DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R5–ES–2017–0056; 4500030113]

RIN 1018–BC44

Endangered and Threatened Wildlife and Plants; Endangered Species Status for the Candy Darter

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), determine endangered species status under the Endangered Species Act of 1973 (Act), as amended, for the candy darter (Etheostoma osburni), a freshwater fish species from Virginia and West Virginia. This rule adds this species to the Federal List of Endangered and Threatened Wildlife.

DATES: This rule is effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: This final rule is available on the Internet at http://www.regulations.gov and https://www.fws.gov/northeast/candydarter. Comments and materials we received, as well as supporting documentation we used in preparing this rule, are available for public inspection at http://www.regulations.gov. Comments, materials, and documentation that we considered in this rulemaking will be available by appointment, during normal business hours, at: U.S. Fish and Wildlife Service, West Virginia Ecological Services Field Office, 694 Beverly Pike, Elkins, WV 26241–9475; telephone 304–636–6586.

FOR FURTHER INFORMATION CONTACT: John Schmidt, Field Supervisor, West
SUPPLEMENTARY INFORMATION:

Previous Federal Actions

Please refer to our October 4, 2017, proposed rule (82 FR 46197) for a detailed description of previous Federal actions concerning the candy darter. Elsewhere in today’s Federal Register, we propose the designation of critical habitat for the candy darter; that proposal also discusses our intent to reestablish populations within the candy darter’s historical range under section 10(j) of the Act in a future publication. And we are seeking public input on other potential recovery tools (e.g., safe harbor agreements), through the proposed critical habitat designation public comment period.

Background

Please refer to our October 4, 2017, proposed rule (82 FR 46197) for a summary of species information available to the Service at the time that it was published. Based on information we received during the proposed rule’s public comment period, we updated the current condition discussion in the species status assessment (SSA) report to more accurately reflect the current spread level of hybridization, which is the primary threat to the species, in the candy darter’s range (Service 2018). The candy darter’s current condition is more degraded than we understood when we published the October 4, 2017, proposed listing rule. Consequently, because the species’ current condition (i.e., the baseline or starting point for the SSA’s future scenario projections) is more degraded, the species’ future condition is also likely to be further degraded than we had previously estimated. With this more accurate reflection of the candy
darter’s current condition, the risk of extinction is greater than we had previously understood, and we have determined that the species does not meet the definition of a threatened species (as proposed). We find that endangered is the appropriate status for the candy darter (see Determination, below).

We also received information during the public comment period that demonstrates a stronger genetic separation between candy darters in the Greenbrier watershed and the Gauley watershed. All the information was incorporated into an updated version of the SSA report, which is available online at https://www.fws.gov/northeast/candydarter.

Summary of Biological Status and Threats

The Act directs us to determine whether any species is an endangered species or a threatened species because of any factors affecting its continued existence. We completed a comprehensive assessment of the biological status of the candy darter and prepared a report of the assessment (SSA report), which provides a thorough account of the species’ overall viability using the conservation biology principles of resiliency, redundancy, and representation (collectively, the “3Rs”). We have used the SSA report’s assessment of the candy darter’s current and potential future status, based on the factors influencing the species, framed in the context of the 3Rs, and information provided during the public comment period on the October 4, 2017, proposed listing rule to inform our determination of whether the candy darter meets the definition of an endangered or a threatened species (see Determination, below).

Because we have included information below about the candy darter’s 3Rs, we further define those terms here. Resiliency means having sufficiently large populations for the species to withstand stochastic events (arising from random factors). We can measure resiliency based on metrics of population health; for example, birth versus death rates and population size, if that
information exists. Resilient populations are better able to withstand disturbances such as random fluctuations in birth rates (demographic stochasticity), variations in rainfall (environmental stochasticity), or the effects of human activities. Redundancy means having a sufficient number of populations for the species to withstand catastrophic events (such as a rare destructive natural event or episode involving many populations). Redundancy is about spreading the risk and can be measured through the duplication and distribution of populations across the range of the species. Generally, the greater the number of populations a species has distributed over a larger landscape, the better it can withstand catastrophic events.

