DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R4–ES–2018–0094; FF09E21000 FXES11110900000 212]

RIN 1018–BD08

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Yellow Lance

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), designate critical habitat for the yellow lance (*Elliptio lanceolata*) under the Endangered Species Act of 1973 (Act), as amended. In total, approximately 319 river miles (mi) (514 kilometers (km)) fall within 11 units of critical habitat in Franklin, Granville, Halifax, Johnston, Nash, Vance, Wake, and Warren Counties, North Carolina; Brunswick, Craig, Culpeper, Dinwiddie, Fauquier, Louisa, Lunenburg, Madison, Nottoway, Orange, and Rappahannock Counties, Virginia; and Howard and Montgomery Counties, Maryland. This rule extends the Act's protections to the yellow lance's designated critical habitat.

DATES: This rule is effective May 10, 2021.

ADDRESSES: This final rule is available on the internet at *http://www.regulations.gov.* Comments and materials we received, as well as some supporting documentation we used in preparing this rule, are available for public inspection at *http://www.regulations.gov.*

The coordinates or plot points or both from which the maps are generated are included in the administrative record for this critical habitat designation and are available at *http://www.regulations.gov* at Docket No. FWS–R4–ES–2018–0094, or from the Raleigh Ecological Services Field Office (*https://www.fws.gov/raleigh*) (see **FOR FURTHER INFORMATION CONTACT**). Any additional tools or supporting information developed will also be available at the Fish and Wildlife Service website and Field Office identified below and at *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Pete Benjamin, Field Supervisor, U.S. Fish and Wildlife Service, Raleigh Ecological Services Field Office, 551F Pylon Drive, Raleigh, NC 27606; telephone 919–856–4520. 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 section 4(a)(3) of the Endangered Species Act of 1973 (Act), as amended, if we determine that a species is an endangered or threatened species, we must designate critical habitat to the maximum extent prudent and determinable. We published a final rule to list the yellow lance as a threatened species on April 3, 2018 (83 FR 14189). Designations of critical habitat can be completed only by issuing a rule.

Basis for our action. Section 3(5)(A) of the Act defines critical habitat as (i) the specific areas within the geographical area occupied by the species, at the time it is listed, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protections; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination by the Secretary that such areas are essential for the conservation of the species. Section 4(b)(2) of the Act states that the Secretary must make the designation on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impacts of specifying any particular area as critical habitat. The critical habitat we are designating in this rule, consisting of 11 units comprising approximately 319 miles (514 kilometers) of streams and rivers, constitutes our current best assessment of the areas that meet the definition of critical habitat for the yellow lance.

Economic analysis. In accordance with section 4(b)(2) of the Act, we prepared an economic analysis of the impacts of designating critical habitat for the yellow lance. We published the announcement of, and solicited public comments on, the draft economic analysis (DEA; 85 FR 6856, February 6, 2020). Because we received no comments or new information on the DEA, we adopted the DEA as a final version.

Public comments. We considered all comments and information we received from the public during the comment period on the proposed designation of critical habitat for the yellow lance and the associated DEA (85 FR 6856; February 6, 2020).

Supporting Documents

As part of the process of listing the yellow lance, a species status assessment (SSA) team prepared an SSA report for the species. The SSA team was composed of Service biologists, in consultation with other species experts. 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 SSA report underwent independent peer review by scientists with expertise in mussel biology, habitat management, and stressors (factors negatively affecting the species) to the species. Along with other information submitted during the process of listing the species, the SSA report is the primary source of information for this final designation. The SSA report and other materials relating to this rule can be found on the Service's Southeast Region website at *https://www.fws.gov/southeast/* and at *http://www.regulations.gov* under Docket No. FWS–R4–ES–2018–0094.

Previous Federal Actions

On April 20, 2010, we were petitioned to list 404 aquatic species in the southeastern United States, including yellow lance. In response to the petition, we completed a 90-day finding on September 27, 2011 (76 FR 59836), in which we announced our finding that the petition contained substantial information that listing may be warranted for the yellow lance. On April 5, 2017, we published a proposed rule to list the yellow lance as a threatened species (82 FR 16559). On April 3, 2018, we published the final rule to list the species as a threatened species (83 FR 14189). On February 6, 2020, we published a proposed rule to designate critical habitat for the yellow lance (85 FR 6856). Please refer to the April 5, 2017, proposed listing rule for a discussion of earlier Federal actions regarding the yellow lance.

Summary of Comments and Recommendations

On February 6, 2020, we published in the **Federal Register** (85 FR 6856) a proposed rule to designate critical habitat for the yellow lance and to make available the associated DEA; the public comment period for that proposed rule was open for 60 days, ending April 6, 2020. During the open comment period, we received 23 public comments on the proposed rule; a majority of the comments supported the designation, none opposed the designation, and

some included suggestions on how we could refine or improve the designation. All substantive information provided to us during the comment period has been incorporated directly into this final rule or is addressed below.

(1) Comment: Two commenters recommended adding to the critical habitat designation. One commenter suggested that whole watersheds be considered for designation, indicating that protecting entire watersheds would improve genetic diversity and resiliency of yellow lance populations. Another commenter recommended including vegetative buffers in the designation, citing a study on the functions and recommended widths of riparian buffer zones: For erosion and sediment control, a width of 30 to 98 feet is recommended, and in the case of absorbing biocontaminants, nutrients, and pesticides, the width ranges are 30 or more feet, 49 to 164 feet, and 49 to 328 feet, respectively.

Our Response: Designation of an entire watershed, which we interpret to mean all streams and waterbodies within a watershed, would include areas that are not occupied by yellow lance, and areas that are not suitable habitat for the yellow lance. The Service has determined that unoccupied habitat is not essential for the conservation of the species. Further, many areas within a watershed are not suitable habitat, and therefore do not contain one or more of the physical or biological features essential to yellow lance conservation. In other words, these areas do not meet the definition of critical habitat. Similarly, while the Service recognizes in the SSA report the important contribution of riparian buffers to yellow lance habitat, these land areas surrounding streams do not meet the definition of critical habitat in that they are not specific areas occupied by the species that have one or more of the physical and biological features essential to yellow lance conservation. As an obligate aquatic species, freshwater mussels such as the yellow lance cannot survive in terrestrial riparian areas. Therefore, such areas are not considered in the designation of critical habitat.

(2) Comment: One commenter recommended that exclusion of human-made structures should be construed as narrowly as possible and should not allow the exclusion of undeveloped land because that land may share a parcel with otherwise-excluded pavement or human structures.

Our Response: The exclusion of human-made structures from the boundaries of the designated critical habitat was intended to apply only to the structures included in the Geographic Information Systems (GIS) shapefiles of the critical habitat and not to undeveloped land.

(3) Comment: One commenter suggested that the Service include in the economic analysis consideration of economic benefits of protecting yellow lance habitat, including ecosystem services, the protection of clean water, the reduced cost of water treatment for drinking water supplies, as well as public health benefits.

Our Response: As noted in the DEA, the primary intended benefit of critical habitat is to support the conservation of endangered and threatened species, such as the yellow lance. In order to quantify and monetize direct benefits of the designation, information would be needed to determine (1) the incremental change in the probability of yellow lance conservation expected to result from the critical habitat designation, and (2) the public's willingness to pay for such beneficial changes. The conclusion was that additional project modifications to avoid adverse modification of critical habitat for the yellow lance are not anticipated. Because of the uncertainties associated with monetary quantification of these benefits, we were not able to estimate the economic benefits of ecosystem services, such as clean water via mussel-based biofiltration treatment, or broad benefits of ecosystem services that flow from protected areas to human populations.

(4) Comment: One commenter noted that according to the SSA report, the yellow lance is dependent on attaching itself to minnows to successfully reach its adult stage. The commenter further noted that although it is likely true that the yellow lance is mostly being hindered by abiotic factors such as pollution and sedimentation, establishing a critical habitat for this mussel species should also address conditions necessary for the survival of its host species to ensure proper development of the yellow lance. The commenter stated that yellow lance's glochidia stage coincides with the spawning period of minnows—from late spring to mid-summer—and that minnows are obligate hosts for this species and require conservation consideration in order to ensure proper development of the yellow lance. The commenter then asked how this critical habitat can be tailored to also meet the needs of the yellow lance's obligate hosts.

Our Response: In this critical habitat designation, we identify the physical or biological features essential to yellow lance conservation, and, of those, we include two physical or biological factors that specifically mention the yellow lance's fish hosts: (1) Adequate flows, or a hydrologic flow regime (which includes the severity, frequency, duration, and seasonality of discharge over time), necessary to maintain benthic habitats where the yellow lance is found and to maintain connectivity of streams with the floodplain, allowing the exchange of nutrients and sediment for maintenance of the mussel's and fish host's habitat, food availability, spawning habitat for native fishes, and the ability for newly transformed juveniles to settle and become established in their habitats; and (2) the presence and abundance of fish hosts necessary for yellow lance recruitment. In addition, we identify another physical or biological feature essential to yellow lance conservation consisting of certain suitable substrates and connected instream habitats ''that support a diversity of freshwater mussels and native fish.'' Therefore, this critical habitat designation does address, in the context of the physical or biological features essential to yellow lance conservation, conditions necessary for the yellow lance's fish hosts.

(5) Comment: One commenter noted that compliance with the existing 15 federally enacted best management practices (BMPs) for Clean Water Act section 404(f)(1) exemption for established silviculture activities like crossing a water of the United States, as well as compliance with the North Carolina forestry practice guidelines (FPGs), and with any other applicable State-enacted riparian buffer rules, should be deemed as concurrent protection of critical habitat under the Act (16 U.S.C. 1531 *et seq.*).

Our Response: The Federal BMP under consideration states, ''The discharge shall not take, or jeopardize the continued existence of, a threatened or endangered species as defined under the Endangered Species Act, or adversely modify or destroy the critical habitat of such species.'' Therefore, this Federal BMP restates existing requirements of the Act. The North Carolina FPGs are Statewide, ''mandatory narrative rule standards that were developed to assure that forestry activities are conducted in a manner that protects water quality'' (NCFS 2018, p. 1). The Service recognizes that adherence to the FPG performance standards described under title 2 of the North Carolina Administrative Code at chapter 60, subchapter C, are considered by the North Carolina Forest Service to be compliance with the Federal BMP

mentioned above. Thus, compliance with FPGs will also protect critical habitat.

(6) Comment: One commenter recommended we provide Federal funds to support cooperative improvements to forest access infrastructure and other conservation management measures within the designated critical habitat watersheds. The commenter suggested that robust, recurring funding could go towards the following activities: (1) Increase the availability of portable, temporary bridgemats for loggers to use on stream crossings; (2) enhance cost-sharing of prompt and effective reforestation after timber harvests; (3) provide cost-shared assistance for landowners to remove/renovate/replace substandard, existing forest road stream crossings; (4) develop pre-harvest plans for landowners through technical assistance provided by a forester; (5) compensate landowners in exchange for installing legal protections of critical habitat riparian zones; and (6) provide targeted in-woods research, study, and/or monitoring.

Our Response: The Service is working with forestry partners to consider funding opportunities to advance the ideas suggested by the commenter.

(7) Comment: One commenter offered information about the conservation benefits provided to aquatic species on private, working forests and requested that the Service include several references for our consideration.

Our Response: We made several revisions to include new, relevant reference materials in the forestry discussion in the SSA report, where appropriate, in response to this comment. However, several of the references provided by the commenter were not specific to studies of the impacts or benefits of forestry management to freshwater mussels and, therefore, were not included in the SSA report.

(8) Comment: One commenter noted that silvicultural practices implemented with BMPs protect aquatic species and, because they are widely implemented, should not be viewed as ''special management''; the commenter recommended the Service instead recognize BMPs as routine practices. They also note that although there are limited data documenting relationships between BMPs and some individual aquatic and riparian species, there is a significant body of research confirming that BMPs contribute to water quality and riparian forest structure and provided many references to this effect.

Our Response: BMPs are ''management practices'' that are used to protect water quality during timber harvests and other forest management activities (National Association of State Foresters 2020, unpaginated). Because there are a variety of BMPs that may be implemented depending on the project in consideration, and because there can be a forestry management or harvest plan that details which BMPs will be implemented for that particular project, the use of them is considered ''management.'' The Act defines ''critical habitat'' as, in part, the specific areas within the geographical area occupied by the species which may require special management considerations. Forestry best ''management practices'' are considered to be management considerations needed for the habitat occupied by the yellow lance. Whether they are routine or not, there is a management strategy used when implementing BMPs; therefore, they can be considered ''special management considerations'' under the Act. The SSA report (Service 2019, p. 49) and the February 6, 2020, proposed rule (85 FR 6861) recognize that BMPs can protect water quality and habitat for aquatic species. However, as noted by the commenter, there are some species for which there are limited data documenting the relationships with BMPs, and even with the 43 references provided in the comment letter, there are no data presented that consider temporary or long-term effects of sedimentation on long-lived, sedentary freshwater mussel species such as the yellow lance.

