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Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Dakota Skipper and Poweshiek Skipperling; Final Rule

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R3–ES–2013–0017; 4500030113]

RIN 1018–AZ58

Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Dakota Skipper and Poweshiek Skipperling

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), designate critical habitat for the Dakota skipper (*Hesperia dacotae*) under the Endangered Species Act (Act). In total, approximately 19,903 acres (8,054 hectares) in Chippewa, Clay, Kittson, Lincoln, Murray, Norman, Pipestone, Polk, Pope, and Swift Counties, Minnesota; McHenry, McKenzie, Ransom, Richland, and Rolette Counties, North Dakota; and Brookings, Day, Deuel, Grant, Marshall, and Roberts Counties, South Dakota, fall within the boundaries of the critical habitat designation for Dakota skipper. We also designate critical habitat for the Poweshiek skipperling (*Oarisma poweshiek*). In total, approximately 25,888 acres (10,477 hectares) in Cerro Gordo, Dickinson, Emmet, Howard, Kossuth, and Osceola Counties, Iowa; Hilsdale, Jackson, Lenawee, Livingston, Oakland, and Washtenaw Counties, Michigan; Chippewa, Clay, Cottonwood, Douglas, Kittson, Lac Qui Parle, Lincoln, Lyon, Mahnomen, Murray, Norman, Pipestone, Polk, Pope, Swift, and Wilkin Counties, Minnesota; Richland County, North Dakota; Brookings, Day, Deuel, Grant, Marshall, Moody, and Roberts Counties, South Dakota; and Green Lake and Waukesha Counties, Wisconsin, fall within the boundaries of the critical habitat designation for Poweshiek skipperling. The effect of this regulation is to designate critical habitat for the Dakota skipper (*Hesperia dacotae*) and the Poweshiek skipperling (*Oarisma poweshiek*) under the Endangered Species Act.

DATES: This rule becomes effective on November 2, 2015.

ADDRESSES: This final rule is available on the internet at *http://www.regulations.gov* and *http://www.fws.gov/midwest/Endangered/.* Comments and materials we received, as well as some supporting documentation we used in preparing this final rule, are available for public inspection at *http://www.regulations.gov.* All of the comments, materials, and documentation that we considered in this rulemaking are available by appointment, during normal business hours at: U.S. Fish and Wildlife Service, Twin Cities Field Office, 4101 American Boulevard East, Bloomington, Minnesota, 55425; (612) 725–3548; (612) 725–3609 (facsimile).

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–R3–ES–2013–0017, and at the Twin Cities Field Office (*http://www.fws.gov/midwest/Endangered/*) (see **FOR FURTHER INFORMATION CONTACT**). Any additional tools or supporting information that we developed for this critical habitat designation will also be available at the Fish and Wildlife Service Web site and Field Office set out above, and may also be included in the preamble and at *http://www.regulations.gov.*

FOR FURTHER INFORMATION CONTACT: Peter Fasbender, Field Supervisor, U.S. Fish and Wildlife Service, Twin Cities Ecological Services Fish and Wildlife Office, 4101 American Boulevard East, Bloomington, Minnesota 55425; telephone (612) 725–3548; facsimile (612) 725–3609. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Executive Summary

Why we need to publish a rule. This is a final rule to designate critical habitat for the Dakota skipper and Poweshiek skipperling. Under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act), any species that is determined to be an endangered or threatened species requires critical habitat to be designated, to the maximum extent prudent and determinable. Designations and revisions of critical habitat can only be completed by issuing a rule.

We, the U.S. Fish and Wildlife Service (Service), listed the Dakota skipper as a threatened species and the Poweshiek skipperling as an endangered species on October 24, 2014 (79 FR 63672). On October 24, 2013, we published in the **Federal Register** a proposed critical habitat designation for the Dakota skipper and Poweshiek skipperling (78 FR 63625). Section 4(b)(2) of the Act states that the Secretary shall designate 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 critical habitat areas we are designating in this rule constitute our current best assessment of the areas that meet the definition of critical habitat for the Dakota skipper and Poweshiek skipperling. Here we are designating approximately 19,903 acres (8,054 hectares) of native prairies and connecting dispersal habitats for the Dakota skipper and approximately 25,888 acres (10,477 hectares) of native prairies and connecting dispersal habitats for the Poweshiek skipperling.

This rule consists of: A final designation of critical habitat for the Dakota skipper and the Poweshiek skipperling. The Dakota skipper and Poweshiek skipperling have been listed under the Act. This rule finalizes designation of critical habitat necessary for the conservation of the Dakota skipper and Poweshiek skipperling.

We have prepared an economic analysis of the designation of critical habitat. In order to consider economic impacts, we have prepared an analysis of the economic impacts of the critical habitat designations and related factors. We announced the availability of the draft economic analysis (DEA) in the **Federal Register** on September 23, 2014 (79 FR 56704), allowing the public to provide comments on our analysis. We have incorporated the comments and have completed the final economic analysis (FEA) concurrently with this final determination.

Peer review and public comment. We sought comments from independent specialists to ensure that our designation is based on scientifically sound data and analyses. We obtained opinions from seven knowledgeable individuals with scientific expertise to review our technical assumptions, analysis, and whether or not we had used the best available information. These peer reviewers generally concurred with our methods and conclusions and provided additional information, clarifications, and suggestions to improve this final rule. Information we received from peer review is incorporated in this final revised designation. We also considered all comments and information received from the public during the comment period.

Previous Federal Actions

We, the U.S. Fish and Wildlife Service (Service), listed the Dakota

skipper as a threatened species and the Poweshiek skipperling as an endangered species on October 24, 2014 (79 FR 63672) with a rule issued under section 4(d) of the Act for the Dakota skipper. This rule followed publication on October 24, 2013, of a proposal to list the Dakota skipper as threatened with a section 4(d) rule and the Poweshiek skipperling as endangered (78 FR 63573). Also on October 24, 2013, we published in the **Federal Register** a proposed critical habitat designation for the Dakota skipper and Poweshiek skipperling (78 FR 63625).

Summary of Comments and Recommendations

We requested written comments from the public on the proposed designation of critical habitat for the Dakota skipper and Poweshiek skipperling during two comment periods. The first comment period associated with the publication of the proposed rule (78 FR 63625) opened on October 24, 2013, and closed on December 23, 2013, during which we held public meetings on November 5, 2013, in Minot, North Dakota; November 6, 2013, in Milbank, South Dakota; November 7, 2013, in Milford, Iowa; November 13, 2013, in Holly, Michigan, and November 14, 2013, in Berlin, Wisconsin. We also requested comments on the proposed critical habitat designation and associated draft economic analysis during a comment period that opened September 23, 2014, and closed on October 23, 2014 (79 FR 56704). We published a news release stating that we would continue to accept comments during the time period between December 23, 2013, and the end of the second public comment period. We did not receive any requests for a public hearing. We also contacted appropriate Federal, State, and local agencies; scientific organizations; and other interested parties and invited them to comment on the proposed rule and draft economic analysis during these comment periods.

During the first comment period, we received approximately 33 comment letters addressing the proposed critical habitat designation. We also received several additional comment letters posted to the listing docket, but that also addressed the proposed critical habitat designation. Comment letters addressing the proposed listing rule were addressed in the final listing ruling document. We received 7 comment letters after the 1st comment period closed but before the 2nd comment period opened on the proposed critical habitat, and approximately 15 comments on the listing docket that also addressed critical habitat. During the second comment period, we received 21 comment letters addressing the proposed critical habitat designation or the draft economic analysis. We also received 5 additional comment letters posted to the listing docket, but that also addressed the proposed critical habitat designation. All substantive information provided during comment periods has either been incorporated directly into this final determination or addressed below. Comments received were grouped into several general issues specifically relating to the critical habitat designation for the Dakota skipper and the Poweshiek skipperling and are addressed in the following summary and incorporated into the final rule as appropriate.