Representation means having the breadth of genetic makeup for the species to adapt to changing environmental conditions. Representation can be measured through the genetic diversity within and among populations and the ecological diversity (also called environmental variation or diversity) of populations across the species’ range. The more representation, or diversity, a species has, the more it is capable of adapting to changes (natural or human caused) in its environment.

In the absence of species-specific genetic and ecological diversity information, we evaluate representation based on the extent and variability of habitat characteristics within the geographical range. We define viability here as the ability of the species to persist in the wild over time and, conversely, to avoid extinction.

Below, we summarize the conclusions of the candy darter’s SSA analysis (Service 2018, entire), which can be accessed at Docket FWS–R5–ES–2017–0056 on http://www.regulations.gov and at https://www.fws.gov/northeast/candydarter. The SSA report documents the results of our comprehensive biological status review for the candy darter, including an assessment of the factors influencing its continued existence. The SSA report does
not represent a decision by the Service on whether the candy darter should be listed as an endangered or a threatened species under the Act. Rather, the SSA report provides the scientific basis that informs our regulatory decision, which involves the further application of standards within the Act and its implementing regulations and policies. The Act directs us to determine whether any species is an endangered species or a threatened species (i.e., whether it meets the definition of a threatened or endangered species) because of any factors affecting its continued existence. Below, we review the biological condition of the species and its resources and the factors influencing the species and resources to assess the species’ overall viability and the risks to that viability.

Summary of Current Condition


Within these two physiographic provinces, the candy darter has been extirpated from almost half of its historical range (17 of 35 (49 percent) known populations, and 2 of 7 (29 percent) known metapopulations), with the extirpations representing a complete loss of resiliency in those populations (or metapopulations). We qualitatively assessed the remaining (extant) populations, placing them in “low,” “moderate,” or “high” categories that represent the populations’ potential to rebound after stochastic events. These categories were based on a combination of eight physical habitat, nonnative competition, and candy darter demographic metrics (see Service 2018, pp. 51, 84–102). Of the 18 extant populations, 5 (28 percent) have a
current score of high or moderate to high resiliency, 9 (50 percent) have moderate resiliency, and 4 (22 percent) have low or moderate to low resiliency (see table 4 in the SSA report (Service 2018, p, 46). The five populations with higher resiliency constitute three metapopulations (the Upper Gauley in the Appalachian Plateaus physiographic province and the Greenbrier and Middle New in the Valley and Ridge physiographic province); the remaining two extant metapopulations (the Lower Gauley in the Appalachian Plateaus physiographic province and the Upper New River in the Valley and Ridge physiographic province) maintain populations with moderate and low resiliency. Therefore, we conclude the candy darter’s populations currently have moderate resiliency because the four out of the five metapopulations have moderate to high resiliency.

This loss of these candy darter populations, which represent the species’ genetic, ecological, and niche diversity within its historical range, as well as the fragmentation of extant populations, has compromised the species’ ability to repatriate those areas or avoid species-level effects of a catastrophic event. Based on the species’ distribution and condition within each of the seven historical metapopulations (one with moderate to high internal redundancy, one with moderate internal redundancy, one with low internal redundancy, two with no internal redundancy, and two that have been extirpated), we conclude, based on the best available data, that the candy darter’s current redundancy is low (Service 2018, pp. 26–28, 49-50).