(9) Comment: One commenter encourages the Service to modify the proposed rule's language to acknowledge that removing large areas of forested wetlands and riparian systems is not part of ongoing forest management, nor is it compatible with BMP guidelines. The commenter states that in making the above statements, the Service appears to rely on older sources of information that do not reflect contemporary forest management, or possibly sources describing practices in regions other than the eastern United States.

Our Response: The section of the proposed rule that the commenter refers to is Special Management Considerations or Protections (85 FR 6856, February 6, 2020, p. 85 FR 6861), which states that the features essential to the conservation of the yellow lance may require special management considerations or protections to reduce threats including ''improper forest management or silviculture activities that remove large areas of forested wetlands and riparian systems.'' The comment implies that the Service improperly characterized this as one of the threats against which the special considerations or protections are needed; therefore, in this rule, we have clarified that language. After reviewing studies within the range of yellow lance in Virginia noted by the commenter (Lakel et al. 2010, p. 541) and frequently asked questions on the North Carolina State Forest Service's website (NCFS 2020, unpaginated), the Service notes that clearcutting, or entirely removing all trees in a forested area (U.S. Forest Service 2020, unpaginated), is a preferred method of harvesting timber. To harvest sites, they are often clearcut, burned, and then replanted (Lakel et al. 2010, p. 541). The threat to yellow lance from this harvest practice is sedimentation from clearcuts near streams. Many of the watersheds occupied by yellow lance do not have mandatory buffer requirements to eliminate sedimentation, and, as noted above, there are no data for the temporary or long-term effects of residual sedimentation post-BMP implementation on freshwater mussels. As stated above, in response to this comment, we have revised relevant language in this rule to clarify that the threat is due to ''improper forest management or clearcuts within riparian areas.''

Summary of Changes From the Proposed Rule

This final rule incorporates one minor substantive change to our proposed rule (85 FR 6856; February 6, 2020) based on the comments we received and that are summarized above under Summary of Comments and Recommendations. We revised the language under Special Management Considerations or Protections to clarify that the features essential to the conservation of the yellow lance may require special management considerations or protections to reduce ''improper forest management or clearcuts within riparian areas.'' We made no other substantive changes from the proposed rule to this final rule.

Background

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features;

(a) Essential to the conservation of the species, and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Our regulations at 50 CFR 424.02 define the geographical area occupied by the species as an area that may generally be delineated around species' occurrences, as determined by the Secretary (*i.e.,* range). Such areas may include those areas used throughout all or part of the species' life cycle, even if not used on a regular basis (*e.g.,* migratory corridors, seasonal habitats, and habitats used periodically, but not solely by vagrant individuals).

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the Federal agency would be required to consult with the Service under section 7(a)(2) of the Act. However, even if the Service were to conclude that the proposed activity would result in destruction or adverse modification of the critical habitat, the Federal action agency and the landowner are not required to abandon the proposed activity, or to restore or recover the species; instead, they must implement ''reasonable and prudent alternatives'' to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical or biological features within an area, we focus on the specific features that support the life-history needs of the species, including, but not limited to, water characteristics, soil type, geological features, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic, or a more complex combination of habitat characteristics. Features may include habitat characteristics that support ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating to principles of conservation biology, such as patch size, distribution distances, and connectivity.

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. When designating critical habitat, the Secretary will first evaluate areas occupied by the species. The Secretary will only consider unoccupied areas to be essential where a critical habitat designation limited to geographical areas occupied by the species would be inadequate to ensure the conservation of the species. In addition, for an unoccupied area to be considered essential, the Secretary must determine that there is a reasonable certainty both that the area will contribute to the conservation of the species and that the area contains one or more of those physical or biological features essential to the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the **Federal Register** on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106–554; H.R. 5658)), and our associated Information Quality Guidelines provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information from the SSA report and other information developed during the listing process for the species. Additional information sources may include any generalized conservation strategy, criteria, or outline that may have been developed for the species; the recovery plan for the species; articles in peer-reviewed journals; conservation plans developed by States and counties; scientific status surveys and studies; biological assessments; other unpublished materials; or experts' opinions or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act; (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species; and (3) the prohibitions found in section 9 of the Act. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. Similarly, critical habitat designations made on the basis of the best available

information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

Physical or Biological Features Essential to the Conservation of the Species

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12(b), in determining which areas we will designate as critical habitat from within the geographical area occupied by the species at the time of listing, we consider the physical or biological features that are essential to the conservation of the species and that may require special management considerations or protection. The regulations at 50 CFR 424.02 define ''physical or biological features essential to the conservation of the species'' as the features that occur in specific areas and that are essential to support the life-history needs of the species, including, but not limited to, water characteristics, soil type, geological features, sites, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic or a more complex combination of habitat characteristics. Features may include habitat characteristics that support ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating to principles of conservation biology, such as patch size, distribution distances, and connectivity. For example, physical features essential to the conservation of the species might include gravel of a particular size required for spawning, alkali soil for seed germination, protective cover for migration, or susceptibility to flooding or fire that maintains necessary early-successional habitat characteristics. Biological features might include prey species, forage grasses, specific kinds or ages of trees for roosting or nesting, symbiotic fungi, or a particular level of nonnative species consistent with conservation needs of the listed species. The features may also be combinations of habitat characteristics and may encompass the relationship between characteristics or the necessary amount of a characteristic essential to support the life history of the species.

In considering whether features are essential to the conservation of the species, the Service may consider an appropriate quality, quantity, and spatial and temporal arrangement of habitat characteristics in the context of the life-history needs, condition, and status of the species. These characteristics include, but are not limited to, space for individual and population growth and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, or rearing (or development) of offspring; and habitats that are protected from disturbance.

The yellow lance is a sand-loving species (Alderman 2003, p. 6) often found buried deep in clean, coarse to medium sand and sometimes migrating with shifting sands (NatureServe 2015, p. 6), although it has also been found in gravel substrates. Yellow lance adults require clear, flowing water with a temperature less than 35 degrees Celsius (°C) (95 degrees Fahrenheit (°F)) and a dissolved oxygen greater than 3 milligrams per liter (mg/L). Juveniles require very specific interstitial chemistry to complete that life stage: Low salinity (similar to 0.9 parts per thousand (ppt)), low ammonia (similar to 0.7 mg/L), low levels of copper and other contaminants, and dissolved oxygen greater than 1.3 mg/L. Most freshwater mussels, including the yellow lance, are found in aggregations (mussel beds) that vary in size and are often separated by stream reaches in which mussels are absent or rare (Vaughn 2012, p. 983). Genetic exchange occurs between and among mussel beds via sperm drift, host fish movement, and movement of mussels during high flow events.

The yellow lance is an omnivore that primarily filter feeds on a wide variety of microscopic particulate matter suspended in the water column, including phytoplankton, zooplankton, bacteria, detritus, and dissolved organic matter, and these food resources are closely tied to riparian area inputs to the stream (Haag 2012, p. 26). Like most freshwater mussels, they have a unique life cycle that relies on fish hosts for successful reproduction. Yellow lance larvae (glochidia) are obligate parasites of the gills, heads, or fins of fish; primary host species are members of the Cyprinidae family, including the white shiner (*Luxilus albeolus*) and pinewoods shiner (*Lythrurus matutinus*).

A thorough review of the life history and ecology of yellow lance is presented in the SSA report (Service 2019, entire), available on *http://www.regulations.gov* at Docket No. FWS–R4–ES–2018–0094.

Summary of Essential Physical or Biological Features

We derive the specific physical or biological features essential to yellow lance conservation from studies of the species' habitat, ecology, and life history as described above, and in the SSA report. We have determined that the following physical or biological features are essential to yellow lance conservation:

(1) Suitable substrates and connected instream habitats, characterized by geomorphically stable stream channels and banks (*i.e.,* channels that maintain lateral dimensions, longitudinal profiles, and sinuosity patterns over time without an aggrading or degrading bed elevation) with habitats that support a diversity of freshwater mussels and native fish (such as stable riffle-run-pool habitats that provide flow refuges consisting of silt-free gravel and coarse sand substrates).

(2) Adequate flows, or a hydrologic flow regime (which includes the severity, frequency, duration, and seasonality of discharge over time), necessary to maintain benthic habitats where the species is found and to maintain connectivity of streams with the floodplain, allowing the exchange of nutrients and sediment for maintenance of the mussel's and fish host's habitat, food availability, spawning habitat for native fishes, and the ability of newly transformed juveniles to settle and become established in their habitats.

(3) Water and sediment quality (including, but not limited to, conductivity, hardness, turbidity, temperature, pH, ammonia, heavy metals, and chemical constituents) necessary to sustain natural physiological processes for normal behavior, growth, and viability of all life stages.

(4) The presence and abundance of fish hosts necessary for yellow lance recruitment.

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features that are essential to the conservation of the species and which may require special management considerations or protection. Activities on the surrounding landscape and in riparian areas are closely tied to instream habitat, therefore special management considerations can be linked to activities on land that influence the stream and instream habitat. The features essential to yellow lance conservation may require special management considerations or protections to reduce the following threats: (1) Reduction in water quality, quantity, and resulting sedimentation as

a result of urbanization of the landscape, including (but not limited to) land conversion for urban and commercial use, infrastructure (roads, bridges, utilities), and urban water uses (water supply reservoirs, wastewater treatment, etc.); (2) nutrient pollution from agricultural activities that impact water quantity and quality; (3) significant alteration of water quality; (4) sedimentation from incompatible forest management or clearcuts in riparian areas; (5) culvert and pipe installations that create barriers to instream movement; (6) impacts from invasive species; (7) changes and shifts in seasonal precipitation patterns as a result of climate change; and (8) other watershed and floodplain disturbances that release sediments or nutrients into the water.

Management activities that could ameliorate these threats include, but are not limited to: Use of BMPs designed to reduce sedimentation, erosion, and bank side destruction; protection of riparian corridors and retention of sufficient canopy cover along banks; moderation of surface and ground water withdrawals to maintain natural flow regimes; increased use of stormwater management and reduction of stormwater flows into the systems; and reduction of other watershed and floodplain disturbances that release sediments, pollutants, or nutrients into the water.

Criteria Used To Identify Critical Habitat

As required by section 4(b)(2) of the Act, we use the best scientific data available to designate critical habitat. In accordance with the Act and our implementing regulations at 50 CFR 424.12(b), we review available information pertaining to the habitat requirements of the species and identify specific areas within the geographical area occupied by the species at the time of listing and any specific areas outside the geographical area occupied by the species to be considered for designation as critical habitat. As discussed in more detail below, we are not designating any areas outside the geographical area occupied by the species at the time of listing because we have not identified any unoccupied areas that are essential for the conservation of the species.

The current distribution of the yellow lance is reduced from its historical distribution. We anticipate that recovery will require continued protection of existing populations and habitat, as well as ensuring there are adequate numbers of mussels in stable populations and that these populations occur over a wide geographic area. This strategy will help to ensure that catastrophic events, such as floods, which can cause excessive sedimentation, nutrients, and debris to disrupt stream ecology, cannot simultaneously affect all known populations. Rangewide recovery considerations, such as maintaining existing genetic diversity and striving for representation of all major portions of the species' current range, were considered in formulating this final critical habitat designation.

Sources of data for this final critical habitat include multiple databases maintained by universities and State agencies for North Carolina, Virginia, and Maryland, and numerous survey reports on streams throughout the species' range. Other sources of available information on habitat requirements for this species include studies conducted at occupied sites and published in peer-reviewed articles, agency reports, and data collected during monitoring efforts (Service 2019, entire).

Areas Occupied at the Time of Listing

This critical habitat designation does not include all streams known to have been occupied by the species historically; instead, it focuses on streams and rivers within the historical range that have also retained the necessary physical or biological features that will allow for the maintenance and expansion of existing populations and that were occupied at the time of listing. First, we identified stream channels that currently support yellow lance populations. In the SSA report, we define ''currently support'' as stream channels with observations of the species from 2005 to present. Due to the breadth and intensity of survey effort done for freshwater mussels throughout the known range of the species, it is reasonable to assume that streams with no positive surveys since 2005 should not be considered occupied for the purpose of our analysis.