Peer Review

In accordance with our peer review policy published on July 1, 1994 (59 FR 34270), we solicited expert opinions from ten knowledgeable individuals with scientific expertise that included familiarity with the species, the geographic region in which the species occurs, and conservation biology principles. We received responses from seven of the peer reviewers.

We reviewed all comments received from the peer reviewers for substantive issues and new information regarding critical habitat for the Dakota skipper and Poweshiek skipperling. The peer reviewers generally concurred with our methods and conclusions and provided additional information, clarifications, and suggestions to improve the final critical habitat rule. Peer reviewer comments are addressed in the following summary and incorporated into the final rule as appropriate.

Peer Reviewer Comments

General Comments

(1) Comment: Several peer reviewers stated that the best available scientific information was used to develop the proposed critical habitat designation and the Service's analysis of the available information was scientifically sound. Peer reviewers provided updated information on Dakota skipper and Poweshiek skipperling populations and stressors throughout the ranges of these species. Minor edits to specific details and interpretation of data did not affect their endorsement of the proposal and its conclusions.

Our Response: We have incorporated the updated information into the Background section of this final rule. Some of the new information received resulted in minor changes or refinements of critical habitat unit boundaries, removal or addition of units, or the occupancy status of some units.

(2) Comment: One peer reviewer asked if the definition of critical habitat, specifically, the geographical area occupied by the species, refers to the total range of the species—interpreted as the area bounding all known occurrences, or the spatial extent of particular colonies or populations (*e.g.,* the area used by the species in one prairie site).

Our Response: Critical habitat is a term defined and used in the Act. It is those specific geographic areas that contain features essential to the conservation of a threatened or endangered species and that may require special management and protection. Critical habitat may include areas that are not currently occupied by the species, but that will be needed for its conservation.

(3) Comment: One peer reviewer asked if the definition of critical habitat, specifically, areas outside the geographical area occupied by the species, refers to the geographical area outside of the documented range of the species or sites within that range that are not known to be occupied at the time of listing?

Our Response: That clause in the definition of critical habitat under section 3(5)(A)(ii) of the Act refers to any areas that are not occupied at the time the species is listed. These could be areas that fall outside the documented historical range of the species, or specific sites within the documented range of the species that were known to be occupied at one point, but which are not occupied when the species is listed (*e.g.,* the species has been extirpated from that site). For the designation of critical habitat for the Dakota skipper and Poweshiek skipperling, all areas that we include as critical habitat under this prong of the definition were historically occupied, but some are not thought to be currently occupied by the species.

(4) Comment: One peer reviewer, with particular experience in Iowa and Minnesota, agrees with the locations proposed as critical habitat, as they are a good representation of the recent historical range for both species.

Our Response: We thank you for your comment.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

(5) Comment: One peer reviewer stated that the assertion that Dakota skipper larvae are ''particularly vulnerable to desiccation during dry summer months'' was a hypothesis with

no confirming evidence. The paper cited only surveyed occupied habitat and did not test unoccupied areas for the same parameters.

Our Response: We recognize the limitations of Royer's 2008 study, and have corrected our interpretations accordingly; specifically, the sampling design (edaphic parameters (such as bulk density and soil moisture) were measured only in occupied areas and no unoccupied areas were examined to test the significance of the findings) does not allow for statistically significant conclusions.

(6) Comment: One peer reviewer questioned why an increase in bulk density (compaction) is relevant in tilled lands, as tilling destroys the habitat in ways that are far more fundamental than changing bulk density.

Our Response: We agree that tilling land alters the native remnant prairies in many ways, such that they are no longer inhabitable to the Dakota skipper or Poweshiek skipperling. Tilling alters the physical state of the soil, and bulk density is just one component of soils that has been measured before and after tilling.

(7) Comment: One peer reviewer did not understand the statement about Dakota skipper distribution and isolation. ''The distribution'' would normally be understood as meaning the same as ''range,'' but the reviewer questioned what about the Dakota skipper's range led the Service to describe it as isolated. If what is intended is to describe the current distribution as consisting of small colonies highly isolated from each other, it would be better stated this way.

Our Response: We did not intend for distribution to mean range in this context. We have corrected this information in the Physical or Biological Features section of this final rule to clarify that we mean that the species currently exists in small, isolated areas.

(8) Comment: One peer reviewer suggested that we verify the accuracy of the following sentence: ''In Michigan, Poweshiek skipperling live on prairie fens, which occur on the lower slopes of glacial moraines or ice contact ridges (Albert 1995 in Michigan Natural Features Inventory 2012, p. 1) where coarse glacial deposits provide high hydraulic connectivity that forces groundwater to the surface (Moran 1981 in Michigan Natural Features Inventory 2012, p. 1)''.

Our Response: We have checked additional sources and have modified the language in the Physical or Biological Features section of this final rule to correctly state that ''In Michigan, Poweshiek skipperling live on prairie fens, which occur on poorly drained outwash channels and outwash plains in the interlobate regions of southern Lower Michigan (Kost *et al.* 2007 pp. 69–73, Cohen *et al.* 2014, pp. 70–73). Prairie fens are typically found where these glacial outwash features abut coarse-textured end moraine or ice-contact features and where coarse glacial deposits provide high hydraulic connectivity that forces groundwater to the surface (Moran 1981 in Michigan Natural Features Inventory 2012, p. 1).''

(9) Comment: One peer reviewer commented that populations of Poweshiek skipperlings in southwest Minnesota did not appear to need low wet areas that provide shelter and relief from high summer temperatures and fire. Areas like this were not present, or were located well away from areas where the Poweshiek skipperling was observed.

Our Response: We have clarified that the Poweshiek skipperling may not need low and wet areas at all sites in the Physical or Biological Features section of this final rule.

Primary Constituent Elements

(10) Comment: One peer reviewer commented that we should not use the precisely quantified soil parameters as stated in primary constituent element (PCE) 1b for the Dakota skipper.

Our Response: We agree and have modified PCE 1b for Dakota skippers. Royer (2008) only examined occupied areas for these parameters; therefore, the statistical and biological significance of these edaphic variables cannot be determined from his study.

Why Occupied Areas are not Sufficient for the Conservation of the Species

(11) Comment: One peer reviewer asked whether we assume there is some possibility that sites with unknown occupancy may still harbor populations.

Our Response: In areas with unknown occupancy, we believe there is a possibility that the species still exists at the location. If these areas still do harbor a population, they would be important for species recovery for various reasons. For example, the remaining individuals may hold potential genetic representation, or a small population could be augmented to help establish a robust population or individuals from a large population may be used for reintroductions to other locations.

(12) Comment: One peer reviewer questioned what genetic material would be preserved if the species is truly absent from locations where we are currently uncertain of the occupancy?

Our Response: We agree that if the species is proven to be absent from a location that there will be no genetic material to preserve at that location. However, because we are uncertain of the occupancy, we believe there is some possibility that the species still exists there. If the species does exist at those locations, it would be important to preserve the genetic material at that location. Maintaining redundancy of genetic representation is important in case genetically similar populations are lost.

Unit-Specific Comments

(13) Comment: One reviewer recommended that Dakota skipper critical habitat units DS MN 13A and 13B in Kittson County, Minnesota, be expanded to include locations referred to as ''Spot G'' and ''Spot H'' in Rigney (2013a). The reviewer supported that recommendation by stating that, although no Dakota skippers were observed at Lake Bronson in 2013, there was one highly likely sighting there, and the area continues to contain moderate-quality habitat.

Our Response: We have reviewed this new information and have found that ''Spot G'' and ''Spot H'' were greater than the estimated 1-km (0.6-mi) dispersal distance from the closest sites where the species have been documented (those sites within MN Unit 13A and 13B), and we believe the habitat areas are too small (1 ac (0.4 ha) and 12 ac (5 ha), respectively) to qualify as independent sub-units. These areas, however, may be useful as potential reintroduction sites, which we will consider during recovery planning.