While the candy darter currently maintains representation in both the Appalachian Plateaus and Valley and Ridge physiographic provinces, only a single metapopulation in each province has a moderate to high resiliency score. As related to the species’ occupation in a diversity of environmental settings, candy darters have lost representation from lower mainstem rivers and tributaries. While researchers have noted differences in the genetic, physical,
behavioral, or developmental characteristics of some stream fish species based on the species’ longitudinal position in the watershed (e.g., stream size) (Neville et al. 2006, pp. 911–913), but we have no data indicating candy darters exhibit similar differences based on their particular environmental setting. Although the candy darter retains representation in both the Appalachian Plateaus and Valley and Ridge physiographic provinces, the species has a reduced distribution than it had historically and likely a reduced ability to respond to stochastic and catastrophic events, thereby putting the species at increased risk of extinction from any such events (Service 2018, pp. 50–51). The available genetic data for the candy darter indicate that the Upper and Lower Gauley River metapopulations are different from the Greenbrier metapopulation. While we have no information regarding the evolutionary significance of these genetic differences to either metapopulation, the loss of either metapopulation would represent a loss to the species’ genetic diversity. Therefore, we conclude that the species’ representation is currently moderate to low (Service 2018, pp. 26–29, 50–51).

The candy darter is currently distributed in five of the historical seven metapopulations. The populations within those metapopulations generally have moderate to low resiliency and redundancy scores. While the candy darter is present in the two physiographic provinces from which it is historically known, the species is not found in lower mainstem rivers and tributaries in which it once existed (Service 2018, Chapter 3). This fact leads us to conclude the candy darter’s representation is also moderate to low. Therefore, our analysis under the 3Rs leads us to conclude that the current condition of the candy darter is currently moderate to low.

**Risk Factors for the Candy Darter**

Based on the candy darter’s life history and habitat needs, and in consultation with species’ experts from Virginia and West Virginia State and Federal agencies and academic
institutions, we identified the potential stressors (negative influences), the contributing sources of those stressors, and conservation measures to address those stressors that are likely to affect the species’ current condition and viability (Service 2018, pp. 32–43). We evaluated how these stressors may be currently affecting the species and whether, and to what extent, they would affect the species in the future (Service 2018, pp. 52–66). Water temperature, excessive sedimentation, habitat fragmentation, water chemistry, water flow, and nonnative competition likely influenced the species in the past and contributed to its current condition, and may continue to affect some populations in the future (Service 2018, pp. 44, 46, 52–67). However, habitat stressors are not considered to be a primary source of risk to candy darter viability in the future. Hybridization with the closely related variegate darter (*Etheostoma variatum*) appears to be having, and will continue to have, the greatest influence on candy darter populations and the candy darter’s overall viability within the next 25 years (Service 2018, pp. 52–66). While we acknowledge there is uncertainty regarding some of the scientific data and assumptions used to assess the biological condition of the candy darter, the species’ experts generally agreed with the overall methodology for assessing the candy darter’s current and projected future condition, and confirmed that the results were reflective of their observations of the candy darter and its habitat.

As mentioned above, the primary stressor to the candy darter is hybridization with the variegate darter (Service 2018, pp. 32–37), a species that is native to the Kanawha River basin below the Kanawha Falls in Fayette County, West Virginia. The Kanawha Falls serve as a natural barrier to fish dispersal from the lower Kanawha River basin (and greater Ohio River basin) upstream into the range of the candy darter in the upper Kanawha River basin. However, in the late 20th century, the variegate darter was introduced, likely by “bait bucket transfer,” into the upper Kanawha basin. Since they were first observed in the upper Kanawha basin in 1982
and 2002, variegated darters have expanded their range approximately 3 to 9 stream miles per year over the course of the last 20 or more years within the range of the candy darter. Genetic studies have demonstrated that where variegated and candy darter ranges now overlap, the two species will hybridize, and consistent, repeated contact will quickly result in “genetic swamping” (the homogenization or replacement of native genotypes) of the endemic candy darter population and eventually its complete replacement by variegated darters or hybrids (Service 2018, pp. 32–37).

**Summary of Future Conditions Analysis**

We modeled five scenarios to assess the potential viability of the candy darter at a point up to 25 years in the future (Service 2018, pp. 52–66). Two scenarios were focused on habitat change (one positive and the other negative), and three scenarios were focused on variegated darter invasion. However, the habitat change scenarios, by themselves, are not plausible scenarios because variegated darter hybridization is ongoing and highly likely to continue (see chapter 4 and appendix B of the SSA report for additional information). We chose to model all scenarios out to 25 years because we have data to reasonably predict potential habitat and variegated darter changes and their effects on the candy darter within this timeframe.