Specific habitat areas were delineated based on Natural Heritage Element Occurrences (EOs) following NatureServe's occurrence delineation protocol for freshwater mussels (NatureServe 2018, unpaginated). These EOs provide habitat for yellow lance subpopulations and are large enough to be self-sustaining over time, despite fluctuations in local conditions. The EOs contain stream reaches with interconnected waters so that host fish containing yellow lance glochidia can move between areas, at least during certain flows or seasons. Based on this information, we consider the following streams in Maryland, Virginia, and North Carolina to have been occupied by the species at the time of listing: Patuxent River, Rappahannock Subbasin (including the Rappahannock River, South Run, Carter Run, Thumb Run, Hungry Run, and Great Run), Rapidan Subbasin (including the Rapidan River, Blue Run, and Marsh Run), South Anna River, Johns Creek, Nottoway Subbasin (including the Nottoway River, Crooked Creek, and Sturgeon Creek), Tar River, Sandy/Swift Creek, Fishing Creek Subbasin (including Fishing Creek, Shocco Creek, and Richneck Creek), Swift Creek, and Little River.

Areas Outside the Geographic Area Occupied at the Time of Listing

We are not designating any areas outside the geographical area occupied by the species at the time of listing because we did not find any unoccupied areas that are essential for the conservation of the species. The protection of stream segments within the seven currently existing populations (Patuxent, Rappahannock, York, James, Chowan, Tar, and Neuse), which are located across the physiographic representation of the range, would sufficiently reduce the risk of extinction. Improving the resiliency of populations in the currently occupied streams will increase viability to the point that the protections of the Act are no longer necessary.

Critical Habitat Maps

When determining critical habitat boundaries, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack physical or biological features necessary for yellow lance. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this rule have been excluded by text in the rule and are not included for designation as critical habitat. Therefore, a Federal action involving these lands would not trigger section 7 consultation under the Act with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the physical or biological features in the adjacent critical habitat.

The critical habitat designation is defined by the maps, as modified by any accompanying regulatory text, presented at the end of this document under **REGULATION PROMULGATION**. We include more detailed information on the boundaries of the critical habitat designation in the discussion of

individual units below. We will make the GIS shapefiles on which each map is based available to the public at *http://www.regulations.gov* under Docket No. FWS–R4–ES–2018–0094, at *http://www.fws.gov/southeast.*

Final Critical Habitat Designation

We are designating approximately 319 river mi (514 km) in 11 units in North Carolina, Virginia, and Maryland as critical habitat for the yellow lance. All of the units were occupied by the species at the time of listing and contain some or all of the physical and biological features that are essential to support life-history processes of the species. These critical habitat areas, described below, constitute our current best assessment of areas that meet the definition of critical habitat for yellow lance. The table below shows the name, land ownership of the riparian areas surrounding the units, and approximate river miles of the designated units for yellow lance. Because all streambeds are navigable waters, the actual critical habitat units are all owned by the State where they occur. The riparian land adjacent to the critical habitat is 83 percent private lands, 11 percent conservation lands and easements, and 6 percent State lands.

TABLE OF CRITICAL HABITAT UNITS FOR THE YELLOW LANCE

Critical habitat unit	Riparian ownership surrounding units	River miles (kilometers)
1. PR1—Patuxent River	State; Private	10 (16)
2. RR1—Rappahannock Subbasin	Private; Easements	44 (71)
3. RR2—Rapidan Subbasin	Private; Easements	9 (14)
4. YR1—South Anna River	Private; Easements	8 (13)
5. JR1—Johns Creek	Private; George Washington and Jefferson National Forest	14 (23)
6. CR1—Nottoway Subbasin	Private; Easements	41 (66)
7. TR1—Tar River	Private; Easements	91 (146)
8. TR2—Sandy/Swift Creek	Private; State; Easements	31 (50)
9. TR3—Fishing Creek Subbasin	Private; State; Easements	37 (60)
10. NR1—Swift Creek	Private; Easements	24 (39)
11. NR2—Little River	Private; Easements	10 (16)
Total		319 (514)

Note: Area sizes may not sum due to rounding.

We present brief descriptions of all units, and reasons why they meet the definition of critical habitat for yellow lance, below.

Patuxent Population

Unit 1: PR1—Patuxent River

Unit 1 consists of approximately 10 river mi (16.1 km), including 3 mi (4.8 km) of the Patuxent River and 7 mi (11.3 km) of the Hawlings River, in Montgomery and Howard Counties, Maryland. The riparian land adjacent to Patuxent River is primarily located in Patuxent River State Park (90 percent), with some parcels privately owned (10 percent); the riparian land surrounding the Hawlings River is predominantly conservation parcels (97 percent) including State, county, and Maryland National Capital Parks Planning (MD NCPP) park land, and some privately owned parcels (3 percent).

Special management considerations or protection may be required to address excess nutrients, sediment, and pollutants that enter the rivers and serve as indicators of other forms of pollution such as bacteria and toxins, all of which reduce water quality for the species. Primary sources of these types of pollution result from urbanization and include wastewater, stormwater runoff, and fertilizers. Portions of the upper Patuxent River watershed were listed in 2011 as impaired for aquatic life and wildlife due to total suspended solids, and in 2014 due to chlorides and sulfates (MDE 2016, unpaginated). There are 146 non-major National Pollutant Discharge Elimination System (NPDES) discharges and three major (including Maryland City Water Reclamation Facility (WRF) and Bowie Wastewater Treatment Plant (WWTP)) NPDES discharges in the management unit. The Patuxent River is also fragmented by two water supply reservoirs, one with dual use as a hydroelectric facility. Given the urban stormwater and nonpoint source pollution identified as contributing to water quality issues in this unit, special management considerations related to developed areas including riparian buffer restoration, reduced surface and groundwater withdrawals, stormwater retrofits, eliminating direct stormwater discharges, increasing open space in the watershed, and implementing highest levels of wastewater treatment practicable will benefit the species' habitat in this unit.

Rappahannock Population

Unit 2: RR1—Rappahannock Subbasin

Unit 2 consists of approximately 44 river mi (70.8 km) of Rappahannock Subbasin, including 1.7 mi (2.7 km) in Hungry Run, 7.9 mi (12.7 km) in Thumb Run, 5.9 mi (9.5 km) in South Run/Carter Run, 2.7 mi (4.3 km) in Great Run, and 25.8 mi (41.6 km) in Rappahannock River in Rappahannock, Fauquier, and Culpeper Counties, Virginia. The riparian land adjacent to this unit is primarily privately owned (72 percent), with some conservation parcels (28 percent).

Special management considerations or protection may be required to address excess nutrients, sediment, and pollutants that enter the river and serve as indicators of other forms of pollution such as bacteria and toxins, all of which impact water quality for the species. Sources of these types of pollution include wastewater, agricultural runoff, stormwater runoff, and septic systems. Approximately 77 miles (123.9 km) of the Rappahannock River watershed are impaired for aquatic life. Impairment is indicated by low benthic-macroinvertebrate bioassessment scores, pH and temperature issues, and *Escherichia coli* (*E. coli*); several of these can be attributed to septic systems or nonpoint source runoff into streams. There are 93 non-major NPDES discharges and 11 major NPDES discharges, including several city and package WWTPs, within this unit. Special management considerations for riparian buffer restoration, agricultural BMPs, stormwater retrofits, maintenance of forested buffers, and implementing highest levels of wastewater treatment practicable will benefit the habitat for the species in this unit.

Unit 3: RR2—Rapidan Subbasin

Unit 3 consists of approximately 9 river mi (14.5 km) of Rapidan Subbasin, including 1.2 mi (1.9 km) in Marsh Run, 3.1 mi (5.0 km) in Blue Run, and 4.7 mi (7.6 km) in the Rapidan River in Madison and Orange Counties, Virginia. The riparian land adjacent to this unit is privately owned (57 percent) and conservation parcels (43 percent).

Special management considerations or protection may be required to address excess nutrients, sediment, and pollutants that enter the river and serve as indicators of other forms of pollution such as bacteria and toxins, all of which reduce water quality for the species (see discussion for Unit 2, above). Special management considerations for riparian buffer restoration, agricultural BMPs, stormwater retrofits, maintenance of forested buffers, and implementing highest levels of wastewater treatment practicable will benefit the habitat for the species in this unit.

York Population

Unit 4: YR1—South Anna River

Unit 4 consists of approximately 8 river mi (12.9 km) of the South Anna River in Louisa County, Virginia. The riparian land adjacent to this unit is primarily privately owned (92 percent), with some conservation parcels (8 percent).

Special management considerations or protection may be required to address excess nutrients, sediment, and pollutants that enter the river and serve as indicators of other forms of pollution such as bacteria and toxins, all of which impact water quality for the species. Sources of these types of pollution include wastewater, agricultural runoff, stormwater runoff, and septic systems. Based on 2012 data, 13 stream reaches, totaling approximately 44 miles (70.8 km), are impaired for aquatic life in the Po River and South Anna River watersheds. Impairment is indicated by low benthic-macroinvertebrate bioassessment scores, low dissolved oxygen, pH, and *E. coli.* There are 50 non-major NPDES discharges in the basin, and one major discharge, the Ashland WWTP. Special management considerations for riparian buffer restoration, agricultural BMPs, stormwater retrofits, maintenance of forested buffers, and implementing highest levels of wastewater treatment practicable will benefit the habitat for the species in this unit.

James Population

Unit 5: JR1—Johns Creek

Unit 5 consists of approximately 14 river mi (22.5 km) of the Johns Creek in Craig County, Virginia. The riparian land adjacent to this unit is primarily private, with some federally owned land as part of George Washington and Jefferson National Forest.

Special management considerations or protection may be required to address excess nutrients, sediment, and pollutants, which enter the creek and serve as indicators of other forms of pollution such as bacteria and toxins, all of which impact water quality for the species. Sources of these types of pollution are wastewater, agricultural runoff, and urban stormwater runoff. National Forest lands surround most of the Johns Creek watershed; protections and management of these lands will likely enable habitat conditions (water quality, water quantity/flow, instream substrate, and connectivity) to remain high into the future (Service 2019, entire). Targeted species restoration in conjunction with current associated-species restoration efforts in Johns, Dicks, and Little Oregon Creeks within the Craig Creek Subbasin will likely improve the yellow lance's resiliency in these areas. Maintenance of forested buffer conditions is essential to retaining high-quality instream habitat in this unit.

Chowan Population

Unit 6: CR1—Nottoway Subbasin

Unit 6 consists of approximately 41 river mi (66 km) of Nottoway Subbasin, including 1.4 mi (2.3 km) in Crooked Creek, 3.3 mi (5.3 km) in Sturgeon Creek, and 36.3 mi (58.4 km) in the Nottoway River in Nottoway, Lunenburg, Brunswick, and Dinwiddie Counties, Virginia. The designation begins upstream of VA49 and ends at its confluence with Sturgeon Creek. The riparian land adjacent to this unit is primarily privately owned (64 percent), although Fort Pickett Military Reservation, which is exempted from this critical habitat designation, also has frontage on the Nottoway River (33 percent; see Exemptions, below), and there are some conservation parcels (3 percent).

Special management considerations or protection may be required within this unit to address a variety of threats. In the past decade, the Nottoway River suffered from several seasonal drought events, which not only caused low dissolved oxygen conditions but also decreased food delivery because of minimal flows. In addition, these conditions led to increased predation rates on potential host fishes that were concentrated into low-flow refugia (*e.g.,* pools). Urban stormwater and nonpoint source pollution have been identified as contributing to water quality issues in this unit. Additional threats to this unit include oil and gas pipeline projects that propose to cross streams at locations where the species occurs, with special management recommendations of alternate routes for oil and gas pipelines, or directional boring for those projects. Special management considerations for riparian buffer restoration, reduced surface and groundwater withdrawals, and stormwater retrofits will benefit the habitat in this unit. Additional special management considerations or protection may be required within this unit to address low water levels as a result of water withdrawals and drought.

Tar Population

Unit 7: TR1—Tar River

Unit 7 consists of approximately 91 river mi (146.5 km) of the Tar River, including 4.4 mi (7.1 km) in Ruin Creek, 11.9 mi (19.2 km) in Tabbs Creek, 6.8 mi (10.9 km) in Crooked Creek, and 67.9 mi (109.3 km) in the Tar River in Granville, Vance, Franklin, and Nash Counties, North Carolina. The riparian land adjacent to this unit is almost all privately owned (98 percent), with a few conservation parcels (2 percent).