(14) Comment: One peer reviewer questioned why no areas in far northwestern Minnesota were proposed as critical habitat for Poweshiek skipperlings, given the close proximity of the extant Manitoba population to the U.S. border, the similarity between occupied habitats in Manitoba and in Minnesota, and the historical Poweshiek skipperling records in Kittson County.

Our Response: We reviewed the known locations of Poweshiek skipperlings in northwestern Minnesota, and, based on new information that we received, we revised the proposed critical habitat (79 FR 56704) and included critical habitat for the Poweshiek skipperling in Polk and Kittson counties, Minnesota (PS MN Units 19 and 20) in this final designation. See the Critical Habitat section of this final rule and the textual descriptions of units (available online at *http://www.fws.gov/midwest/Endangered/insects/dask*) for details of specific units.

(15) Comment: One reviewer recommended the addition of several units in Minnesota as critical habitat for the Poweshiek skipperling. These areas included the following: Lake Bronson, North Clow 36, North Clow 35, Richardville 28 and 29, and the West Caribou Wildlife Management Area (WMA) sites identified in the 2013 Kittson County surveys (Rigney 2013a). The reviewer asserted that these areas have equivalent habitat and opportunity to encounter the Poweshiek skipperling as does the Lake Bronson site, which was included in the proposal; although no Poweshiek skipperlings were observed at these sites in 2013, they do provide moderate-quality habitat.

Our Response: We reviewed the information in the 2013 reports and have designated critical habitat for the Poweshiek skipperling in the Lake Bronson Area (PS MN Unit 19), which was the only aforementioned location that met our criteria for critical habitat. Specifically, most of the Poweshiek skipperling records in the sites the reviewer recommended for inclusion were relatively old (1992 or earlier), the habitat was rated as relatively poor, or the sizes of the parcels were likely too small to sustain a viable population. The Poweshiek skipperling was last observed at the North Clow 35 location in 1992, and the site is very small (6 ac (2.4 ha)). North Clow 35 consists of four separate areas, ranging in size from 1 to 5 ac (0.4 to 2 ha), recently rated as moderate quality (Rigney 2013a, p. 3), but these areas are on the fringes of a densely forested area surrounded by agriculture and only equated to a total of approximately 9 ac (3.6 ha). The Poweshiek skipperling was last observed at both West Caribou WMA and North Clow 36 in 1991, but the habitat at West Caribou was recently considered to be of only fair quality (Rigney 2013a, pp. 7–9). The habitat at North Clow 36 was reported as good (Rigney 2013a, pp. 5–6), but the habitat equates to less than 5 ac (2 ha) in size. Richardville 28 and 29 each had Poweshiek skipperling records from 1991, but equate to less than 4 ac (1.6 ha) in size combined.

(16) Comment: One peer reviewer commented that all of the Dakota skipper critical habitat units in North Dakota are essential and should be included as critical habitat.

Our Response: We thank you for your comment, which supports the designations in North Dakota. Based on new information, we have made some refinements to a few of the aforementioned critical habitat units, and other units have been partially or entirely removed from designation, due to these units no longer meeting our criteria for critical habitat. We have also excluded some of the areas in North Dakota that were proposed as critical habitat because of existing partnerships that outweigh the benefits of critical habitat (see Exclusions discussion below).

(17) Comment: One peer reviewer commented that the three proposed Poweshiek skipperling critical habitat units in North Dakota were not enough and recommended additional land be considered as critical habitat. The reviewer further explained that, given the probable historical extent of habitat for this species in North Dakota, the designation of only 263 ac (106 ha) is not sufficient to represent the species' complete potential range within the State. For that reason, the reviewer recommended expanding the critical habitat designation to include other sites, particularly within the Sheyenne National Grassland (Richland-Ransom County) area.

Our Response: We reviewed the available data on the occurrence of the Poweshiek skipperling in the Sheyenne National Grasslands, and found few records for the species in those areas. The single record of the species, from 1996, was unverified and the habitat was considered to be poor in 2012 (Royer 2012, p. 87). Thus, we have not included any areas as critical habitat for the Poweshiek skipperling in the Sheyenne National Grassland. However, there may be suitable habitat within the Sheyenne National Grasslands that may be important in recovery efforts for both species, such as potential sites for future reintroductions. For example, in light of new ecological information, we have refined the boundaries of North Dakota Critical Habitat Units 11 and 12 to better reflect Dakota skipper habitat—this area may also be utilized for Poweshiek skipperling recovery. PS North Dakota Unit 3 was removed from proposed critical habitat designation because we received new or updated information that indicates that this area no longer meets our criteria for critical habitat as described in this final critical habitat rule. This unit is dominated by Kentucky blue grass, and site managers ''are unsure if we can bring the site back to a more native dominated site,'' which has been either burned or grazed every spring from 2009 through 2013 (Askertooth, 2014, pers. comm.). North Dakota Unit 3 was 47 ha (117 ac) of federally owned land and included Krause Wildlife Production Area in Sargent County.

(18) Comment: One peer reviewer asked if the site with the most recent historic sites for Dakota skipper in Iowa should be included as critical habitat for that species. Other sites that are included in the Poweshiek skipperling designations (PS Iowa Unit 3, PS Iowa Unit 11) may also contain good habitat for the Dakota skipper.

Our Response: In Iowa, the Dakota skipper was recorded from two locations in 1911 and 1906, which did not meet our criteria for critical habitat because the records were old, and there is currently no suitable habitat at those locations. The Dakota skipper was observed at one additional site in Iowa in 1992. This area was not designated as critical habitat due to the relatively old record and because there were few records of the species in the State; therefore, we did not think that Iowa sites would help fulfill the conservation principles of redundancy, resiliency, and representation for the Dakota skipper. Some of the areas designated as critical habitat for the Poweshiek skipperling may also be important areas for Dakota skipper recovery efforts, however.

(19) Comment: One peer reviewer noted that the Florenceville Prairie in Howard County, Iowa, may be another possible addition to the Poweshiek skipperling critical habitat units.

Our Response: We examined Florenceville Prairie for its potential for critical habitat designation. The Poweshiek skipperling was last observed in this location in 1994. Other than the record, we had very little information regarding the habitat and management of the site, which appears to be approximately 25 ac (10 ha) from our aerial photograph interpretation. Because of its small size and little more information, this site did not fit our criteria for critical habitat. The Florenceville Prairie may be an important area for recovery.

(20) Comment: One peer reviewer suggested that our discussion of the time for prairie habitat to degrade to non-habitat due to woody encroachment and invasive species would benefit from additional literature review, because there is much variation among sites.

Our Response: We agree that there may be site-specific variation, which is why we attempted to verify habitat on the ground. There are few long-term studies of prairies without a management component that estimate the time of natural succession from prairie to non-prairie habitat. We have included citations from several sources that studied long-term succession across varying management regimes.

Federal Agency Comments

General Comments

(21) Comment: North Dakota Natural Resources Conservation Service (ND NRCS) commented that a substantial percentage of the literature cited in the proposed rule was internal documents and not peer-reviewed or published literature.

Our Response: Under the Act, we are obligated to use the best available scientific and commercial information, including results from surveys, reports by scientists and biological consultants, natural heritage data, and expert opinion from biologists with extensive experience studying the Dakota skippers and Poweshiek skipperling and their habitats, whether published or unpublished. We acknowledge that some of the reports we utilized were unpublished reports, most of which were reports of butterfly surveys that were submitted directly to various agencies. The Service's databases were also referenced several times within the document (*e.g.,* USFWS 2014, unpublished geodatabase). These databases were built using hundreds of sources, including unpublished reports, published papers, and State heritage data. We referenced these databases in the proposed and final critical habitat document in places where we summarized data across many sources. All of the reports utilized in these databases are publically available, upon request. Our licenses to use State natural heritage data for internal purposes have data sharing restrictions.

Management Concerns

(22) Comment: Several agencies expressed interest in working with the Service to manage Dakota skipper and Poweshiek skipperling habitat and establish best management practices for the species.

Our Response: We look forward to continuing to work with Federal agencies and other interested parties to explore management approaches and their benefit to the species and their habitat.

