat loss and degradation, collection for the pet trade, and small population size, including cumulative effects. The suite of activities that has caused and continues to cause the loss and degradation of habitat such as urban development, agricultural conversion, grazing, and military exercises occurs throughout the species range and across all populations throughout the species range. The available data do not suggest that the threats to the species habitat are concentrated at a biologically meaningful scale. Therefore, those threats do not themselves result in the species being in danger of extinction in any significant portion of its range, although we did consider the cumulative impacts of habitat threats in the context of the other threats discussed below.

Collection for the pet trade is the most significant threat to the species in Libya and concentrated in this part of the species' range currently. Collection has historically been a significant threat across Egypt, particularly in the North Coast, which combined with loss of habitat led to the extirpation of the species from this part of its range. Collection for the pet trade is not known to be a factor in North Sinai in Egypt or in the western Negev Desert in Israel, although minimal poaching likely occurs in Israel, and

there is concern that commercial collectors will target Egyptian tortoises in Zaranik Protected Area (McGrath 2011, unpaginated). Libya contains the majority of the entire population of Egyptian tortoises. While the threat of collection for the pet trade is currently concentrated in Libya, which is the only population on the west side of the Nile River, the effect of collection does not place the species in danger of extinction in this portion of its range, even in combination with other threats to the species there. In other words, the concentrated collection pressure in Libya is not severe enough to make the species currently endangered in this portion of its range.

Additionally, we considered whether the small population of Egyptian tortoises in North Sinai in Egypt and the moderately sized population in a small area in the western Negev Desert in Israel may each be more vulnerable to a loss of genetic diversity and stochastic environmental events because of their small sizes. However, we have no information that the species is affected by inbreeding depression, and we are not aware of likely stochastic environmental events that would make the species currently in danger of extinction in these portions of its range.

Thus, there is no portion of the species' range where it may be in danger of extinction, and we determine that the species is likely to become in danger of extinction within the foreseeable future throughout all of its range. Our approach to analyzing significant is consistent with the courts' holdings in *Desert Survivors* v. *Department of the Interior*, No. 16-cv-01165-JCS, 2018 WL 4053447 (N.D. Cal. Aug. 24, 2018), and *Center for Biological Diversity* v. *Jewell*, 248 F. Supp. 3d , 946, 959 (D. Ariz. 2017).

Determination of Status

Our review of the best available scientific and commercial information indicates that the Egyptian tortoise meets the definition of a threatened species. Therefore, we propose to list the Egyptian tortoise as a threatened species in accordance with sections 3(20) and 4(a)(1) of the Act.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened species under the Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing results in public awareness, and encourages and results in conservation actions by Federal, State, Tribal, and local agencies, foreign governments, private organizations, and individuals. The Act encourages cooperation with the States and other countries and calls for recovery actions to be carried out for listed species. The protection required by Federal agencies and the prohibitions against certain activities are discussed, in part, below.

Our regulations at 50 CFR part 402 implement the interagency cooperation provisions found under section 7 of the Act. Under section 7(a)(1) of the Act, Federal agencies are to use, in consultation with and with the assistance of the Service, their authorities in furtherance of the purposes of the Act. Section 7(a)(2) of the Act, as amended, requires Federal agencies to ensure, in consultation with the Service, that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of a listed species or result in destruction or adverse modification of its critical habitat. An action that is subject to the consultation provisions of section 7(a)(2) is defined in our implementing regulations at 50 CFR 402.02 as all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies in the United States or upon the high seas. With respect to this species, there are no actions known to require consultation under section 7(a)(2) of the Act. Given the regulatory definition of "action," which clarifies that it applies to activities or program "in the United States or upon the high seas," the Egyptian tortoise is unlikely to be the subject of section 7 consultations, because the entire life cycle of the species occurs in terrestrial areas outside of the United States unlikely to be affected by U.S. Federal actions. Additionally, no critical habitat will be designated for this species because, under

50 CFR 424.12(g), we will not designate critical habitat within foreign countries or in other areas outside of the jurisdiction of the United States.

Section 8(a) of the Act (16 U.S.C. 1537(a)) authorizes the provision of limited financial assistance for the development and management of programs that the Secretary of the Interior determines to be necessary or useful for the conservation of endangered or threatened species in foreign countries. Sections 8(b) and 8(c) of the Act (16 U.S.C. 1537(b) and (c)) authorize the Secretary to encourage conservation programs for foreign listed species, and to provide assistance for such programs, in the form of personnel and the training of personnel.