Special management considerations or protection may be required within this unit to address a variety of threats. Excessive amounts of nitrogen and phosphorus run off the land, or are discharged, into the waters, causing excessive growth of vegetation and leading to extremely low levels of dissolved oxygen. Based on 2014 data, seven stream reaches totaling approximately 38 miles (61.1 km) are impaired in this basin. Indicators of impairment are low dissolved oxygen and low benthic-macroinvertebrate assessment scores, and the entire basin is classified as Nutrient Sensitive Waters (NCDEQ 2016, pp. 115–117). There are 102 non-major NPDES discharges, including several package WWTPs and biosolids facilities, and 3 major NPDES discharges (Oxford WWTP, Louisburg WWTP, and Franklin County WWTP) in this unit; with expansion of these facilities, or addition of new wastewater discharges, an additional threat to habitat exists in this unit. Special management focused on agricultural BMPs, implementing highest levels of wastewater treatment practicable, maintenance of forested buffers, and connection of protected riparian corridors will benefit habitat for the species in this unit.

Unit 8: TR2—Sandy/Swift Creek

Unit 8 consists of approximately 31 river mi (50 km) of Sandy/Swift Creek in Vance, Warren, Halifax, Franklin, and Nash Counties, North Carolina. The riparian land adjacent to this unit is primarily privately owned (92 percent), with the rest in either conservation easements (2.5 percent) or State Game Land parcels (4.6 percent).

Special management considerations or protection may be required within this unit to address a variety of threats. Excessive amounts of nitrogen and phosphorus run off the land, or are discharged, into the waters, causing excessive growth of vegetation and leading to extremely low levels of dissolved oxygen; one stream reach totaling approximately 5 miles (8 km) is impaired in this unit. Special management focused on agricultural BMPs, maintenance of forested buffers, and connection of protected riparian corridors will benefit habitat for the species in this unit.

Unit 9: TR3—Fishing Creek Subbasin

Unit 9 consists of approximately 37 river mi (59.5 km) of Fishing Creek Subbasin, including 1.6 mi (2.6 km) in Richneck Creek, 8.0 mi (12.9 km) in Shocco Creek, and 27.4 mi (44 km) in Fishing Creek in Vance, Warren, Halifax, Franklin, and Nash Counties, North Carolina. The riparian land adjacent to this unit is primarily in private ownership (85 percent), with some State Game Land parcels (12 percent) and conservation easements (3 percent).

Special management considerations or protection may be required within this unit to address a variety of threats. Excessive amounts of nitrogen and phosphorus run off the land, or are discharged, into the waters, causing excessive growth of vegetation and leading to extremely low levels of dissolved oxygen. Special management focused on agricultural BMPs, maintenance of forested buffers, and connection of protected riparian corridors will benefit habitat for the species in this unit.

Neuse Population

Unit 10: NR1—Swift Creek

Unit 10 consists of approximately 24 river mi (38.6 km) of the Swift Creek in Wake and Johnston Counties, North Carolina. The riparian land adjacent to this unit is almost entirely privately owned (99.5 percent), with one conservation parcel (0.5 percent).

Special management considerations or protection may be required within this unit to address a variety of threats. Large quantities of nutrients (especially nitrogen) contributed by fertilizers and animal waste washed from lawns, urban developed areas, and farm fields are impacting aquatic ecosystems in this unit. There are several permitted point source discharges of wastewater. Development is also impacting several areas along Swift Creek.

All of Swift Creek is rated ''impaired'' by the North Carolina Division of Water Resources. Many factors contribute to this designation, including low benthic-macroinvertebrate assessment scores, low pH, poor fish community scores, low dissolved oxygen, polychlorinated biphenyls, copper, and zinc. Many non-major and one major (Dempsey Benton Water Treatment Plant) permitted discharges occur in this unit. Special management related to developed areas, including using the best available wastewater treatment technologies, retrofitting stormwater systems, eliminating direct stormwater discharges, increasing open space in the watershed, and maintaining connected riparian corridors, will be important to maintain habitat in this unit.

Unit 11: NR2—Little River

Unit 11 consists of approximately 10 river mi (16.1 km) of the Little River in Johnston County, North Carolina. The riparian land adjacent to this unit is almost entirely privately owned (99.5 percent), with one conservation parcel (0.5 percent).

Special management considerations or protection may be required within this unit to address a variety of threats. Four stream reaches totaling approximately 17 miles are impaired in the Little River. The designation of impairment is based primarily on low benthic-macroinvertebrate assessment scores, low pH, and low dissolved oxygen. There are 32 non-major and no major NPDES discharges in this unit. Special management considerations in this unit include retrofitting stormwater systems, eliminating direct stormwater discharges, increasing and protecting existing open space, and maintaining connected riparian corridors.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a) of the Act requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as an endangered or threatened species and with respect to its critical habitat, if any is designated. Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action which is likely to jeopardize the continued existence of any species listed under the Act or result in the destruction or adverse modification of critical habitat.

We published a final regulation with a revised definition of destruction or adverse modification on August 27, 2019 (84 FR 44976). Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, Tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal agency actions within the species' habitat that may require conference or consultation or both include management and any other landscape-altering activities on Federal lands administered by the Service, Army National Guard, U.S. Forest Service, and National Park Service; issuance of section 404 Clean Water Act permits by the U.S. Army Corps of Engineers; and construction and maintenance of roads or highways by the Federal Highway Administration. Federal actions not affecting listed species or critical habitat, and actions on State, Tribal, local, or private lands that are not federally funded, authorized, or carried out by a Federal agency, do not require section 7 consultation.

Compliance with the requirements of section 7(a)(2), is documented through our issuance of:

(1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or

(2) A biological opinion for Federal actions that may affect, and are likely to

adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define ''reasonable and prudent alternatives'' (at 50 CFR 402.02) as alternative actions identified during consultation that:

(1) Can be implemented in a manner consistent with the intended purpose of the action,

(2) Can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction,

(3) Are economically and technologically feasible, and

(4) Would avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 set forth requirements for Federal agencies to reinitiate formal consultation on previously reviewed actions. These requirements apply when the Federal agency has retained discretionary involvement or control over the action (or the agency's discretionary involvement or control is authorized by law) and, subsequent to the previous consultation, we have listed a new species or designated critical habitat that may be affected by the Federal action, or the action has been modified in a manner that affects the species or critical habitat in a way not considered in the previous consultation. In such situations, Federal agencies sometimes may need to request reinitiation of consultation with us, but the regulations also specify some exceptions to the requirement to reinitiate consultation on specific land management plans after subsequently listing a new species or designating new critical habitat. See the regulations for a description of those exceptions.

Application of the ''Destruction or Adverse Modification'' Standard

The key factor related to the destruction or adverse modification determination is whether implementation of the proposed Federal action directly or indirectly alters the designated critical habitat in a way that appreciably diminishes the value of the critical habitat as a whole for the conservation of the listed species. As discussed above, the role of critical habitat is to support physical or biological features essential to the conservation of a listed species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may violate 7(a)(2) of the Act by destroying or adversely modifying such designation, or that may be affected by such designation.

Activities that the Services may, during a consultation under section 7(a)(2) of the Act, find are likely to destroy or adversely modify critical habitat include, but are not limited to:

(1) Actions that would alter the minimum flow or the existing flow regime. Such activities could include, but are not limited to, impoundment, channelization, water diversion, water withdrawal, and hydropower generation. These activities could eliminate or reduce the habitat necessary for the growth and reproduction of yellow lance and/or its fish host by decreasing or altering flows to levels that would adversely affect their ability to complete their life cycles.

(2) Actions that would significantly alter water chemistry or temperature. Such activities could include, but are not limited to, release of chemicals (including pharmaceuticals, metals, and salts), biological pollutants, or heated effluents into the surface water or connected groundwater at a point source or by dispersed release (non-point source). These activities could alter water conditions to levels that are beyond the tolerances of yellow lance and/or its fish host and result in direct or cumulative adverse effects to these individuals and their life cycles.

(3) Actions that would significantly increase sediment deposition within the stream channel. Such activities could include, but are not limited to, excessive sedimentation from livestock grazing, road construction, channel alteration, timber harvest, off-road vehicle use, and other watershed and floodplain disturbances. These activities could eliminate or reduce the habitat necessary for the growth and reproduction of yellow lance and/or its fish host by increasing the sediment deposition to levels that would adversely affect their ability to complete their life cycles.

(4) Actions that would significantly increase the filamentous algal community within the stream channel. Such activities could include, but are not limited to, release of nutrients into the surface water or connected groundwater at a point source or by dispersed release (non-point source). These activities can result in excessive filamentous algae filling streams and reducing habitat for the yellow lance and/or its fish host, degrading water quality during algal decay, and decreasing oxygen levels at night from algal respiration to levels below the tolerances of the mussel and/or its fish host. Algae can also directly compete with mussel offspring by covering the sediment, which prevents the glochidia from settling into the sediment.

(5) Actions that would significantly alter channel morphology or geometry. Such activities could include, but are not limited to, channelization, impoundment, road and bridge construction, mining, dredging, oil and gas pipeline crossings, and destruction of riparian vegetation. These activities may lead to changes in water flows and levels that would degrade or eliminate the mussel, its fish host, and/or their habitats. These actions can also lead to increased sedimentation and degradation in water quality to levels that are beyond the tolerances of yellow lance and/or its fish host.

(6) Actions that result in the introduction, spread, or augmentation of nonnative aquatic species in occupied stream segments, or in stream segments that are hydrologically connected to occupied stream segments, even if those segments are occasionally intermittent, or introduction of other species that compete with or prey on the yellow lance. Possible actions could include, but are not limited to, stocking of nonnative fishes, stocking of sport fish, or other related actions. These activities can introduce parasites or disease to fish hosts; result in direct predation; or affect the growth, reproduction, and survival of yellow lance.

Exemptions

Application of Section 4(a)(3) of the Act

The Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an integrated natural resources management plan (INRMP) by November 17, 2001. An INRMP integrates implementation of the

military mission of the installation with stewardship of the natural resources found on the base. Each INRMP includes:

(1) An assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species;

(2) A statement of goals and priorities;

(3) A detailed description of management actions to be implemented to provide for these ecological needs; and

(4) A monitoring and adaptive management plan.

Among other things, each INRMP must, to the extent appropriate and applicable, provide for fish and wildlife management; fish and wildlife habitat enhancement or modification; wetland protection, enhancement, and restoration where necessary to support fish and wildlife; and enforcement of applicable natural resource laws.

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108–136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) provides that the Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.

We consult with the military on the development and implementation of INRMPs for installations with listed species. We analyzed INRMPs developed by military installations located within the range of the critical habitat designation for yellow lance to determine if they meet the criteria for exemption from critical habitat under section 4(a)(3) of the Act.

We have identified one area within the critical habitat designation that consists of Department of Defense lands with a completed, Service-approved INRMP. The Army National Guard—Maneuver Training Center Fort Pickett (Fort Pickett) is located on 41,000 acres in three counties in southeastern Virginia: Nottoway, Brunswick, and Dinwiddie. Fort Pickett is on federally owned land, is managed by the Virginia Army National Guard, and is subject to all Federal laws and regulations. The Fort Pickett INRMP covers fiscal years 2017–2021, updated every five years, and serves as the principal management plan governing all natural resource activities on the installation. Among the goals and objectives listed in the INRMP is habitat management for rare, threatened, and endangered species, and the yellow lance is included in this plan. Management actions and elements that will benefit the yellow lance and its habitat include managing soil erosion and sedimentation; maintaining and improving riparian, forest, and stream habitats; enforcing stream and wetland protection zones; improving water quality; and conducting public outreach and education.

Fourteen miles (22.5 km) of Unit 6 (CR1—Nottoway Subbasin) are located within the area covered by this INRMP. Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that the identified streams are subject to the INRMP and that conservation efforts identified in the INRMP will provide a benefit to the yellow lance. Therefore, streams within this installation are exempt from critical habitat designation under section 4(a)(3) of the Act. We are not including approximately 14 river miles (22.5 km) of habitat in this critical habitat designation because of this exemption.

Consideration of Impacts Under Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making the determination to exclude a particular area, the statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor. On December 18, 2020, we published a final rule in the **Federal Register** (85 FR 82376) revising portions of our regulations pertaining to exclusions of critical habitat. These final regulations became effective on January 19, 2021 and apply to critical habitat rules for which a proposed rule was published after January 19, 2021. Consequently, these new regulations do not apply to this final rule.

The first sentence in section 4(b)(2) of the Act requires that we take into consideration the economic, national security, or other relevant impacts of designating any particular area as critical habitat. We describe below the process that we undertook for taking into consideration each category of impacts and our analyses of the relevant impacts.