Exclusions

(23) Comment: The North Dakota Army National Guard (NDARNG) requested exemptions from listing and critical habitat designations on lands that they use for training in North Dakota where they have an Integrated Natural Resources Management Plan (INRMP) in place in accordance with the Sikes Act.

Our Response: Neither Camp Grafton South nor Garrison Training Area were proposed for critical habitat designations, nor are they included in our final designations.

Primary Constituent Elements

(24) Comment: North Dakota State Department of Trust Lands commented that non-invasive grasses, such as Kentucky bluegrass and smooth brome, exceed the five percent threshold as defined for PCE 1d for the Dakota skipper and PCE 1e for the Poweshiek skipperling. They further state that data show that managed grazing has limited the dominance of Kentucky bluegrass, whereas no management results in a total dominance of Kentucky bluegrass.

Our Response: We realize that non-native plant species in some areas designated as critical habitat may currently exceed five percent of the area, and that non-native plants will likely increase if these areas are not managed properly. Through active management, such as managed grazing, we will strive to reduce the amount of non-native invasive plants in critical habitat areas.

Unit-Specific Comments

(25) Comment: The U.S. Forest Service recommended that the Service consider making boundary adjustments to Dakota skipper North Dakota Units 11 and 12. The Forest Service used a butterfly habitat model (Foli and Sjursen 2005) to develop recommendations for boundary adjustments that eliminate lands cultivated in the early 1900s that are dominated by non-native plants.

Our Response: In light of this new ecological information, we have refined the boundaries of North Dakota Critical Habitat Units 11 and 12 to better reflect Dakota skipper habitat.

Comments From States

General Comments

(26) Comment: The Minnesota Department of Natural Resources (MN DNR) supports the Service's decision to designate critical habitat for the Dakota skipper and Poweshiek skipperling in Minnesota and concurs with the Service's determination that designation of critical habitat for these species will be beneficial to their conservation.

Our Response: Thank you for your comment.

(27) Comment: The MN DNR recommends that areas with plans for restoration of severely degraded prairie be considered for exclusion under section 4(b)(2) of the Act. They commented that this would necessitate an explicit distinction between prairie remnants requiring maintenance-level management and remnants requiring restoration-level management, and would allow for more liberal use of management in lands targeted for restoration and support cautious management in restored areas. As such, prairie restoration practices are critical to connecting existing prairie remnants, countering the effects of habitat fragmentation and isolation, and are a focus of the Minnesota Prairie Conservation Plan (MPCP).

Our Response: To exclude areas from critical habitat, the benefit of exclusion of that land must outweigh inclusion as critical habitat. The critical habitat designation for these two butterflies focused on relatively high-quality native remnant prairie, which may need maintenance-level management, with limited areas of lesser quality habitat included as dispersal areas. Four units in Minnesota contain lesser quality dispersal habitat (DS/PS Minnesota Unit 2, DS/PS Minnesota subunit 7A, PS Minnesota Unit 11 and PS Minnesota Unit 13), where restoration management may be appropriate. There are several areas included in the MPCP that are designated as critical habitat. We determined that degraded or poor-quality prairies and dispersal areas would benefit from inclusion in the designation because the species may use these areas during the short adult period. The Service will work with the MN DNR and other stakeholders to help identify varying habitat types and is looking forward to working together to develop methods and practices for restoring habitat for the two butterfly species. We hope to work with those involved in the MPCP to develop mutually acceptable management on these areas. See the Consideration of Impacts Under Section 4(b)(2) of the Act section of this final rule for more details on our balancing analysis for critical habitat exclusions.

(28) Comment: The North Dakota Department of Agriculture suggested the addition of public informational meetings throughout the range of the butterflies in North Dakota and requested that there be more discussion on the potential impacts to private landowners, Federal funding programs, and current and future easements with the Service.

Our Response: The Service will continue to conduct public outreach and coordinate with the U.S. Department of Agriculture and other stakeholders throughout the recovery planning and implementation process for these species. Proposed projects in areas where one or both species may be present, or on designated critical habitat that has a Federal nexus (in other words, funded, authorized or carried out

by a Federal agency), will be required to undergo consultation with the Service under section 7 of the Act. We suggest that action agencies contact the Service's Ecological Services Office in their State if they are planning an activity with a Federal nexus that may affect the species or its critical habitat. For more information about section 7 consultations, visit the Service's Web site (*http://www.fws.gov/endangered/what-we-do/consultations-overview.html*).

(29) Comment: North Dakota Game and Fish and South Dakota Department of Game, Fish, and Parks commented that including private land in the designation of critical habitat increases the threat of conversion of privately owned grassland. Benefits may be derived from the triggering of consultation under section 7 of the ESA for activities that have a Federal nexus on State and Federal lands. However, benefits of consultation or regulatory protections afforded by the implementation of section 7 of the ESA are lost when applied on private land. The Service should take this concern seriously and continue to investigate suitable alternatives to critical habitat designation. The Service should consult with each private landowner individually and directly to determine their potential impacts.

Our Response: We agree that conversion of native prairies to agricultural or other uses is a threat to both species and have discussed this threat in the final listing determination, published in the **Federal Register** on October 24, 2014 (79 FR 63671). The Service is committed to working with private landowners, public land managers, conservation agencies, nongovernmental organizations, and the scientific community to conserve the Dakota skipper and Poweshiek skipperling and their habitats. For example, in recognition of efforts that provide for conservation and management of the Dakota skipper and its habitat in a manner consistent with the purposes of the Act, we finalized a rule under section 4(d) of the Act (79 FR 63671) that exempts incidental take of Dakota skippers that may result from livestock grazing since we believe this is necessary and advisable for the conservation of the species and facilitates the habitat protection, coordination, and partnerships needed to recover the species.

During development of the proposed critical habitat designation, the Service notified each private landowner of record of the proposed designation and requested that landowners submit information, in the form of public comments, about potential impacts. While efforts to consult directly with each private landowner are outside the scope of this effort, the Service has considered this issue and has held some meetings with individual landowners to discuss their concerns. We focused initial meetings with private landowners in Minnesota, North Dakota, and South Dakota, which is where we received several comments from private landowners who had concerns about the implications of listing and critical habitat designations. Additionally, we have excluded some areas that are covered by conservation partnerships that provide a conservation benefit to Dakota skipper or Poweshiek skipperling from final critical habitat designation in this final rule. It is important for private individuals to understand that only those proposed projects in areas where one or both species may be present, or on designated critical habitat, and that have a Federal nexus (in other words, funded, authorized or carried out by a Federal agency), will be required to undergo consultation with the Service under section 7 of the Act. The responsibility of this consultation is that of the Federal agency, not the private landowner.

(30) Comment: The South Dakota Department of Agriculture asked how a private landowner would be compensated, if during the course of the Service's activities for monitoring the critical habitat areas, the land or property is damaged.

Our Response: Surveys for either species on private lands would only be conducted with landowner permission. Furthermore, surveys are not destructive in nature and have little, if any, impact to the land.

(31) Comment: South Dakota Department of Agriculture suggested that further research should be conducted to determine if the Poweshiek skipperling is present in South Dakota. Because the Poweshiek skipperling is not found in South Dakota, this commenter submitted that South Dakota should not be included in the critical habitat designation for that species.

Our Response: According to our data and analysis, the presence of Poweshiek skipperling is unknown at 36 of the total 69 sites where the species has been documented in South Dakota. The species was detected at least once at all 36 of these sites in 1993 or later; of those, 19 had positive detections in 2002 or later. No surveys were conducted for the species between 2007 and 2011 at these 36 sites. Many of these 36 sites were surveyed in 2012 and/or 2013, but we cannot presume that the species is truly absent at sites with only 1 or 2 years of negative data. The most recent detection of the species in South Dakota was at three sites in 2008. At several South Dakota sites, the species persisted for longer than 20 years. South Dakota is in the range of the Poweshiek skipperling and the species is listed throughout its range. Critical habitat is defined in the Endangered Species Act as specific areas within the geographic area occupied by a species, at the time it is listed, on which are found those biological or physical features that are essential to the conservation of the species and may require special management considerations or protection. Additionally, specific areas outside the geographic area occupied by a species at the time of listing may be considered for critical habitat designation if they are essential for the conservation of the species. The areas we have designated as critical habitat are important for the resiliency, redundancy, and representation concepts of species recovery, as discussed in the Criteria Used To Identify Critical Habitat section of this final rule. We addressed the comment regarding additional surveys or research in the final listing rule, published in the **Federal Register** on October 24, 2014 (79 FR 63671).