Under the three most plausible scenarios, those that include the variegated darter invasion, the predicted rate of variegated darter expansion and hybridization remains the same, and at the end of 25 years, the candy darter will likely occur in four isolated populations and maintain little resilience, redundancy, or representation. The effects of significant positive or negative habitat changes do not alter this outcome; however, because variegated darters may be more tolerant of a wider range of habitat conditions, negative habitat changes could selectively benefit variegated darters and increase the rate at which candy darters are extirpated (Service 2018, p. 64).
The candy darter SSA report (Service 2018, entire) contains a more detailed discussion of our evaluation of the biological status of the candy darter and the influences that may affect its continued existence. Our conclusions are based upon the best available scientific and commercial data, including the expert opinion of the species’ experts (fishery biologists, aquatic ecologists, and geneticists from State and Federal agencies and academic institutions) and the SSA team members. Please see the SSA report for a complete list of the species experts and peer reviewers and their affiliations.

**Summary of Changes from the Proposed Rule**

We received information during the public comment period that concluded we had inaccurately described the current condition of some populations of the candy darter. The current condition of the candy darter populations in five streams in the Upper Gauley watershed is more degraded than we had understood when we proposed the candy darter for listing. We inaccurately stated that “[v]ariegate darters have not yet been detected in the remainder of the candy darter’s range (i.e., the Upper Gauley watershed in West Virginia.” Based on comments we received regarding the spread of the variegate darter in the upper Gauley drainage, the risk of hybridization appears imminent and may already be widespread (see **Summary of Comments and Recommendations**, below). We incorporated this information into an updated version of the SSA report (Service 2018). The risk of extinction is higher (see **Determination**, below) than we characterized in the proposal to list the candy darter as a threatened species (82 FR 46197; October 4, 2017).

Additionally, we received information during the public comment period that demonstrated that there is greater genetic differentiation between candy darter in the Greenbrier watershed and candy darter in the Gauley watershed (see **Summary of Comments and**
Recommendations, below). We incorporated this information into an updated version of the SSA report (Service 2018).

We reassessed our analysis (after reviewing all public comments), updated the SSA report, and, after evaluating the best available information and the Act’s regulation and policies, determined that the candy darter meets the definition of an endangered species, and such designation is more appropriate than that of a threatened species as originally proposed.

Summary of Comments and Recommendations

In the proposed rule published on October 4, 2017 (82 FR 46197), we requested that all interested parties submit written comments on the proposal by December 4, 2017. We also contacted appropriate Federal and State agencies, scientific experts and organizations, and other interested parties and invited them to comment on the proposal. A newspaper notification inviting general public comment was published in the USA Today on October 10, 2017. We did not receive any requests for a public hearing. All substantive information provided during the comment period has either been incorporated directly into this final determination or is addressed below, as appropriate.

Peer Reviewer Comments

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 opinions of six individuals (and received responses from four) with expertise in darters; fisheries, population, or landscape ecology; genetics and conservation genetics; and/or speciation and conservation biology regarding the SSA report (Service 2018). The purpose of peer review is to ensure that our designation is based on scientifically sound data, assumptions, and analyses. The peer
reviewers generally concurred with our methods and conclusions and provided additional information, clarifications, and suggestions to improve the final SSA report. The SSA report and peer reviews can be found on http://www.regulations.gov under Docket No. FWS–R5–ES–2017–0056. The SSA report informed the proposed rule (82 FR 46197; October 4, 2017) and this final rule.

Comments from States

(1) Comment: The West Virginia Division of Natural Resources (WVDNR) and one public commenter stated that given the fact that variegate darter alleles were detected in the Upper Gauley in 2014 the spread of hybrids in the Upper Gauley drainage appears imminent and may already be widespread based on the rapid spread of hybrids in the Greenbrier drainage.