As explained below, the proposed 4(d) rule for the Egyptian tortoise would, in part, make it illegal for any person subject to the jurisdiction of the United States to import or export; deliver, receive, carry, transport, or ship in interstate or foreign commerce, by any means whatsoever and in the course of commercial activity; or sell or offer for sale in interstate or foreign commerce any Egyptian tortoise. It would also be illegal to take (which includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or to attempt any of these) any Egyptian tortoise within the United States or on the high seas; or possess, sell, deliver, carry, transport, or ship, by any means whatsoever any Egyptian tortoise that has been taken in violation of the Act. It would also be unlawful to attempt to commit, to solicit another to commit or to cause to be committed, any of these acts. Certain exceptions apply to agents of the Service and State conservation agencies. An exception is also provided in the proposed 4(d) rule for interstate commerce from public institutions to other public institutions, specifically museums, zoological parks, and scientific institutions that meet the definition of "public" at 50 CFR 10.12.

We may issue permits to carry out otherwise prohibited activities involving endangered and threatened wildlife species under certain circumstances. Regulations

governing permits for threatened species are codified at 50 CFR 17.32, and general Service permitting regulations are codified at 50 CFR part 13. With regard to threatened wildlife, a permit may be issued for scientific purposes, to enhance the propagation or survival of the species, for incidental take in connection with otherwise lawful activities, as well as for zoological exhibition, education, and special purposes consistent with the Act. The Service may also register persons subject to the jurisdiction of the United States through its captive-bred-wildlife (CBW) program if certain established requirements are met under the CBW regulations (50 CFR 17.21(g)). Through a CBW registration, the Service may allow a registrant to conduct certain otherwise prohibited activities under certain circumstances to enhance the propagation or survival of the affected species: take; export or re-import; deliver, receive, carry, transport, or ship in interstate or foreign commerce, in the course of a commercial activity; or sell or offer for sale in interstate or foreign commerce. A CBW registration may authorize interstate purchase and sale only between entities that both hold a registration for the taxon concerned. The CBW program is available for species having a natural geographic distribution not including any part of the United States and other species that the Director has determined to be eligible by regulation. The individual specimens must have been born in captivity in the United States. There are also certain statutory exemptions from the prohibitions, which are found in sections 9 and 10 of the Act.

It is our policy, as published in the *Federal Register* on July 1, 1994 (59 FR 34272), to identify to the maximum extent practicable at the time a species is listed, those activities that would or would not constitute a violation of section 9 of the Act. The intent of this policy is to increase public awareness of the effect of a proposed listing on proposed and ongoing activities within the range of the species proposed for listing. The discussion below regarding protective regulations under section 4(d) of the Act complies with our policy.

II. Proposed Rule Issued Under Section 4(d) of the Act

Background

Section 4(d) of the Act contains two sentences. The first sentence states that the "Secretary shall issue such regulations as he [or she] deems necessary and advisable to provide for the conservation" of species listed as threatened. The U.S. Supreme Court has noted that statutory language like "necessary and advisable" demonstrates a large degree of deference to the agency (see *Webster* v. *Doe*, 486 U.S. 592 (1988)). Conservation is defined in the Act to mean "the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to [the Act] are no longer necessary." Additionally, the second sentence of section 4(d) of the Act states that the Secretary "may by regulation prohibit with respect to any threatened species any act prohibited under section 9(a)(1), in the case of fish or wildlife, or section 9(a)(2), in the case of plants." Thus, the combination of the two sentences of section 4(d) provides the Secretary with broad discretion to select and promulgate appropriate regulations tailored to the specific conservation needs of the threatened species. The second sentence grants particularly broad discretion to the Service when adopting the prohibitions under section 9.

The courts have recognized the extent of the Secretary's discretion under this standard to develop rules that are appropriate for the conservation of a species. For example, courts have upheld rules developed under section 4(d) as a valid exercise of agency authority where they prohibited take of threatened wildlife, or include a limited taking prohibition (see *Alsea Valley Alliance* v. *Lautenbacher*, 2007 U.S. Dist. Lexis 60203 (D. Or. 2007); *Washington Environmental Council* v. *National Marine Fisheries Service*, 2002 U.S. Dist. Lexis 5432 (W.D. Wash. 2002)). Courts have also upheld 4(d) rules that do not address all of the threats a species faces (see *State of Louisiana* v. *Verity*, 853 F.2d 322 (5th Cir. 1988)). As noted in the legislative history when the Act was

initially enacted, “once an animal is on the threatened list, the Secretary has an almost infinite number of options available to him with regard to the permitted activities for those species. He [or she] may, for example, permit taking, but not importation of such species, or he [or she] may choose to forbid both taking and importation but allow the transportation of such species” (H.R. Rep. No. 412, 93rd Cong., 1st Sess. 1973).