(32) Comment: North Dakota Game and Fish commented that the proposal infers that the Service has identified skipper habitat in addition to critical habitat in North Dakota. If that is correct, does the Service have specific legal descriptions where such habitat exists and what restrictions will be placed on that habitat?

Our Response: The Dakota skipper and the Poweshiek skipperling are both closely tied to native prairie habitats. Dakota skipper and Poweshiek skipperling are among a group of species endemic to North American tallgrass and mixed-grass prairie. In addition, these butterflies are not likely to inhabit reconstructed prairies, such as former cropland replanted to native prairie species. The Service has records of the Dakota skipper and Poweshiek skipperling in areas that are not designated as critical habitat, but these sites did not meet our criteria for critical habitat as described in this final ruling. However, they may still be important for recovery. The Service recognizes that there may be areas of suitable habitat for the species where surveys have never occurred or the survey effort was insufficient to know if the species were truly absent from a location. We do not have specific legal descriptions of all potential habitat areas. Therefore, the

Service recommends that, to determine whether a section 7 consultation may be required or recommended, action agencies should first provide the U.S. Fish and Wildlife Service Ecological Services field office (FWS–ES) with a description of the area.

(33) Comment: The North Dakota Farm Bureau and several other organizations noted that incentive-based voluntary programs that work well for other species may be a better solution to listing and critical habitat designations.

Our Response: We appreciate any assistance to incentivize landowners to conserve these species. Voluntary action can have a significant contribution to conservation, and if such measures are in place when we are evaluating a species for listing, we consider them in that decision. The Service's policy, Expanding Incentives for Voluntary Conservation Actions Under the Act (77 FR 15352, March 15, 2012), encourages voluntary conservation actions for non-listed species (*http://www.gpo.gov/fdsys/pkg/FR-2012-03-15/pdf/2012-6221.pdf*). However, if such voluntary actions are not in place when we are evaluating a species for listing, or if those actions are not sufficient to affect the need to list a species, the Service must make a determination based on the status of the species. Furthermore, under the ESA, the Service must propose critical habitat concurrently, or within 1 year of the final listing ruling, if it is found to be prudent. In this final critical habitat designation, we are excluding lands covered by conservation partnerships that provide a conservation benefit to Dakota skipper or Poweshiek skipperling. See the Consideration of Impacts under section 4(b)(2) of the Act section of this final rule for more details on these easements and the benefits of excluding these areas.

(34) Comment: North Dakota Game and Fish supported the removal of Poweshiek skipperling North Dakota Unit 3 from the final designation as proposed on September 23, 2014.

Our Response: We proposed some changes to our critical habitat proposal on September 23, 2014, based on updated biological or ecological information. Based on the information we received, the habitat in the aforementioned unit no longer met our criteria for critical habitat and has been removed.

(35) Comment: The North Dakota Department of Agriculture suggests removing all critical habitat designations from any lands that are not currently inhabited by either species. Both species rarely travel more than 1 mile in their lifetime, so it is highly unlikely that unoccupied areas will be re-colonized without artificial reintroduction. It would not be beneficial to the species to designate critical habitat that will not be re-colonized naturally.

Our Response: Some of the lands we are considering to be ''unoccupied'' for critical habitat analyses have actually had recent records of the species' presence and have only had 1 or t2 years of negative surveys (no detections during the survey season). It is beneficial to designate these areas as critical habitat in light of the potential for recovery of the species on these lands as discussed in the Critical Habitat section of this rule.

Economic Concerns

(36) Comment: The South Dakota Department of Agriculture requested that all private lands be removed from the critical habitat designations due to economic impacts. The average size of the farms in the South Dakota counties selected for critical habitat for both species is 675 acres (USDA National Agricultural Statistics Service 2013). These are small family farms that support the local county economy. The National Agricultural Statistics Service reported that the total livestock and crop cash receipts for these counties are $1,447,861,000. The Service proposed to designate about 0.20 percent of total farmed acres as critical habitat. This could potentially result in a loss of $2.5 million to the local economies.

Our Response: The Service must consider the economic impacts of designating critical habitat and has done so for these two species. As noted in the notice of availability for the draft economic analysis (79 FR 56708; September 23, 2014), the Service evaluated the economic impact of designating critical habitat for the Dakota skipper and Poweshiek skipperling in the ''Screening Analysis of the Likely Economic Impacts of Critical Habitat Designation for the Dakota Skipper and Poweshiek Skipperling.'' The screening analysis was made available for public review and comment on September 23, 2014. As a result of our analysis, we concluded that the proposed critical habitat designation for the Dakota skipper and Poweshiek skipperling is unlikely to generate costs exceeding $100 million in a single year; therefore, the rule is unlikely to meet the threshold for an economically significant rule. Private property owners have expressed concern that the designation of critical habitat for the two butterflies may affect their property values. Data limitations prevented the quantification of the possible incremental reduction in property values; however, data on current land values suggest that, even if such costs occur, the rule is unlikely to reach the threshold of an economically significant rulemaking when possible perception effects are combined with the other incremental costs.

The commenters' calculation of a potential loss of $2.5 million to the local economies assumes that all livestock and crop income will be lost in those counties. The designation of critical habitat does not have such far-reaching effects. Furthermore, several privately owned areas have been removed due to new ecological information indicating unsuitable habitat or excluded based on the existence of conservation partnerships as described in the Consideration of Impacts under section 4(b)(2) of the Act section of this rule.

(37) Comment: The North Dakota Department of Agriculture (NDDA) and a few private individuals are concerned that the designation of critical habitat on private lands could jeopardize current private conservation efforts or result in fewer private-public partnerships to preserve native grassland, and they suggest the Service remove all critical habitat designations from private lands. They further commented that, whether the impacts associated with a critical habitat designation are real or perceived, private land designated as critical habitat has decreased value economically. It is less marketable to future buyers, both for agriculture and development. The Service's September 8, 2014, memorandum concludes that proposed critical habitat designation does not reach the threshold of an ''economically significant rulemaking,'' however, it is very significant for current and future landowners.

Our Response: As the commenter notes, this issue was discussed in a September 8, 2014, memorandum titled ''Supplemental Information on Land Value—Critical Habitat Designation for the Dakota skipper and Poweshiek skipperling.'' Data limitations prevent the quantification of the possible incremental reduction in property values due to the designation of critical habitat, but the memorandum presents information on the total value of the private lands (excluding conservation lands) included in the proposed critical habitat designation as an estimate of the upper bound on possible costs. It also identifies the relative value of private land across the proposed units.

In this final critical habitat designation, we have made modifications to some of the critical habitat units due to new ecological

information, including the removal of some unsuitable private lands. We also exclude lands covered by Service permanent conservation easements and certain lands covered by current management agreements with the Service's Partners for Fish and Wildlife Program (PFW). See the Consideration of Impacts under section 4(b)(2) of the Act section of the preamble to this final rule for more details on these easements and the benefits of excluding these areas.

The public perceptions supplement to the draft economic analysis discusses the idea that public attitudes about the limits or restrictions that critical habitat may impose can cause real economic effects to property owners, regardless of whether such limits are actually imposed (stigma effects). As the public becomes aware of the true regulatory burden imposed by critical habitat, the impact of the designation on property markets may decrease. Although stigma impacts may occur when critical habitat is first designated, and may be a real concern to landowners, research shows those impacts should be temporary. As described in the memorandum, small entities are generally not directly involved in the consultation process between NRCS or U.S. Department of Agriculture (USDA) and the Service. As a result, impacts to small ranchers are not anticipated.