Our Response: After reviewing how we assessed the hybridization metric, one of eight metrics in our candy darter condition model, we concluded that we had previously underestimated the risk of hybridization in the Upper Gauley. Therefore, we have updated the analysis in the SSA report to address this concern. This information was the primary reason we changed our determination from threatened to endangered.

(2) Comment: The WVDNR stated that the Gauley and Greenbrier river populations of candy darter have a high level of genetic differentiation that borders on species-level differentiation. The Greenbrier River population appears to be on a definite “trajectory to extinction.” Loss of candy darter in the Greenbrier river would drastically reduce genetic diversity of the species and leave the Gauley River and Virginia populations separated by substantial geographic distance and two physical barriers (i.e., Summersville and Bluestone dams).
Our Response: The best available genetic information suggests genetic differences exist between these watersheds. We have updated the SSA report to reflect the importance of these genetic differences.

Public Comments

(3) Comment: One commenter provided additional supporting evidence of the genetic differentiation between the Greenbrier and Gauley metapopulations.

Our Response: We incorporated the information into our SSA report.

(4) Comment: One commenter believed that the candy darter has been extirpated from 77.2% of its range rather than 49 percent, as we stated in the proposed rule. They also stated that the situation is likely worse than that because three of the four populations in the Upper Gauley that are labeled as “extant candy darter populations” have not been genetically analyzed; if they were genetically analyzed, they may fall into the category of “extant candy darter population with variegate darter alleles.”

Our Response: This final determination relies on the best scientific information available. At this time, we do not have genetic information (or evidence otherwise) to fully evaluate the genetics of the populations in the Gauley; therefore, we do not assume they are candy darter with variegate darter alleles. We recognize uncertainty in the data and that the situation may be worse than we are aware.
(5) Comment: Three commenters recommended exemptions for activities for the Service to consider in the event that we drafted a species-specific rule under section 4(d) of the Act (“4(d) rule”).

Our Response: The Service has determined that the candy darter meets the definition of an endangered species, and the Act does not allow for the promulgation of a 4(d) rule when a species is listed as endangered.

Determination

Section 4 of the Act (16 U.S.C. 1533), and its implementing regulations at 50 CFR part 424, set forth the procedures for adding species to the Federal Lists of Endangered and Threatened Wildlife and Plants. Under section 4(a)(1) of the Act, we may list a species based on (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 carefully assessed the best scientific and commercial information available regarding the past, present, and future threats to the candy darter. Our analysis of this information indicates that, at the species level, hybridization with variegate darters (Factor E) is the most influential factor affecting the candy darter now and into the future. Excessive sedimentation and increased water temperatures degraded once-suitable habitat (Factor A) and likely caused historical declines of the candy darter. We also analyzed existing regulatory mechanisms (such as the Federal Clean Water Act of 1977 (33 U.S.C. 1251 et seq.), Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1234–1328), West Virginia Water Pollution Control Act (WVSC § 22–11) and the increased implementation of forestry and
construction “best management practices” designed to reduce erosion and sedimentation) (Factor D) to reduce or eliminate sedimentation and found that these mechanisms were not sufficient to protect the species from extinction as excessive sedimentation and increased water temperatures continue to affect some of the remaining populations. There may be additional infrastructure projects (e.g., roads, pipeline, etc.) that increase sediment loading within the range of the candy darter as a result of stream crossings or forest clearing for permanent rights of way.

Additionally, the current level of habitat fragmentation (Factor A) isolates some populations, which reduces gene flow and limits the potential for the species to colonize or recolonize streams if habitat conditions change. Other factors such as flow alterations and water quality degradation that affect habitat (Factor A), and the stocking of nonnative species that can eat (Factor C) or outcompete (Factor E) the candy darter are not expected to cause species-level effects. In addition, we have no evidence that overutilization (Factor B) or disease (Factor C) is affecting individuals or populations of candy darters.