Consideration of Economic Impacts

Section 4(b)(2) of the Act and its implementing regulations require that we consider the economic impact that may result from a designation of critical habitat. In order to consider economic impacts of a designation, we prepared an incremental effects memorandum (IEM) and screening analysis which, together with our narrative and interpretation of effects, constitute our final economic analysis (FEA) of the critical habitat designation and related factors (IEc 2018, entire). We made the analysis, dated September 28, 2018, available for public review from February 6, 2020, through April 6, 2020. The DEA addressed probable economic impacts of critical habitat for the yellow lance. Following the close of the comment period, we reviewed and evaluated all information submitted during the comment period that may pertain to our consideration of the probable incremental economic impacts of this critical habitat designation. Additional information relevant to the probable incremental economic impacts of critical habitat designation for the yellow lance is summarized below and available in the screening analysis for the yellow lance (IEc 2018, entire), available at *http://www.regulations.gov.*

The final critical habitat designation for yellow lance totals approximately 319 river mi (514 km) in 11 units as critical habitat in North Carolina, Virginia, and Maryland, all occupied at the time of listing. In these areas, any actions that may affect critical habitat would also affect the species, and it is unlikely that any additional conservation efforts would be recommended to address the adverse modification standard over and above those recommended as necessary to avoid jeopardizing the continued existence of yellow lance. Therefore, even though some analysis of the impacts of the action of critical habitat may be necessary, and this additional analysis will require costs in time and resources by both the Federal action agency and the Service, it is believed that, in most circumstances, these costs would predominantly be administrative in nature and would not be significant.

The probable incremental economic impacts of the yellow lance critical habitat designation are expected to be limited to additional administrative effort, as well as minor costs of conservation efforts resulting from a small number of future section 7 consultations. This low level of impacts is anticipated because, given that the critical habitat is occupied by the species, actions that may adversely modify the critical habitat would also likely jeopardize the continued existence of the species; as a result, other than administrative costs, incremental economic impacts of critical habitat designation over and above impacts from consulting for jeopardy are unlikely.

We do not expect any additional consultations resulting from the designation of critical habitat. The total annual incremental costs of critical habitat designation are anticipated to be the additional resources expended in a maximum of 102 section 7 consultations annually at a cost of less than $240,000 per year. Accordingly, we conclude that this final designation does not reach the threshold of ''significant'' under E.O. 12866.

Exclusions Based on Economic Impacts

As discussed above, we considered the economic impacts of the critical habitat designation, and the Secretary is not exercising their discretion to exclude any areas from this designation of critical habitat for the yellow lance based on economic impacts. A copy of the IEM and screening analysis with supporting documents may be obtained by contacting the Raleigh Ecological Services Field Office (see **ADDRESSES**) or by downloading from the internet at *http://www.regulations.gov.*

Exclusions Based on Impacts on National Security and Homeland Security

Section 4(a)(3)(B)(i) of the Act (see Exemptions, above) may not cover all Department of Defense (DoD) lands or areas that pose potential national-security concerns (*e.g.,* a DoD installation that is in the process of revising its INRMP for a newly listed species or a species previously not covered). If a particular area is not covered under section 4(a)(3)(B)(i), national-security or homeland-security concerns are not a factor in the process of determining what areas meet the definition of ''critical habitat.'' Nevertheless, when designating critical habitat under section 4(b)(2), the Service must consider impacts on national security, including homeland security, on lands or areas not covered by section 4(a)(3)(B)(i). Accordingly, we will always consider for exclusion from the designation areas for which DoD, Department of Homeland Security (DHS), or another Federal agency has requested exclusion based on an assertion of national-security or homeland-security concerns. We have determined that, other than the land exempted under section 4(a)(3)(B)(i) of the Act based upon the existence of an approved INRMP (see Exemptions, above), the lands within the designation of critical habitat for yellow lance are not owned or managed by DoD or DHS, and, therefore, we anticipate no impact on national security. Consequently, we did not exclude any areas from the final designation based on impacts on national security.

Exclusions Based on Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security. We consider a number of factors including whether there are permitted conservation plans covering the species in the area such as habitat conservation plans (HCPs), safe harbor agreements, or candidate conservation agreements with assurances, or whether there are nonpermitted conservation agreements and partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at the existence of Tribal conservation plans and partnerships, and consider the government-to-government relationship of the United States with Tribal entities. We also consider any social impacts that might occur because of the designation.

In preparing this final rule, we determined that there are currently no permitted conservation plans or other nonpermitted conservation agreements or partnerships for the yellow lance, and the final critical habitat designation does not include any Tribal lands or trust resources. We anticipate no impact on Tribal lands, partnerships, or permitted or nonpermitted plans or agreements from this critical habitat designation. Accordingly, we did not exclude any areas from the final designation based on other relevant impacts.

Required Determinations

Regulatory Planning and Review (Executive Orders 12866 and 13563)

Executive Order 12866 provides that the Office of Information and Regulatory Affairs in the Office of Management and Budget (OMB) will review all significant rules. The Office of Information and Regulatory Affairs has determined that this rule is not significant.

Executive Order (E.O.) 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA; 5 U.S.C. 801 *et seq.*), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (*i.e.,* small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than $5 million in annual sales, general and heavy construction businesses with less than $27.5 million in annual business,

special trade contractors doing less than $11.5 million in annual business, and agricultural businesses with annual sales less than $750,000. To determine whether potential economic impacts to these small entities are significant, we considered the types of activities that might trigger regulatory impacts under this designation as well as types of project modifications that may result. In general, the term ''significant economic impact'' is meant to apply to a typical small business firm's business operations.

Under the RFA, as amended, and as understood in light of recent court decisions, Federal agencies are only required to evaluate the potential incremental impacts of rulemaking on those entities directly regulated by the rulemaking itself and, therefore, are not required to evaluate the potential impacts to indirectly regulated entities. The regulatory mechanism through which critical habitat protections are realized is section 7 of the Act, which requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried out by the agency is not likely to destroy or adversely modify critical habitat. Therefore, under section 7, only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. Consequently, it is our position that only Federal action agencies will be directly regulated by this designation. There is no requirement under the RFA to evaluate the potential impacts to entities not directly regulated. Moreover, Federal agencies are not small entities. Therefore, because no small entities will be directly regulated by this rulemaking, the Service certifies that this critical habitat designation will not have a significant economic impact on a substantial number of small entities and a regulatory flexibility analysis is not required.

Energy Supply, Distribution, or Use—Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. OMB has provided guidance for implementing this E.O. that outlines nine outcomes that may constitute ''a significant adverse effect'' when compared to not taking the regulatory action under consideration. The economic analysis finds that none of these criteria is relevant to this analysis. Thus, based on information in the economic analysis, energy-related impacts associated with yellow lance conservation activities within critical habitat are not expected. As such, the designation of critical habitat is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*), we make the following findings:

(1) This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or Tribal governments, or the private sector, and includes both ''Federal intergovernmental mandates'' and ''Federal private sector mandates.'' These terms are defined in 2 U.S.C. 658(5)–(7). ''Federal intergovernmental mandate'' includes a regulation that ''would impose an enforceable duty upon State, local, or tribal governments'' with two exceptions. It excludes ''a condition of Federal assistance.'' It also excludes ''a duty arising from participation in a voluntary Federal program,'' unless the regulation ''relates to a then-existing Federal program under which $500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority,'' if the provision would ''increase the stringency of conditions of assistance'' or ''place caps upon, or otherwise decrease, the Federal Government's responsibility to provide funding,'' and the State, local, or Tribal governments ''lack authority'' to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. ''Federal private sector mandate'' includes a regulation that ''would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.''

The designation of critical habitat does not impose a legally binding duty on non-Federal Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule will significantly or uniquely affect small governments because most of the lands adjacent to the streams being designated as critical habitat are owned by private landowners. These entities do not fit the definition of ''small governmental jurisdiction.'' The riparian habitat owned by Federal, State, or local governments that we are designating as critical habitat in this rule are either lands managed for conservation or lands already developed. Consequently, we do not believe that the critical habitat designation will significantly or uniquely affect small government entities. As such, a Small Government Agency Plan is not required.

Takings—Executive Order 12630

In accordance with E.O. 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for yellow lance in a takings implications assessment. The Act does not authorize the Service to regulate private actions on private lands or confiscate private property as a result of critical habitat designation. Designation of critical habitat does not affect land ownership, or establish any closures, or restrictions on use of or access to the designated areas. Furthermore, the designation of critical habitat does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit actions that do require Federal funding or permits to go forward. However, Federal agencies are prohibited from carrying out, funding, or authorizing actions that

would destroy or adversely modify critical habitat. A takings implications assessment has been completed and concludes that this designation of critical habitat for yellow lance does not pose significant takings implications for lands within or affected by the designation.

Federalism—Executive Order 13132

In accordance with E.O. 13132 (Federalism), this rule does not have significant Federalism effects. A federalism summary impact statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of the critical habitat designation with, the appropriate State resource agencies. We did not receive comments from the States. From a federalism perspective, the designation of critical habitat directly affects only the responsibilities of Federal agencies. The Act imposes no other duties with respect to critical habitat, either for States and local governments, or for anyone else. As a result, the rule does not have substantial direct effects either on the State, or on the relationship between the Federal Government and the State, or on the distribution of powers and responsibilities among the various levels of government. The designation may have some benefit to these governments because the areas that contain the features essential to the conservation of the species are more clearly defined, and the physical or biological features of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist these local governments in long-range planning (because these local governments no longer have to wait for case-by-case section 7 consultations to occur).

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) will be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

Civil Justice Reform—Executive Order 12988

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We are designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, this rule identifies the elements of physical or biological features essential to the conservation of the species. The designated areas of critical habitat are presented on maps, and the rule provides several options for the interested public to obtain more detailed location information, if desired.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain information collection requirements, and a submission to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*) is not required. We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number.

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

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the National Environmental Policy Act in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County* v. *Babbitt,* 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)).

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. We have identified no Tribal interests that will be affected by this rule.

References Cited

A complete list of references cited in this rule is available on the internet at *http://www.regulations.gov* and upon request from the Raleigh Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this rule are the staff members of the U.S. Fish and Wildlife Service Species Assessment Team and Raleigh 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 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 revising the entry for ''Lance, yellow'' under CLAMS in the List of Endangered and Threatened Wildlife to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Common name	Scientific name	Where listed	Status	Listing citations and applicable rules
*	*	*	*	*
CLAMS				
*	*	*	*	*
Lance, yellow	*Elliptio lanceolata*	Wherever found	T	83 FR 14189, 4/3/2018; 50 CFR 17.95(f).CH
*	*	*	*	*

■ 3. Amend § 17.95(f) by adding, immediately following the entry for ''Rabbitsfoot (*Quadrula cylindrica cylindrica*),'' an entry for ''Yellow Lance (*Elliptio lanceolata*)'' to read as set forth below:

§ 17.95 Critical habitat—fish and wildlife.

* * * * *

(f) *Clams and Snails.*

* * * * *

Yellow Lance (*Elliptio lanceolata*)

(1) Critical habitat units are depicted for Franklin, Granville, Halifax, Johnston, Nash, Vance, Wake, and Warren Counties, North Carolina; Brunswick, Craig, Culpeper, Dinwiddie, Fauquier, Louisa, Lunenburg, Madison, Nottoway, Orange, and Rappahannock Counties, Virginia; and Howard and Montgomery Counties, Maryland, on the maps in this entry.

(2) Within these areas, the physical or biological features essential to yellow lance conservation consist of the following components:

(i) Suitable substrates and connected instream habitats, characterized by geomorphically stable stream channels and banks (*i.e.,* channels that maintain lateral dimensions, longitudinal profiles, and sinuosity patterns over time without an aggrading or degrading bed elevation) with habitats that support a diversity of freshwater mussel and native fish (such as stable riffle-run-pool habitats that provide flow refuges consisting of silt-free gravel and coarse sand substrates).

(ii) Adequate flows, or a hydrologic flow regime (which includes the severity, frequency, duration, and seasonality of discharge over time), necessary to maintain benthic habitats where the species is found and to maintain connectivity of streams with the floodplain, allowing the exchange of nutrients and sediment for maintenance of the mussel's and fish host's habitat, food availability, spawning habitat for native fishes, and the ability for newly transformed juveniles to settle and become established in their habitats.

(iii) Water and sediment quality (including, but not limited to, conductivity, hardness, turbidity, temperature, pH, ammonia, heavy metals, and chemical constituents) necessary to sustain natural physiological processes for normal behavior, growth, and viability of all life stages.

(iv) The presence and abundance of fish hosts necessary for yellow lance recruitment.