Management Concerns

(38) Comment: MN DNR recommended that a clear distinction be made regarding management activities that will be permitted in designated critical habitat that is occupied by one or both species and critical habitat that is not currently occupied by either species. Furthermore, this commenter requested that the Service provide clear guidance to support distinguishing between ''occupied'' and ''unoccupied'' habitat in terms of the required frequency of surveys upon which to base conclusions regarding occupancy years since the last observation for a site to be considered occupied; number of individuals observed for a site to be considered occupied; distance from a site with more recent, larger, or more certain observation for a site to be considered occupied; and when artificial reintroduction of a listed species into an unoccupied site would be permitted, and when the site would then be considered occupied.

Our Response: Stakeholders and project proponents should provide U.S. Fish and Wildlife Service Ecological Services field office (FWS–ES) with a description of the area that would be affected, directly or indirectly, by the proposed or ongoing action to determine whether it is occurring in an area that is occupied by the species and what the appropriate management activities would be at the particular location. We discuss species occupancy in the Criteria Used to Identify Critical Habitat section of this final rule, which we used to determine the occupancy status of critical habitat units at the time of the publication of this final rule.

(39) Comment: The South Dakota Department of Agriculture expressed concern that management restrictions implemented on critical habitat may have an impact on noxious weed and pest management on adjacent private lands. They asked what steps the Service will take to ensure that the management practices on critical habitat do not adversely affect adjacent private lands.

Our Response: Proposed projects on designated critical habitat with a Federal nexus (in other words, funded, authorized or carried out by a Federal agency) will be required to undergo consultation with the Service under section 7 of the Act. We are not aware of any management restrictions that would affect noxious weed and pest management on property adjacent to critical habitat areas.

(40) Comment: The North Dakota Department of Transportation is concerned that all activity related to highway construction and maintenance projects adjacent to or within critical habitat of the Dakota skipper will have to undergo consultation with the Service. There are six proposed critical habitat units for Dakota skipper that are located adjacent to highways in North Dakota (DS Units 5, 6, 7, 9, 10, and 14).

Our Response: In the section 4(d) rule for Dakota skipper, published with the final listing rule, we exempted take of Dakota skippers caused by mowing native grassland for hay after July 15 within transportation rights-of-way. See the Designation section of this final rule for maps of our final designations—we have made adjustments to some of the aforementioned units due to new ecological information, and we have excluded some lands in some of those units—see Consideration of Impacts Under Section 4(b)(2) of the Act section of this final rule. However, new highway construction projects in critical habitat would need to undergo consultation if they have a Federal nexus.

(41) Comment: The South Dakota Department of Game, Fish and Parks (SDGFP) commented that they have a cooperative agreement with the Service for the conservation of endangered and threatened animals. As such, they have coordinated and funded numerous butterfly surveys, published a butterfly field guide, developed specific management recommendations for Hartford Beach State Park and Pickerel Lake Recreation Area, and are developing a management plan for the Crystal Springs GPA to benefit prairie wildlife species. The SDGFP submitted this information as documentation of their past, current, and future commitment to assist with rare tallgrass prairie butterfly species recovery. They hope this will facilitate management of the critical habitat owned and managed by SDGFP.

Our Response: We appreciate your continued efforts towards conservation of the two species and look forward to working with the SDGFP to that end.

Exclusion Comments

(42) Comment: The MN DNR commented that exclusions under section 4(b)(2) of the Act should be exercised cautiously and reserved only for circumstances in which the benefit of exclusion will clearly outweigh the benefit of designation and treat all landowners equitably.

Our Response: We agree. Exclusions under Section 4(b)(2) of the Act must outweigh the benefit of inclusion in the critical habitat designation. This weighing analysis was completed for several situations, including lands with established partnerships with the Service such as private lands on which the Service has secured conservation easements and private properties that are covered by existing conservation agreements under the Service's Partners for Fish and Wildlife Program. Exclusions are discussed in detail in the Consideration of Impacts Under Section 4(b)(2) of the Act section of this rule.

(43) Comment: The MN DNR discouraged the Service from invoking participation in the Minnesota Prairie Conservation Plan (MPCP) to justify exclusion of land from critical habitat. The agency believes that the designation of critical habitat is concordant with a landowner's participation in the MPCP and, in many cases, will enhance the effectiveness and further the goals of the MPCP.

Our Response: The Service did not exclude any land from critical habitat designation based solely on participation in the Minnesota Prairie Conservation Plan.

(44) Comment: The MN DNR recommended that relief from regulatory restrictions be provided to private landowners within designated critical habitat, rather than exclusion from critical habitat under section 4(b)(2), such as those provided under section 10

of the Act. For example, the agency requested that the Service consider working with them and other stakeholders to develop habitat conservation plans and incidental take permits under section 10 of the Act to provide for a balance between prohibited and permitted activities, which may result in a strategy to accommodate beneficial management rather than excluding the land.

Our Response: The Service hopes to work with the State to develop ways to conserve the two butterfly species. See the Consideration of Impacts under section 4(b)(2) of the Act section of this final rule for a discussion of the lands that were excluded from final designations.

(45) Comment: The MN DNR recommends that areas with plans for restoration of severely degraded prairie should be considered as eligible for exclusion under section 4(b)(2) of the Act. This will necessitate that the Service draw an explicit distinction between prairie remnants requiring maintenance-level management and remnants requiring restoration-level management.

Our Response: To exclude areas from critical habitat, the benefit of exclusion of that land must clearly outweigh inclusion. The critical habitat designation focused on relatively high-quality native remnant prairie with limited areas of lesser quality habitat included as dispersal areas. Some degraded areas were considered for exclusions, for example, if they were part of a conservation agreement as described in the Consideration of Impacts under Section 4(b)(2) of the Act section of this rule. We did not, however, use degraded areas with plans for restoration as the sole basis for exclusion from critical habitat. Furthermore, several critical habitat boundaries were modified prior to our exclusion analysis to remove degraded areas from critical habitat due to the poor habitat quality. The Service will work with the MN DNR and other stakeholders to help identify varying habitat types and is looking forward to working with the MN DNR and others to develop methods and practices for restoring habitat for the two butterfly species.

Comments on the Section 4(d) Rule Related to Critical Habitat

(46) Comment: ND Game and Fish and ND State Department of Trust Lands stated that the list of counties in which the 4(d) rule did not allow take caused by grazing—Eddy, McHenry, Richland, Rolette, Sargent, and Stutsman—did not directly correspond to the list of counties in which critical habitat was proposed—McHenry, McKenzie, Ransom, Richland, Rolette, and Wells.

Our Response: We revised the 4(d) rule to exempt take caused by grazing throughout the range of the species, and not limited to certain counties. Thus, the final 4(d) rule exempts take of Dakota skippers caused by livestock grazing on all private, State, tribal, and other non-Federal (*e.g.,* county) lands, regardless of where critical habitat is designated.

Unit-Specific Comments

(47) Comment: The North Dakota State Department of Trust Lands requested that their land be removed from critical habitat, because cultivation on these lands is prohibited by the North Dakota State constitution. Due to this lack of cultivation, the Dakota skipper is still found on North Dakota School Trust Lands.

Our Response: Although cultivation is prohibited on these lands, we still conclude that the benefits of excluding these lands do not outweigh the benefits of including them as critical habitat as described in the Consideration of Impacts under section 4(b)(2) of the Act section of this rule. We will work with the North Dakota School Department of Trust Lands to conserve Dakota skipper habitat and hope to develop a mutually acceptable partnership with them.

(48) Comment: The North Dakota State Department of Trust Lands stated that Kentucky bluegrass is the dominant species in two of the four tracts of North Dakota trust land in McHenry County that were proposed as critical habitat. The third tract has been actively grazed, which has reduced the amount of Kentucky bluegrass, and the fourth tract is tallgrass prairie in good condition that had previously been hayed in the fall.