Active hybridization with variegate darters has occurred or is currently occurring in multiple streams within the Lower New, Lower Gauley, and Greenbrier River watersheds in West Virginia (Service 2018, p. 37). Although variegate darter individuals have not yet been detected in the remainder of the candy darter’s range (i.e., the Middle New and Upper New watersheds in Virginia), variegate darter alleles have been detected in two separate locations in the Upper Gauley watershed, indicating that hybridization occurred at one time and currently likely underway. Additionally, the risk is moderately high that variegate darter introductions will continue to occur in these watersheds because if watersheds occupied by variegate darters (and hybrids) are adjacent to candy darter watersheds, the likelihood that variegate darters will be collected as bait and transported into an adjacent candy darter watershed is increased. When
this happens, variegate darters ultimately replace most candy darter populations throughout the candy darter’s range. The Act defines an endangered species as any species that is “in danger of extinction throughout all or a significant portion of its range.” We find that an endangered species status is appropriate for the candy darter because the species is facing a catastrophic threat from which the risk of extinction is imminent and certain. The introduction of variegate darters is occurring, and the consequence that it will extirpate any local candy darter population that variegate darters come into sustained contact with is imminent and certain across the species’ remaining range. As a result of their limited range and/or population size, narrowly endemic species are inherently vulnerable to extinction when subject to elevated threats. The candy darter has a moderately small range, which has only become more restricted, as 77 percent (27 of 35 populations (see SSA report, table 4)) of its range has been lost through historical land use changes and/or has been invaded by the variegate darter. Therefore, we conclude that the current risk of extinction of the candy darter is such that it does not meet the definition of a threatened species under the Act.

The Act defines an endangered species as any species that is “in danger of extinction throughout all or a significant portion of its range” and a threatened species as any species “that is likely to become endangered throughout all or a significant portion of its range within the foreseeable future.” We find that the candy darter is presently in danger of extinction throughout its entire range based on the severity and immediacy of threats currently affecting the species. The overall range has been significantly reduced, and the remaining populations are threatened by hybridization and, to a lesser extent, a combination of other threats, reducing the overall viability of the species. The risk of extinction is high because the remaining populations are isolated and the threat of hybridization is ongoing and increasing. Therefore, on the basis of the
best available scientific and commercial data, we are listing the candy darter as endangered in accordance with sections 3(6) and 4(a)(1) of the Act. We find that a threatened species status is not appropriate for the candy darter because of the reasons previously outlined and because the threats, which occur throughout the species’ range, are expected to continue to increase, putting the species at risk of extinction now.

Under the Act and our implementing regulations, a species may warrant listing if it is endangered or threatened throughout all or a significant portion of its range. Because we have determined that the candy darter is in danger of extinction throughout its range, we find it unnecessary to proceed to an evaluation of potentially significant portions of the range. Where the best available information allows the Services to determine a status for the species rangewide, that determination should be given conclusive weight because a rangewide determination of status more accurately reflects the species’ degree of imperilment and better promotes the purposes of the statute. Under this reading, we should first consider whether listing is appropriate based on a rangewide analysis and proceed to conduct a “significant portion of its range” analysis if, and only if, a species does not qualify for listing as either endangered or threatened according to the “all” language. We note that the court in Desert Survivors v. Department of the Interior, No. 16-cv-01165-JCS, 2018 WL 4053447 (N.D. Cal. Aug. 24, 2018), did not address this issue, and our conclusion is therefore consistent with the opinion in that case.

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 conservation by Federal, state, Tribal, and local agencies; private organizations; and individuals. The Act encourages cooperation with the States and requires that recovery actions be carried out for all listed species. The protection required by Federal agencies and the prohibitions against certain activities are discussed, in part, below.

The primary purpose of the Act is the conservation of endangered and threatened species and the ecosystems upon which they depend. The ultimate goal of such conservation efforts is the recovery of these listed species, so that they no longer need the protective measures of the Act. Subsection 4(f) of the Act requires the Service to develop and implement recovery plans for the conservation of endangered and threatened species. The recovery planning process involves the identification of actions that are necessary to halt or reverse the species’ decline by addressing the threats to its survival and recovery. The goal of this process is to restore listed species to a point where they are secure, self-sustaining, and functioning components of their ecosystems.