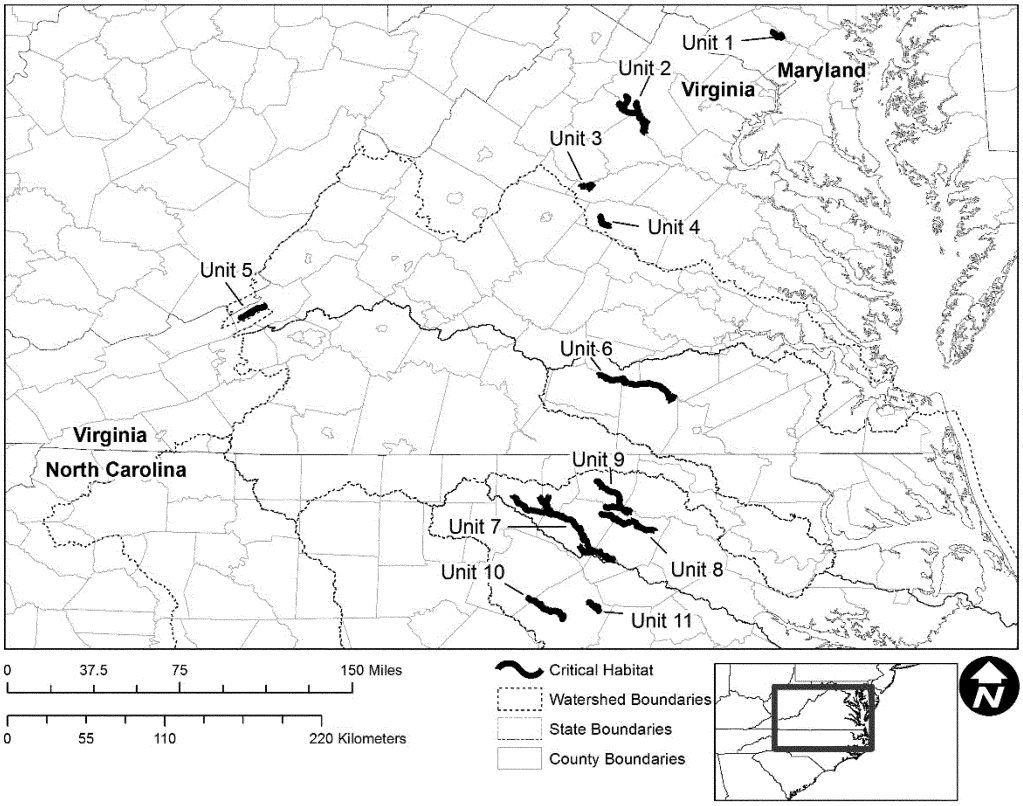
(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on May 10, 2021.

(4) *Critical habitat map units.* Data layers defining map units were created by overlaying Natural Heritage Element Occurrence data and U.S. Geological Survey (USGS) hydrologic data for stream reaches. The hydrologic data used in the critical habitat maps were extracted from the USGS 1:1M scale nationwide hydrologic layer (*https://nationalmap.gov/small_scale/mld/1nethyd.html*) with a projection of EPSG:4269–NAD83 Geographic. The North Carolina, Virginia, and Maryland Natural Heritage program species presence data were used to select specific stream segments for inclusion in the critical habitat layer. The maps in this entry, as modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The coordinates or plot points or both on which each map is based are available to the public at *http://www.regulations.gov* under Docket No. FWS–R4–ES–2018–0094 and at the Raleigh Ecological Services Field Office. You may obtain field office location information by contacting one of the Service regional offices, the addresses of which are listed at 50 CFR 2.2.

(5) *Note:* Index map follows:

BILLING CODE 4333–15–P

Index Map of Critical Habitat Units for Yellow Lance

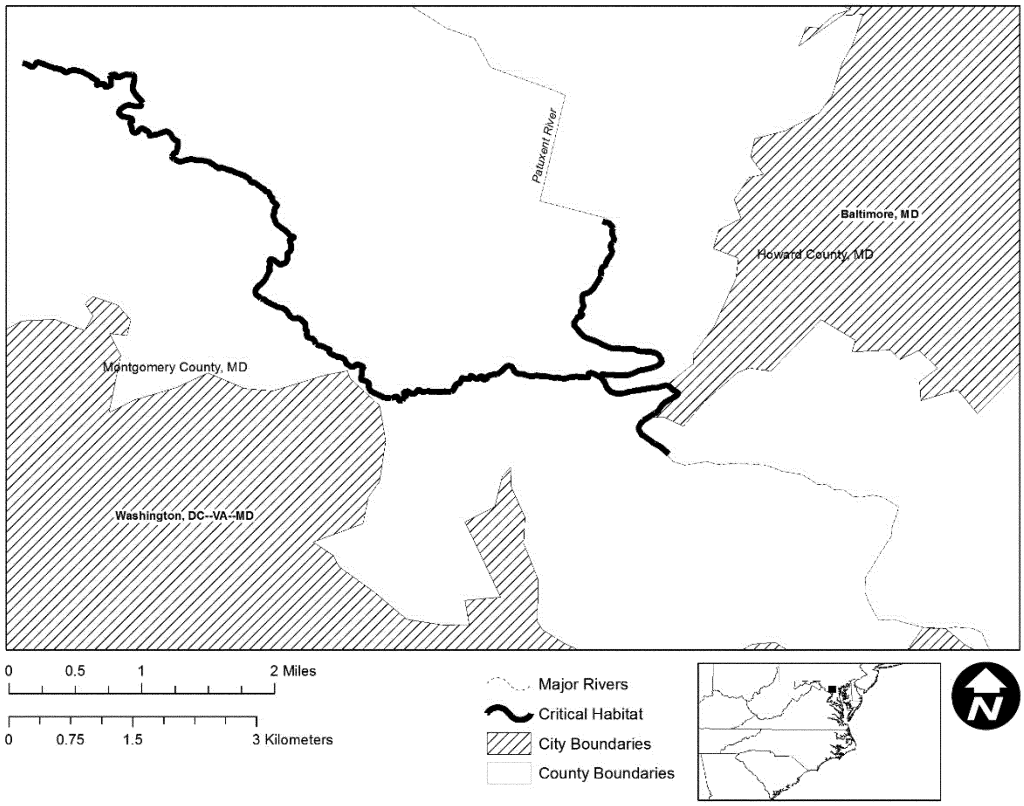


(6) Unit 1: PR1—Patuxent River, Montgomery and Howard Counties, Maryland.

(i) This unit consists of approximately 10 river miles (16.1 kilometers (km)) of occupied habitat, including 3 miles (4.8 km) of the Patuxent River and 7 miles (11.3 km) of the Hawlings River. Unit 1 includes stream habitat up to bank full height.

(ii) Map of Unit 1 follows:

Map of Unit 1 - Patuxent River Critical Habitat Unit for Yellow Lance

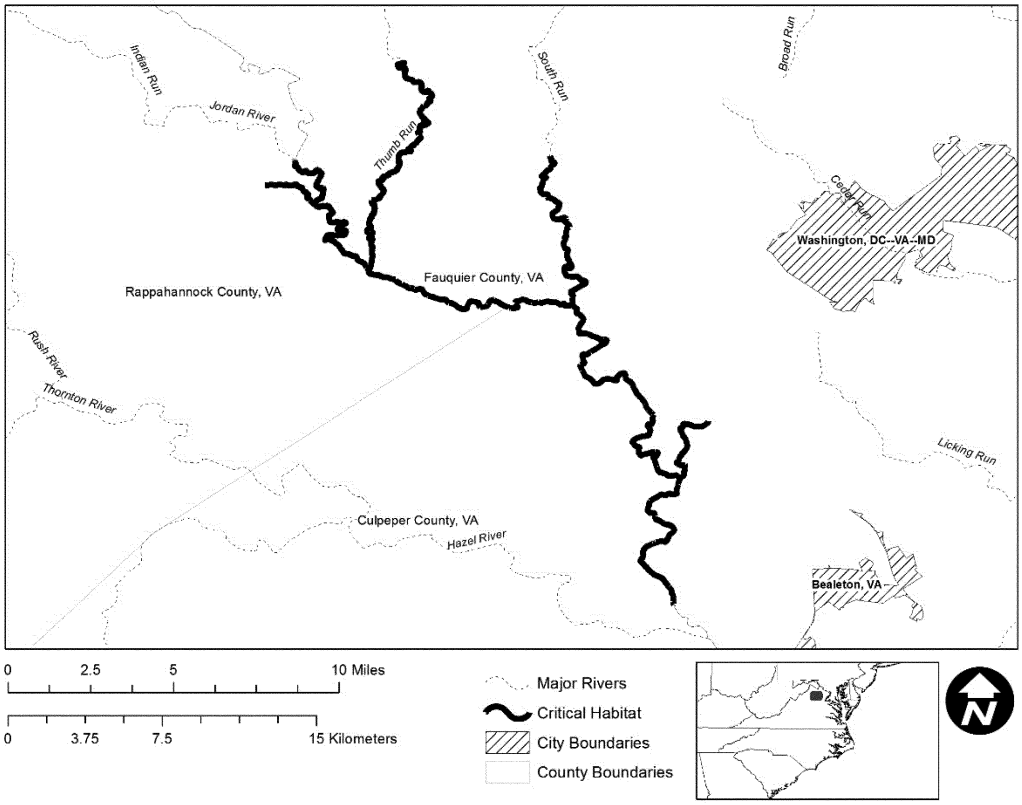


(7) Unit 2: RR1—Rappahannock Subbasin, Rappahannock, Fauquier, and Culpeper Counties, Virginia.

(i) This unit consists of approximately 44 river miles (70.8 km) of occupied habitat in the Rappahannock Subbasin, including 1.7 miles (2.7 km) in Hungry Run, 7.9 miles (12.7 km) in Thumb Run, 5.9 miles (9.5 km) in South Run/Carter Run, 2.7 miles (4.3 km) in Great Run, and 25.8 miles (41.6 km) in Rappahannock River. Unit 2 includes stream habitat up to bank full height.

(ii) Map of Unit 2 follows:

Map of Unit 2 - Rappahannock Subbasin Critical Habitat Unit for Yellow Lance

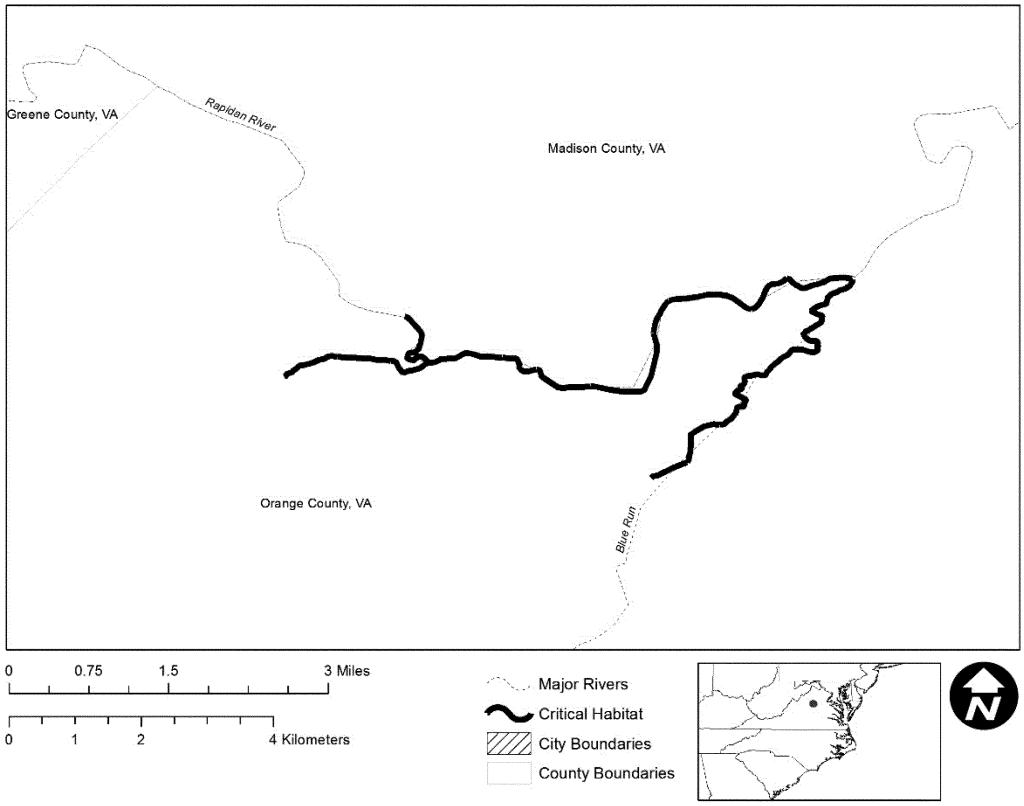


(8) Unit 3: RR2—Rapidan Subbasin, Madison and Orange Counties, Virginia.

(i) This unit consists of 9 river miles (14.5 km) of occupied habitat in the Rapidan Subbasin, including 1.2 miles (1.9 km) in Marsh Run, 3.1 miles (5.0 km) in Blue Run, and 4.7 miles (7.6 km) in the Rapidan River. Unit 3 includes stream habitat up to bank full height.