Our Response: The Dakota skipper has been consistently observed in all four of the units partially or entirely owned by the North Dakota State Land Department and was observed during 2012 surveys at all four units. In light of new ecological information, however, we have refined the boundaries of DS North Dakota Unit 3, and corrected a mapping error in North Dakota Unit 8 to better reflect Dakota skipper habitat.

(49) Comment: The North Dakota State Department of Trust Lands requested that the following counties be excluded from critical habitat for the Dakota skipper: Adams, Billings, Bowman, Burleigh, Dunn (southern), Emmons, Golden Valley, Grant, Hettinger, Logan Mercer, McIntosh, McKenzie (southern), Oliver, Sioux, and Slope. The commenter requested exclusion because these counties are not part of the historical range of the species, they do not contain suitable habitat, the cost of conducting surveys in these counties is significant, and their inclusion as critical habitat will cause significant economic harm.

Our Response: Of the counties listed in this comment, only one, McKenzie County, contains critical habitat for the Dakota skipper and Poweshiek skipperling. The economic analysis does not anticipate incremental impacts resulting from additional surveying efforts for the butterflies in the critical habitat areas in McKenzie County because all are considered occupied or of uncertain occupancy. Therefore, any surveying effort would likely occur with or without the critical habitat designation, as a result of the listing of the species. Dunn, McKenzie, and Oliver counties are within the range of the species and are included in the final listing determination, which was published on October 24, 2014 (79 FR 63671).

(50) Comment: The MN DNR stated that the Service should include Camden and Split Rock Creek state parks as critical habitat.

Our Response: We have considered Camden State Park and Split Rock Creek State Park for critical habitat, but neither meets our criteria as described in this final rule. Split Rock Creek State Park may, however, be important for recovery of the species.

Comments From Other Organizations

General

(51) Comment: Wild Earth Guardians, North Oakland Headwaters Land Conservancy, and The Nature Conservancy (TNC) in Minnesota, North Dakota, and South Dakota support the proposed rules to list and designate critical habitat for the Dakota skipper and Poweshiek skipperling as published in the proposed rule in the **Federal Register** of September 23, 2014. One organization asked for protection for all inhabited and uninhabited potential habitat under a critical habitat designation.

Our Response: We appreciate your support for the listing and critical habitat designations and look forward to working with our partners to conserve both species. The criteria for critical habitat are discussed in Criteria Used To Identify Critical Habitat section of this final rule. In brief, some areas did not meet these criteria, for example, if the habitat has been severely degraded and is no longer in a suitable condition to support the species. Areas not included in our designations may still be important for recovery of one or both

species as discussed in the Critical Habitat section of the rule.

(52) Comment: TNC commented that it was not clear exactly how the unoccupied sites are contributing to the long-term goals of the critical habitat and ultimately the recovery of the species. They encouraged the Service to further clarify its rationale for designating unoccupied sites as critical habitat and how that designation contributes to the long-term recovery goals for both species.

Our Response: Federal agencies must ensure that their activities do not adversely modify critical habitat to the point that it will no longer aid in the species' recovery. In many cases, this level of protection is very similar to that already provided to species by the ''jeopardy standard.'' However, areas that are currently unoccupied by the species, but which are needed for the species' recovery, are protected by the prohibition against adverse modification of critical habitat. Such unoccupied areas are rarely protected by the prohibition against jeopardizing the survival of the species. The importance of including unoccupied areas for recovery of one or both species is discussed in the Critical Habitat section of the rule.

(53) Comment: The American Petroleum Institute commented that the Service had not conducted the analysis required under the ESA to designate critical habitat and had not shown that critical habitat is determinable. They stated that absent important elements of the statutory analysis, the Service's proposed critical habitat designations are impermissible or, at a minimum, premature and unsupported. They further stated that this analysis cannot be made because the Service has yet to evaluate the economic impacts of the critical habitat designation.

Our Response: We have described how we determined critical habitat areas in detail in the Critical Habitat section of this final rule. In the Critical Habitat section of our proposed rule, published on October 23, 2013 (78 FR 63574), we discussed determinability. In brief, we reviewed the available information pertaining to the biological needs of the species and habitat characteristics where these species are located. This and other information represent the best scientific data available and led us to conclude that the designation of critical habitat is determinable for the Dakota skipper and Poweshiek skipperling. For critical habitat designations, the Service must consider the economic impacts of designating critical habitat and has done so for these two species. The draft economic report was made available for public review on September 23, 2014.

(54) Comment: One organization and one private citizen commented that the Service's suggestion that the Regulatory Flexibility Act (RFA), and case law thereunder, absolves the Service of its obligation to consider impacts of critical habitat designations misinterprets and misapplies the RFA and stands at odds with nearly every other critical habitat designation proposed by listing agencies. Private entities, including small businesses, can, and do, incur significant costs, which must be analyzed in the RFA. The requirement of an RFA is well-supported throughout the administrative record, and has been clearly established by other agencies, including the Small Business Administration's Office of Advocacy. The Service's suggestion that ''only Federal action agencies will be directly regulated by this designation'' is erroneous and unsupported by the record. An economic analysis required by section 4 of the ESA and the RFA must be completed.

Our Response: Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 (5 U.S.C. 801 *et seq.*), whenever an agency must 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 (small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of an 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. In this final rule, we are certifying that the critical habitat designation for the Dakota skipper and the Poweshiek skipperling will not have a significant economic impact on a substantial number of small entities. See the Consideration of Impacts under section 4(b)(2) of the Act section of this final rule for a discussion explaining our rationale.

(55) Comment: The ND Stockmen's Association asked what kind of expansion of critical habitat landowners might expect over time. They further asked about the process for designating additional habitat and how much time would be given to survey the species in question in order to determine whether an expansion is necessary before more land would be designated.

Our Response: We acknowledge that the Act authorizes the Service to make revisions to designated critical habitat. If, in the future, the best available information at that time indicates revision of critical habitat is appropriate, and if resources are available, we may revise this critical habitat designation. While the Service does not anticipate changing critical habitat for these two species at this time, if we determine that the critical habitat needs future revision, we would complete that revision through the rulemaking process, including publication of a proposed rule and comment period before the final ruling publication. Additional areas that may harbor thus far undocumented populations of one or both species may be important for recovery.

(56) Comment: The Society for Range Management stated that the comment period occurred in the winter when the landowners and other interested parties could not assess the proposed areas on the ground.

Our Response: On December 17, 2013, the Service announced plans to open an additional public comment period in 2014, once a draft economic analysis on the potential impacts of critical habitat became available. In that announcement, we stated that we would continue to accept comments via mail or hand delivery on the proposal for critical habitat and the proposal for listing between Dec. 23, 2013, and the close of the second public comment period. The second public comment period opened on September 23, 2014, and closed on October 23, 2014.

(57) Comment: The ND Stockmen's Association commented that the Service states that ''habitat is dynamic, and species may move from one place to another over time.'' The association asked if that is the case, then how can earmarking specific parcels as critical habitat be an effective strategy to conserve a species? This group noted that the Service also states that ''. . . critical habitat at a particular point in time may not include all of the habitat areas that we later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal habitat outside the designated area is unimportant or may not be needed for the recovery of a species.'' These statements do not give landowners assurance that these proposals will be effective and do not encourage landowner cooperation, especially when critical habitat designations will affect

their ability to manage their property as they see fit.

Our Response: The purpose of this statement is to recognize that there may be other lands, outside of designated critical habitat areas, that may be important to conserve and recover the species.

(58) Comment: The North Dakota Stockmen's Association requested clarification on whether the polygons on the maps delineate critical habitat or whether the entire county is designated as critical habitat. They further commented that Eddy and Stutsman Counties in North Dakota are on the list for inclusion as critical habitat, yet neither is included in the mapped areas.