Recovery planning includes the development of a recovery outline shortly after a species is listed and preparation of a draft and final recovery plan. The recovery outline guides the immediate implementation of urgent recovery actions and describes the process to be used to develop a recovery plan. As part of our conservation strategy for the candy darter, which will inform the forthcoming recovery outline and informs the proposed critical habitat rule published elsewhere in today’s Federal Register, we identified the need to reestablish candy darter populations within areas of its historical range. Because the candy darter is extirpated from some areas and natural repopulation is not possible without human assistance, use of a 10(j) rule under the Act may be one appropriate tool to achieve this recovery objective. An overview of the process to establish an experimental population under section 10(j) of the Act is described in
detail in the proposed critical habitat rule published elsewhere in today’s Federal Register. In addition to using the authorities under 10(j) of the Act in areas not currently occupied by the candy darter, the condition of existing candy darter populations may be improved by working with non-Federal landowners through safe harbor agreements, authorized under section 10(a)(1)(A) of the Act. More information about safe harbor agreements can be found online at: https://www.fws.gov/endangered/landowners/safe-harbor-agreements.html. We intend to fully explore all of the appropriate recovery tools for the candy darter with our State, Federal, non-governmental, and private partners.

The recovery plan identifies site-specific management actions that set a trigger for review of whether a species remains endangered or may be reclassified from endangered to threatened (“downlisted”) or removed from the Lists of Endangered and Threatened Wildlife and Plants (“delisted”), and methods for monitoring recovery progress. Recovery plans also establish a framework for agencies to coordinate their recovery efforts and provide estimates of the cost of implementing recovery tasks. Recovery teams (composed of species experts, Federal and State agencies, nongovernmental organizations, and stakeholders) are often established to develop recovery plans. When completed, the recovery outline, draft recovery plan, and the final recovery plan will be available on our website (http://www.fws.gov/endangered) or from the person listed under FOR FURTHER INFORMATION CONTACT.

Implementation of recovery actions generally requires the participation of a broad range of partners, including other Federal agencies, states, Tribes, nongovernmental organizations, businesses, and private landowners. Examples of recovery actions include habitat restoration (e.g., restoration of native vegetation), research, captive propagation and reintroduction, and outreach and education. The recovery of many listed species cannot be accomplished solely on
Federal lands because their range may occur primarily or solely on non-Federal lands.

Achieving recovery of these species requires cooperative conservation efforts on private, state, and Tribal lands.

Following publication of this final listing rule, funding for recovery actions will be available from a variety of sources, including Federal budgets, state programs, and cost share grants for non-Federal landowners, the academic community, and nongovernmental organizations. In addition, pursuant to section 6 of the Act, the States of Virginia and West Virginia will be eligible for Federal funds to implement management actions that promote the recovery of the candy darter. Information on our grant programs that are available to aid species recovery can be found at: http://www.fws.gov/grants.

Please let us know if you are interested in participating in recovery efforts for the candy darter. Additionally, we invite you to submit any new information on this species whenever it becomes available and any information you may have for recovery planning purposes (see FOR FURTHER INFORMATION CONTACT).

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is listed as an endangered or threatened species and with respect to its critical habitat, if any is designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(2) of the Act requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of any endangered or threatened species or destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into consultation with the Service.
Federal agency actions within the species' habitat that may require consultation as described in the preceding paragraph include, but are not limited to, management (e.g. captive propagation) and any other landscape-altering activities on Federal lands administered by the U.S. Forest Service (Monongahela and the George Washington and Jefferson National Forests) and the National Park Service; issuance of section 404 Clean Water Act (33 U.S.C. 1251 et seq.) permits by the U.S. Army Corps of Engineers; and construction and maintenance of roads or highways by the Federal Highway Administration.