Exercising this authority under section 4(d), we have developed a proposed rule that is designed to address the Egyptian tortoise’s specific threats and conservation needs. Although the statute does not require us to make a “necessary and advisable” finding with respect to the adoption of specific prohibitions under section 9, we find that this proposed rule as a whole satisfies the requirement in section 4(d) of the Act to issue regulations deemed necessary and advisable to provide for the conservation of the Egyptian tortoise.

As discussed above under **Summary of Biological Status and Threats**, we have concluded that the Egyptian tortoise is likely to become in danger of extinction within the foreseeable future primarily because of habitat loss and degradation and collection for the pet trade, in concert with climate change. Under this proposed 4(d) rule, certain prohibitions and provisions that apply to endangered wildlife under section 9(a)(1) prohibitions will help minimize threats that could cause further declines in the species’ status. The provisions of this proposed 4(d) rule would promote conservation of the Egyptian tortoise by ensuring that activities undertaken with the species by any person under the jurisdiction of the United States are also supportive of the conservation efforts undertaken for the species in Libya, Egypt, and Israel, and the Appendix-I listing under CITES. The provisions of this proposed rule are one of many tools that we would use to promote the conservation of the Egyptian tortoise. This proposed 4(d) rule would apply only if and when we make final the proposed listing of the Egyptian tortoise as a threatened species.

Provisions of the Proposed 4(d) Rule

In the SSA report and this proposed rule, we identified factors such as habitat loss and degradation and collection for the pet trade, in concert with climate change, that have negative effects on this species and its habitat. Additionally, we have identified existing regulatory mechanisms in the tortoise's range countries of Libya, Egypt, and Israel to conserve the Egyptian tortoise, as well as the international measures of CITES for Appendix-I species. While we have found these regulatory mechanisms are not sufficient to prevent the species from likely becoming in danger of extinction within the foreseeable future throughout all of its range, we recognize the benefits of these regulations in helping to conserve the species.

This proposed 4(d) rule would provide for the conservation of the Egyptian tortoise by prohibiting the following activities, except as otherwise authorized or permitted: importing or exporting; take; possession and other acts with unlawfully taken specimens; delivering, receiving, transporting, or shipping in interstate or foreign commerce in the course of commercial activity; or selling or offering for sale in interstate or foreign commerce such unlawfully taken specimens or offspring of unlawfully taken specimens.

As discussed above under **Summary of Biological Status and Threats**, habitat loss and degradation and collection for the pet trade are affecting the status of the Egyptian tortoise. A suite of activities has the potential to affect the Egyptian tortoise in its range countries, including urban development, agricultural conversion, grazing, military exercises, and collection for the pet trade. Habitat degradation will continue in the species' range countries. Prohibiting take (which applies to take within the United States, within the territorial sea of the United States, or upon the high seas) would indirectly contribute to conservation of the species in its range countries of Libya, Egypt, and Israel by helping prevent any captive-held Egyptian tortoises in the United States

being used to establish a domestic market for trade of Egyptian tortoise parts or for the commercial pet trade. For the same reason, regulating interstate commerce in the species in the course of commercial activity by persons subject to the jurisdiction of the United States can benefit the species in the wild by limiting demand in the United States to non-commercial activities and permitted commercial activities for scientific purposes or to enhance the propagation or survival of the species in the wild, such as activities associated with bona fide conservation breeding. The United States is not a primary destination for Egyptian tortoises. However, collection of the species for the illegal international pet trade is ongoing. Further regulating import and export to, from, and through the United States and foreign commerce by persons subject to the jurisdiction of the United States could deter breeding and demand for the species, and help conserve the species by eliminating the United States as a potential market for illegally collected and traded Egyptian tortoises.

The proposed 4(d) rule also provides an exception for interstate commerce from public institutions to other public institutions, specifically museums, zoological parks, and scientific institutions, meeting the definition of "public" at 50 CFR 10.12. Demand for Egyptian tortoises held at or captive-bred by these types of institutions in the United States is not substantial nor is it likely to pose a significant threat to the wild population in the species' range countries. As defined in our regulations, "public" museums, public zoological parks, and scientific institutions, refers to such as are open to the general public and are either established, maintained, and operated as a governmental service or are privately endowed and organized but not operated for profit. This exception would apply unless prohibited by CITES regulation, for example if use after import is restricted under 50 CFR 23.55.