(ii) Map of Unit 3 follows:

Map of Unit 3 - Rapidan Subbasin Critical Habitat Unit for Yellow Lance

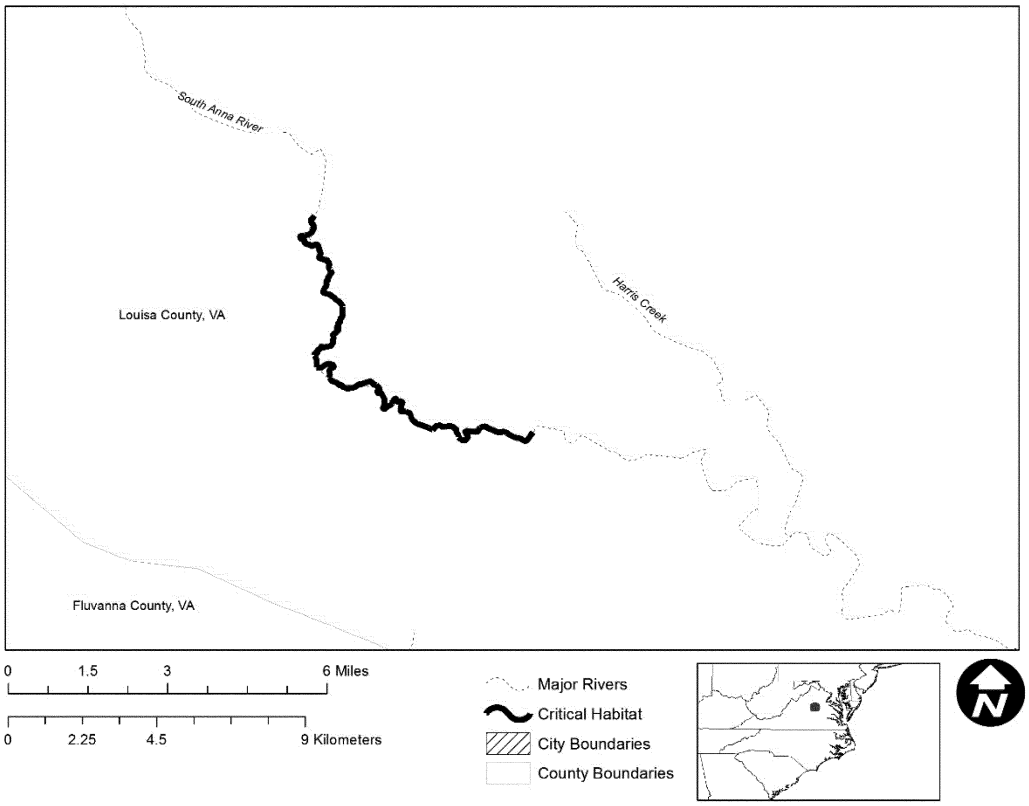


(9) Unit 4: YR1—South Anna River, Louisa County, Virginia.

(i) This unit consists of approximately 8 river miles (12.9 km) of occupied habitat in the South Anna River. Unit 4 includes stream habitat up to bank full height.

(ii) Map of Unit 4 follows:

Map of Unit 4 - South Anna River Critical Habitat Unit for Yellow Lance

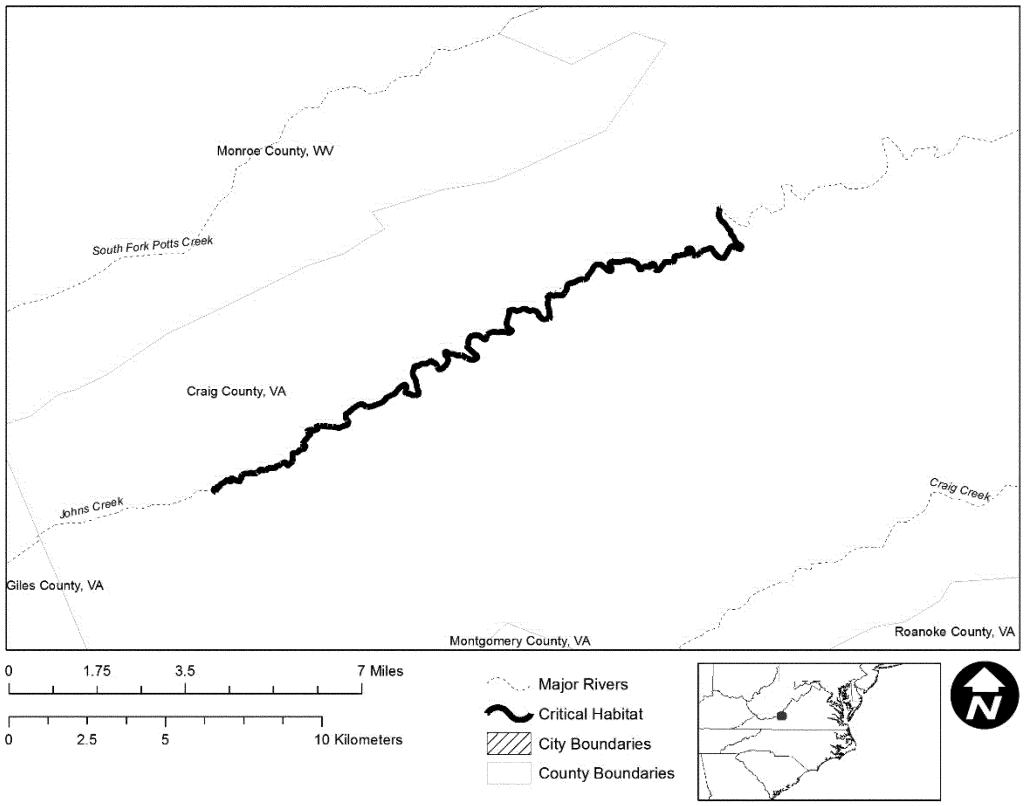


(10) Unit 5: JR1—Johns Creek, Craig County, Virginia.

(i) This unit consists of approximately 14 river miles (22.5 km) of occupied habitat in the Johns Creek. Unit 5 includes stream habitat up to bank full height.

(ii) Map of Unit 5 follows:

Map of Unit 5 - Johns Creek Critical Habitat Unit for Yellow Lance

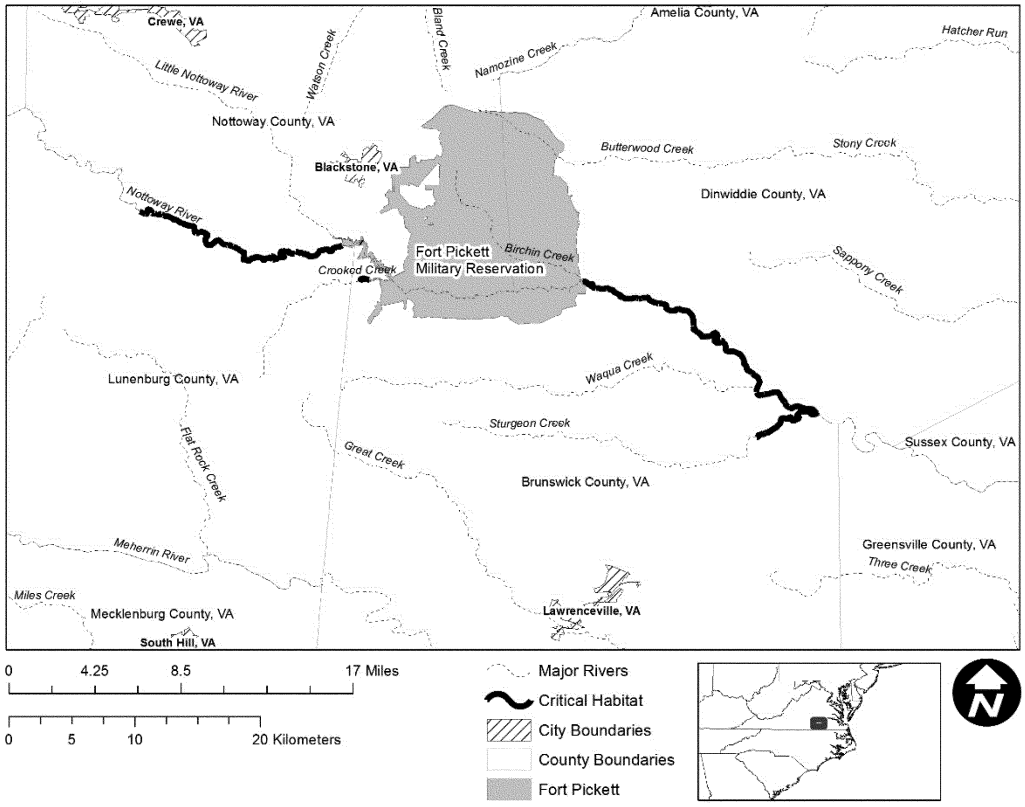


(11) Unit 6: CR1—Nottoway Subbasin, Nottoway, Lunenburg, Brunswick, and Dinwiddie Counties, Virginia.

(i) This unit consists of approximately 41 river miles (66 km) of occupied habitat in the Nottoway Subbasin, including 1.4 miles (2.3 km) in Crooked Creek, 3.3 miles (5.3 km) in Sturgeon Creek, and 36.3 miles (58.4 km) in the Nottoway River. Unit 6 includes stream habitat up to bank full height.

(ii) Map of Unit 6 follows:

Map of Unit 6 - Nottoway Subbasin Critical Habitat Unit for Yellow Lance

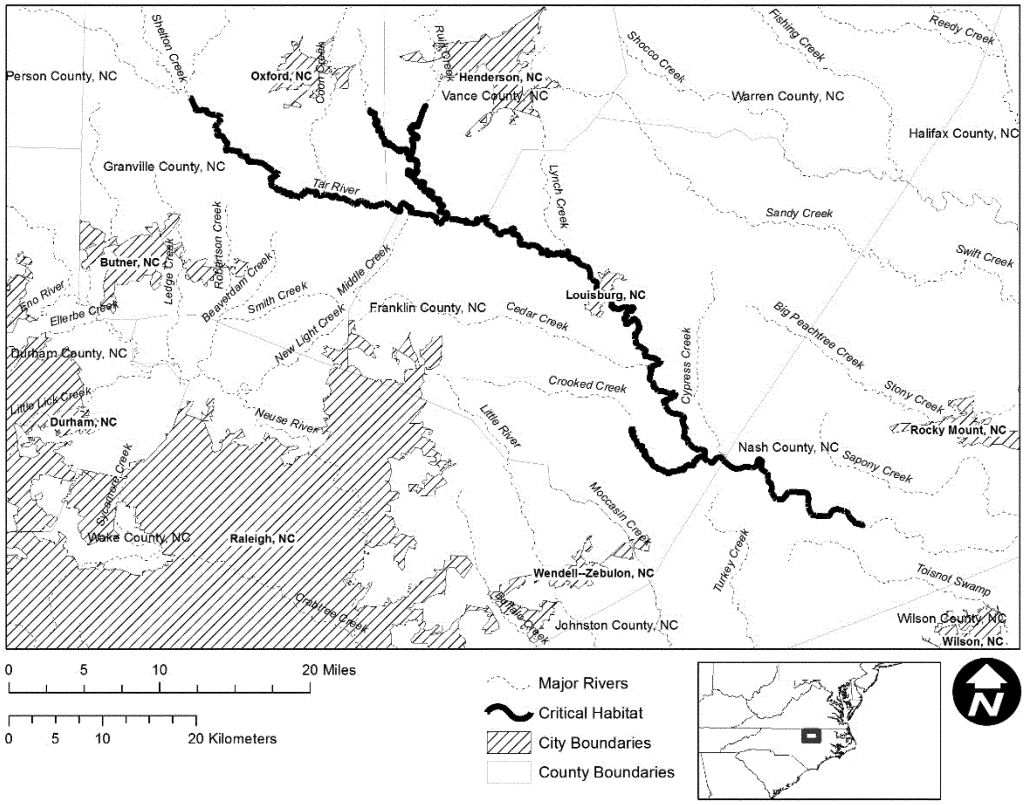


(12) Unit 7: TR1—Tar River, Granville, Vance, Franklin, and Nash Counties, North Carolina.

(i) This unit consists of approximately 91 river miles (146.5 km) of occupied habitat in the Tar River, including 4.4 miles (7.1 km) in Ruin Creek, 11.9 miles (19.2 km) in Tabbs Creek, 6.8 miles (10.9 km) in Crooked Creek, and 67.9 miles (109.3 km) in the Tar River. Unit 7 includes stream habitat up to bank full height.