The Act and its implementing regulations set forth a series of general prohibitions and exceptions that apply to endangered wildlife. The prohibitions of section 9(a)(1) of the Act, codified at 50 CFR 17.21, make it illegal for any person subject to the jurisdiction of the United States to take (which includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these) endangered wildlife within the United States or on the high seas. In addition, it is unlawful to import; export; deliver, receive, carry, transport, or ship in interstate or foreign commerce in the course of commercial activity; or sell or offer for sale in interstate or foreign commerce any listed species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. Certain exceptions apply to employees of the Service, the National Marine Fisheries Service, other Federal land management agencies, and State conservation agencies.

We may issue permits to carry out otherwise prohibited activities involving endangered wildlife under certain circumstances. Regulations governing permits are codified at 50 CFR 17.22. With regard to endangered wildlife, a permit may be issued for the following purposes: for scientific purposes, to enhance the propagation or survival of the species, and for incidental
take in connection with otherwise lawful activities. 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 final listing on proposed and ongoing activities within the range of a listed species. Based on the best available information, the following actions are unlikely to result in a violation of section 9, if these activities are carried out in accordance with existing regulations and permit requirements; this list is not comprehensive:

- Normal agricultural practices, including herbicide and pesticide use, carried out in accordance with any existing regulations and with permit and label requirements.

Based on the best available information, the following activities may potentially result in a violation of section 9 the Act; this list is not comprehensive:

(1) Introduction of variegated darters into suitable candy darter habitat;

(2) Stocking of nonnative species into suitable candy darter habitat;

(3) Destruction or alteration of the habitat of the candy darter (e.g., unpermitted instream dredging, impoundment, water diversion or withdrawal, channelization, discharge of fill material) that impairs essential behaviors such as breeding, feeding, or sheltering, or results in killing or injuring a candy darter; and

(4) Discharges or dumping of toxic chemicals or other pollutants into waters supporting the candy darter that kills or injures individuals, or otherwise impairs essential life-sustaining behaviors such as breeding, feeding, or finding shelter.
Questions regarding whether specific activities would constitute a violation of section 9 of the Act should be directed, as follows:

- In West Virginia, to the West Virginia Ecological Services Field Office (see FOR FURTHER INFORMATION CONTACT); or

- In Virginia, to the Southwestern Virginia Field Office (330 Cummings Street, Abingdon, VA 24210-3208; telephone 276-623–1233).

**Required Determinations**

*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 (NEPA; 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).

*Government-to-Government Relationship with Tribes*

In accordance with the President’s memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments), and the Department of the Interior’s manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with Tribes in developing programs for healthy ecosystems, to acknowledge that tribal lands are not subject to the same controls as Federal
public lands, to remain sensitive to Indian culture, and to make information available to tribes.

The candy darter does not occur on federally recognized Tribal or Tribal interest lands.

**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 West Virginia Ecological Services Field Office (see FOR FURTHER INFORMATION CONTACT).

**Authors**

The primary authors of this final rule are the staff members of the Services’ Species Assessment Team, the West Virginia Ecological Services Field Office, and the Southwestern Virginia Ecological Services Field Office.

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

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

**Regulation Promulgation**

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

**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, in alphabetical order under FISHES, an entry for “Darter, candy” to the List of Endangered and Threatened Wildlife to read as follows:

   **§ 17.11 Endangered and threatened wildlife.**
<table>
<thead>
<tr>
<th>Common name</th>
<th>Scientific name</th>
<th>Where listed</th>
<th>Status</th>
<th>Listing citations and applicable rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Darter, candy</td>
<td><em>Etheostoma osburni</em></td>
<td>Wherever found</td>
<td>E</td>
<td>83 FR [insert <em>Federal Register</em> page where the document begins], [Insert date of publication in the <em>Federal Register</em>].</td>
</tr>
</tbody>
</table>
Dated: ______ September 6, 2018

Signed: ______

James W. Kurth
Deputy Director,
U.S. Fish and Wildlife Service,
Exercising the Authority of the Director,
U.S. Fish and Wildlife Service.

Billing Code 4333-15

[FR Doc. 2018-25316 Filed: 11/20/2018 8:45 am; Publication Date: 11/21/2018]