We may issue permits to carry out otherwise prohibited activities, including those described above, involving threatened wildlife under certain circumstances. Regulations

governing permits are codified at 50 CFR 17.32. With regard to threatened wildlife, a permit may be issued for the following purposes: for scientific purposes, to enhance propagation or survival, for economic hardship, for zoological exhibition, for educational purposes, for incidental taking, or for special purposes consistent with the purposes of the Act. As noted above, we may also authorize certain activities associated with conservation breeding under CBW registrations. We recognize that captive breeding of wildlife can support conservation, for example by producing animals that could be used for reintroductions. We are not aware of any captive-breeding programs for the Egyptian tortoise for this purpose. There are also certain statutory exemptions from the prohibitions, which are found in sections 9 and 10 of the Act. This proposed 4(d) rule, if finalized, would apply to all live and dead Egyptian tortoise parts and products, and support conservation management efforts for Egyptian tortoise in the wild in Libya, Egypt, and Israel.

Required Determinations

Clarity of the Rule

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

(1) Be logically organized;

(2) Use the active voice to address readers directly;

(3) Use clear language rather than jargon;

(4) Be divided into short sections and sentences; and

(5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in **ADDRESSES**. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the

sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

National Environmental Policy Act (42 U.S.C. 4321 et seq.)

We have determined that environmental assessments and environmental impact statements, as defined under the authority of the National Environmental Policy Act (42 U.S.C. 4321 *et seq.*) need not be prepared in connection with listing a species as an endangered or threatened species under the Endangered Species Act. We published a notice outlining our reasons for this determination in the *Federal Register* on October 25, 1983 (48 FR 49244).

References Cited

A complete list of references cited in this rulemaking is available on the Internet at *http://www.regulations.gov* and upon request from the Branch of Delisting and Foreign Species (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this proposed rule are the staff members of the U.S. Fish and Wildlife Service's Species Assessment Team and the Branch of Delisting and Foreign Species.

List of Subjects in 50 CFR Part 17

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

Proposed Regulation Promulgation

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

PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

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

AUTHORITY: 16 U.S.C. 1361–1407; 1531–1544; and 4201–4245, unless otherwise noted.

2. Amend § 17.11(h) by adding an entry for "Tortoise, Egyptian" to the List of Endangered and Threatened Wildlife in alphabetical order under REPTILES to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Common name	Scientific name	Where listed	Status	Listing citations and applicable rules
* * * * * * *				
REPTILES				
* * * * * * *				
Tortoise, Egyptian	*Testudo kleinmanni*	Wherever found	T	[*Federal Register* citation when published as a final rule]; 50 CFR 17.42(l).[4d]
* * * * * * *				

3. Amend § 17.42 by adding paragraph (l) to read as follows:

§ 17.42 Special rules—reptiles.

* * * * *

(l) Egyptian tortoise *(Testudo kleinmanni)*—(1) *Prohibitions.* The following prohibitions that apply to endangered wildlife also apply to the Egyptian tortoise. Except as provided under paragraph (l)(2) of this section and §§ 17.4 and 17.5, it is unlawful for any person subject to the jurisdiction of the United States to commit, to attempt to commit, to solicit another to commit, or cause to be committed, any of the following acts in regard to this species:

(i) Import or export, as set forth for endangered wildlife at § 17.21(b).

(ii) Take, as set forth for endangered wildlife at § 17.21(c)(1).

(iii) Possession and other acts with unlawfully taken specimens, as set forth for endangered wildlife at § 17.21(d)(1).

(iv) Interstate or foreign commerce in the course of commercial activity, as set forth for endangered wildlife at § 17.21(e).

(v) Sale or offer for sale in interstate or foreign commerce, as set forth for endangered wildlife at § 17.21(f).

(2) *Exceptions from prohibitions.* In regard to this species, you may:

(i) Conduct activities as authorized by a permit under § 17.32.

(ii) Sell, offer for sale, deliver, receive, carry, transport, or ship in interstate commerce live Egyptian tortoises from one public institution to another public institution, if such activity is in accordance with 50 CFR part 23. For the purposes of this paragraph, "public institution" means a museum, zoological park, and scientific institution that meets the definition of "public" at 50 CFR 10.12.

(iii) Take, as set forth at § 17.21(c)(2) through (4) for endangered wildlife.

(iv) Possess and engage in other acts, as set forth at § 17.21(d)(2) for endangered wildlife.

(v) Conduct activities as authorized by a captive-bred wildlife registration under § 17.21(g) for endangered wildlife.

* * * * *

Martha Williams
Principal Deputy Director
Exercising the Delegated Authority of the Director
U.S. Fish and Wildlife Service.

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