(ii) Map of Unit 7 follows:

Map of Unit 7 -Tar River Critical Habitat Unit for Yellow Lance

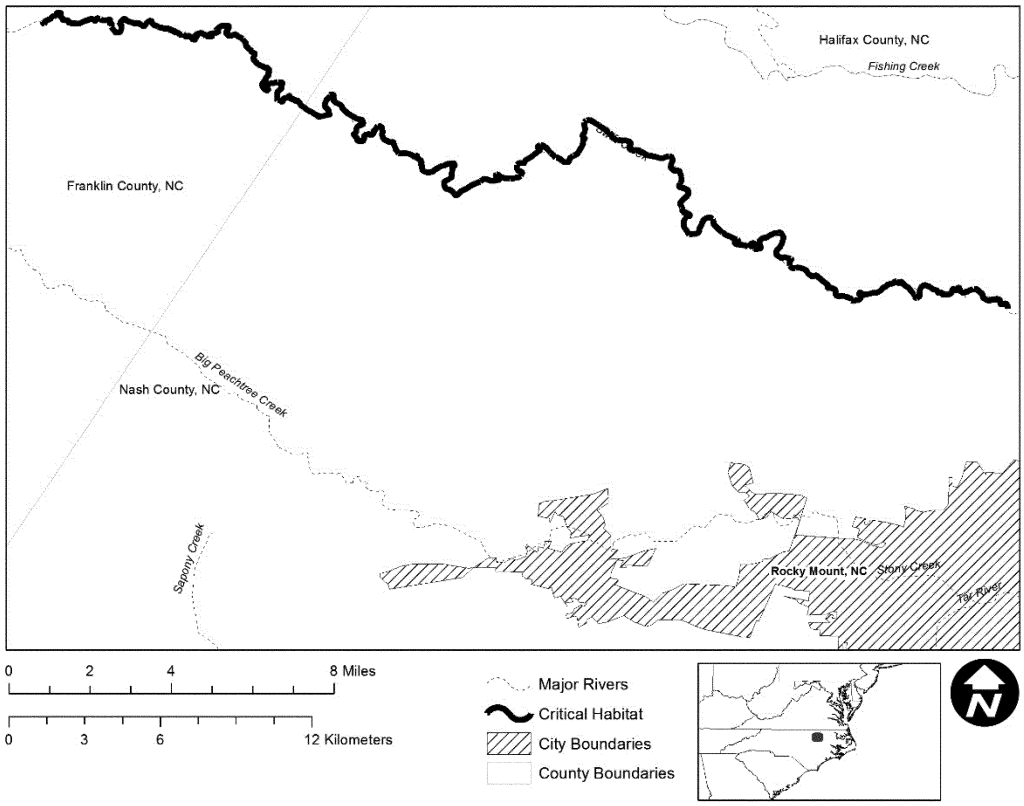


(13) Unit 8: TR2—Sandy/Swift Creek, Vance, Warren, Halifax, Franklin, and Nash Counties, North Carolina.

(i) This unit consists of 31 river miles (50 km) of occupied habitat in the Sandy and Swift Creeks. Unit 8 includes stream habitat up to bank full height.

(ii) Map of Unit 8 follows:

Map of Unit 8 - Sandy/Swift Creek Critical Habitat Unit for Yellow Lance

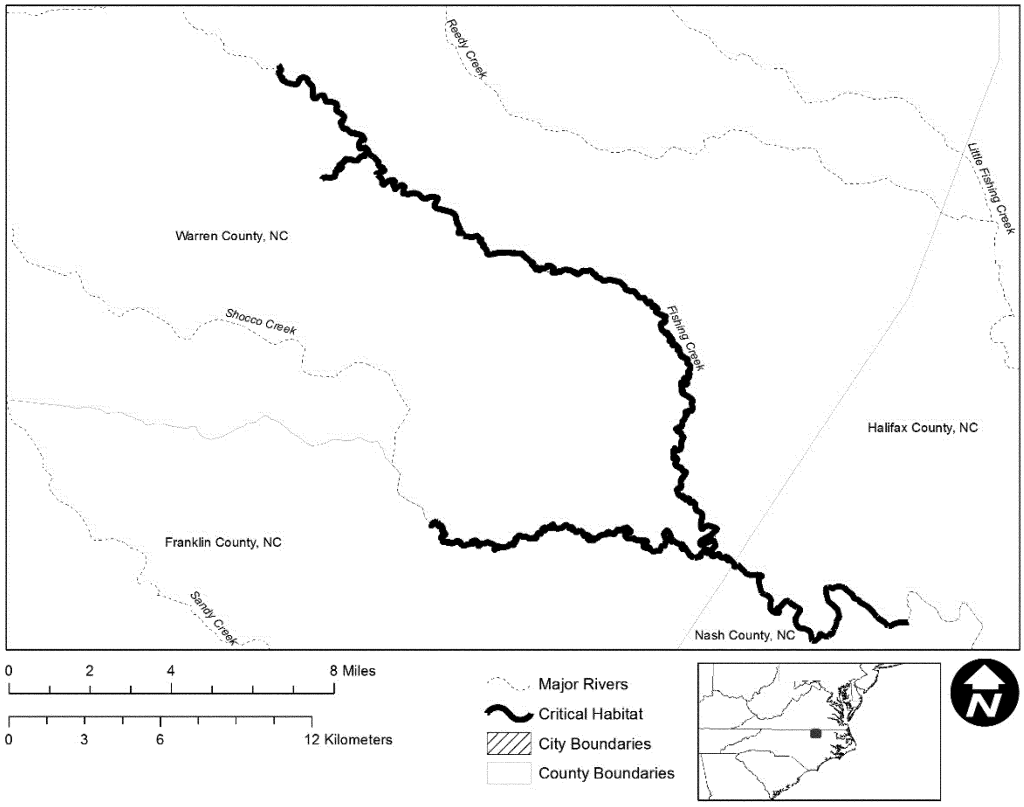


(14) Unit 9: TR3—Fishing Creek Subbasin, Vance, Warren, Halifax, Franklin, and Nash Counties, North Carolina.

(i) This unit consists of approximately 37 river miles (59.5 km) of occupied habitat in the Fishing Creek Subbasin, including 1.6 miles (2.6 km) in Richneck Creek, 8.0 miles (12.9 km) in Shocco Creek, and 27.4 miles (44 km) in Fishing Creek. Unit 9 includes stream habitat up to bank full height.

(ii) Map of Unit 9 follows:

Map of Unit 9 - Fishing Creek Subbasin Critical Habitat Unit for Yellow Lance

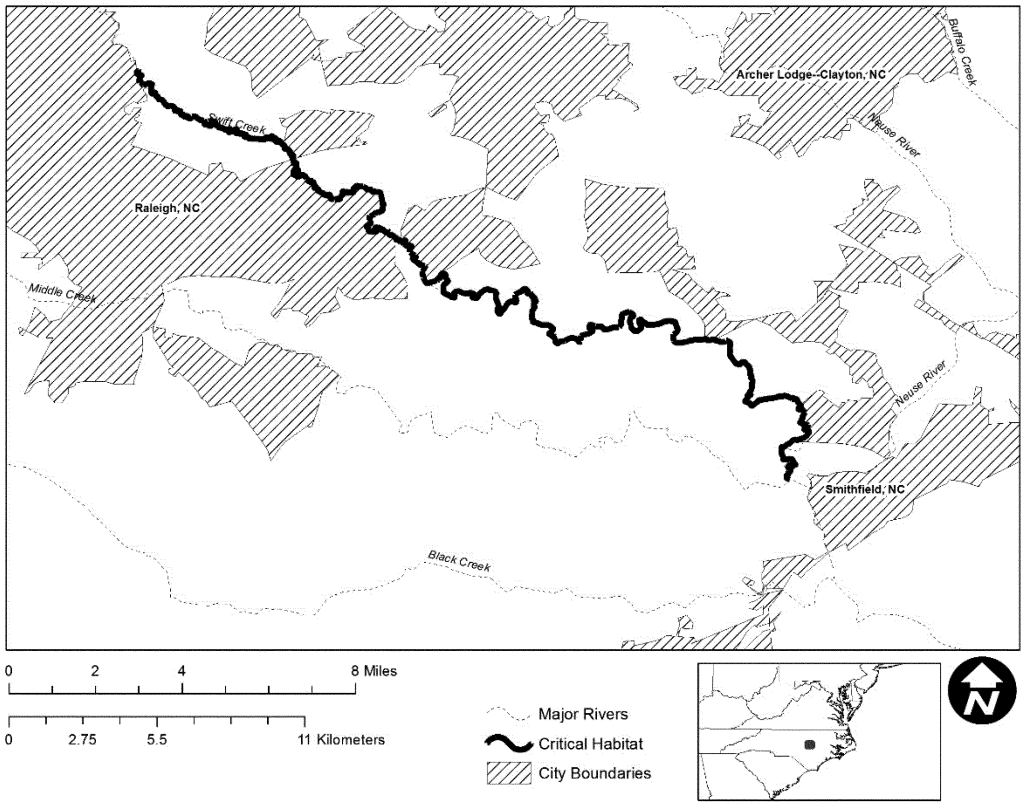


(15) Unit 10: NR1—Swift Creek, Wake and Johnston Counties, North Carolina.

(i) This unit consists of approximately 24 river miles (38.6 km) of occupied habitat in the Swift Creek. Unit 10 includes stream habitat up to bank full height.

(ii) Map of Unit 10 follows:

Map of Unit 10 - Swift Creek Critical Habitat Unit for Yellow Lance

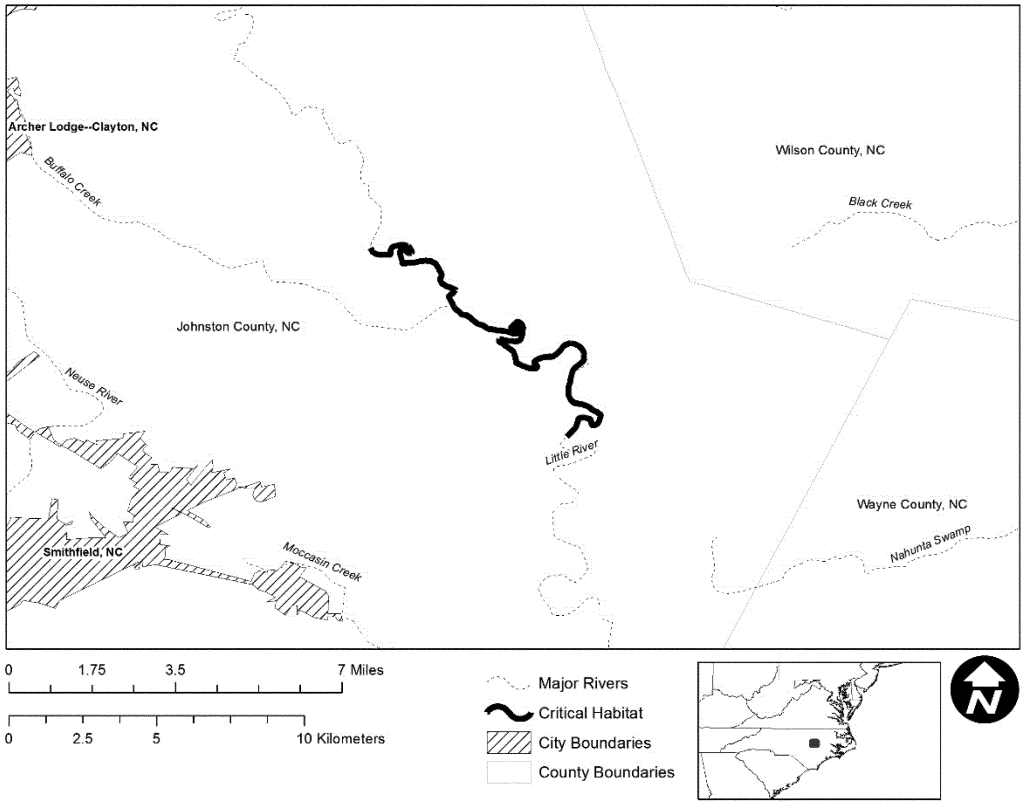


(16) Unit 11: NR2—Little River, Johnston County, North Carolina.

(i) This unit consists of approximately 10 river miles (16.1 km) of occupied habitat in the Little River. Unit 11 includes stream habitat up to bank full height.

(ii) Map of Unit 11 follows:

Map of Unit 11 - Little River Critical Habitat Unit for Yellow Lance



* * * * *

Martha Williams,

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

[FR Doc. 2021–06736 Filed 4–7–21; 8:45 am]

BILLING CODE 4333–15–C