Our Response: Critical habitat areas are specific geographic regions identified in the maps in this final critical habitat rule, not the entire counties. There are no areas designated as critical habitat in Eddy County or Stutsman County, North Dakota. Unit-specific textual descriptions are available online at *http://www.fws.gov/midwest/Endangered/insects/dask.*

(59) Comment: The North Dakota Farmer's Union stated that landowners were notified by mail just prior to publication of the proposed rules. The organization further stated that the Service should have contacted landowners months prior to publication so they could develop a candidate conservation agreement that would allow landowners to voluntarily commit to conservation actions that would help stabilize or restore these species, thereby eliminating the need for listing.

Our Response: The Service acknowledges the importance of landowner cooperation in conserving the Dakota skipper and Poweshiek skipperling. As discussed in conservation measures of Factor A of the final listing rule (published in the **Federal Register** on October 24, 2014), the Service and other conservation agencies have recognized the need to address the status of prairie butterflies for more than 30 years beginning with a 1980 workshop held to initiate studies of Dakota skippers and other prairie butterflies. The Service funded management activities intended to benefit the Dakota skipper, including habitat management, landowner education on conservation practices, and prairie vegetation restoration. As described in detail in the Previous Federal Actions section of the proposed listing rule (78 FR 63574), the Service determined that the Dakota skipper met the definition of a candidate species in 2002 (67 FR 40657). By making the species a candidate, the Service was signaling that we believed the species warrants listing and were awaiting funding and resources to proceed with that listing. Similarly, the Service identified the Poweshiek skipperling as a candidate species, with a listing priority number of 2, in a notice of review published in the **Federal Register** on October 26, 2011 (76 FR 66370). As part of our annual Candidate Notice of Review process, both species were subsequently reevaluated each year to determine if we believed they still warranted listing, up until the time we proposed them for listing. Those annual reevaluations were published in the **Federal Register**, and thus were publicly available.

(60) Comment: Delta Waterfowl commented that, when the Service is considering the designation of critical habitat, special consideration should be given to landowners who are involved in any conservation effort via conservation agreement, easement, grazing system, or other action with the Service, conservation organizations, U.S. Department of Agriculture—NRCS or other recognized conservation or agricultural entities.

Our Response: Landowners deserve credit for their stewardship, and we want to encourage their management practices that support the butterflies. We have excluded some areas that are covered by conservation partnerships that provide a conservation benefit to Dakota skipper or Poweshiek skipperling from final critical habitat designation in this rule. See the Consideration of Impacts under section 4(b)(2) of the Act section of the preamble of this final rule for more details on these easements and the benefits of excluding these areas.

Economic Concerns

(61) Comment: The North Dakota Farmers Union stated that due to the historical loss of native mixed-grass and tallgrass prairie in Iowa, Illinois, and Indiana, a disproportionate share of the survival of these butterflies is dependent upon remaining native prairie habitat in North Dakota and South Dakota, which places an unfair burden on landowners in those States. Native prairie in North Dakota is predominantly used for livestock grazing—the sole source of income and livelihood for ranchers, as well as those who hold grazing contracts on Federal land. The Farmers Union further stated that, to curb livestock grazing, haying, and other practices on critical habitat would devastate ranching operations.

Our Response: The Service acknowledges the importance of landowner cooperation in conserving the Dakota skipper and Poweshiek skipperling. For this reason, the Service published a 4(d) rule that exempts incidental take by routine grazing activities for Dakota skipper on October 24, 2014 (79 FR 63671). Proposed projects in areas where one or both species may be present or on designated critical habitat that have a Federal nexus (in other words, projects that are funded, authorized, or carried out by a Federal agency) will be required to undergo consultation with the Service under section 7 of the Act. We suggest that action agencies contact the Service's Ecological Services Office in their State if they are planning an activity with a Federal nexus that may affect the species or its critical habitat. 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 notice of availability of the draft economic analysis was published in the **Federal Register** on September 23, 2014.

(62) Comment: The North Dakota Farmers Union commented that critical habitat for the Poweshiek skipperling will encompass 283 acres of Federal land in North Dakota, and, if it is listed as an endangered species, no grazing will be allowed on this land. The Farmers Union stated that this is especially disconcerting for livestock producers if habitat is expanded to include private land.

Our Response: We have refined the boundaries of some units in North Dakota based on new information. Critical habitat for the Poweshiek skipperling is now two units in North Dakota, for a total of approximately 166 ac (67 ha). Although the Poweshiek skipperling may still be present in these areas, that likelihood is low, and we are considering the units to be unoccupied at the time of listing. Therefore, Federal activities in unoccupied units that may affect the Poweshiek skipperling will need to undergo consultation under section 7 of the Act, but we do not anticipate that grazing will be prohibited on those Federal lands.

(63) Comment: The North Dakota Farmers Union questioned the need to designate critical habitat for the Poweshiek skipperling since it has not been found in North Dakota, according to the information presented by Service at the public meeting in North Dakota. Designating three units of Federal land for recovery of the Poweshiek skipperling could seriously impact the economics of ranching and farming operations in North Dakota.

Our Response: As presented at the public meeting in November 2013, the Service is aware of 18 locations in North Dakota where the Poweshiek skipperling has been recorded. The Poweshiek skipperling was last observed in North Dakota in 2001; however, we are unaware of any surveys for the species between 2003 and 2011. The species was not detected at 4 North Dakota sites with previous records that were surveyed in 2012 or at 5 additional North Dakota sites with previous records that were surveyed in 2013. The Service can designate critical habitat occupied at the time of listing and in unoccupied areas, and has done so for the Poweshiek skipperling, for instance, at two locations in North Dakota, where the species may no longer be present. The importance of unoccupied areas is discussed in detail in the Critical Habitat section of this rule. Critical habitat for the Poweshiek skipperling now comprises two unoccupied federally owned units in North Dakota. In these units, only Federal activities will need to undergo consultation under section 7 of the ESA, if those activities may affect the Poweshiek skipperling critical habitat. The economics of these consultations is discussed in the draft economic analysis, the notice of which was published in the **Federal Register** on September 23, 2014, but we do not expect designation of 166 acres of Federal land as Poweshiek skipperling critical habitat in North Dakota will seriously impact the economics of ranching and farming operations in North Dakota.

(64) Comment: Several organizations and individuals commented that the critical habitat designation would restrict private property rights and have economically significant ramifications, particularly for livestock producers. They further expressed that the threat of being subject to additional government requirements could be enough to encourage the conversion of these lands to other uses. They commented that designating critical habitat for the two butterflies will result in regulatory takings of an individual's livelihood and, ultimately, his or her property.

Our Response: As stated in our proposed rule, the Service has followed Executive Order 12630 (''Government Actions and Interference with Constitutionally Protected Private Property Rights''). The designation of critical habitat is not anticipated to have significant takings implications for private property rights. As discussed in the Critical Habitat section of this final rule, the designation of critical habitat affects only Federal actions. Critical habitat designation does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation plans or issuance of incidental take permits to authorize actions that require permits. Due to current public knowledge of the species' protections and the prohibition against take of the two species both within and outside of the proposed areas, we do not anticipate that property values would be affected by the critical habitat designation. Our economic analysis for proposed critical habitat designation found only limited incremental impacts of the designation and small impacts on activities on private lands. The notice of availability of the draft economic analysis was published in the **Federal Register** on September 23, 2014.

(65) Comment: Several private citizens noted that the designation of critical habitat will lead to a decrease in the value of privately owned land. They further stated that the designation would place restrictions on the landowner's ability to subdivide and sell the land.

Our Response: We have considered this and have provided a supplemental data memorandum available online at (*http://www.fws.gov/midwest/Endangered/insects/dask/pdf/TwoButterfliesPerceptionEffectsMemo8Sept2014.pdf*) supporting the conclusion that the designation of critical habitat for the two butterflies is unlikely to reach the threshold of an economically significant rulemaking, with regard to costs, under Executive Order (E.O.) 12866. The supplemental memorandum specifically concludes that public perception regarding land use restrictions does not result in land value reductions approaching this threshold when perception effects are combined with the other incremental costs that could result from designation of critical habitat for the two butterflies. The draft economic analysis discusses public attitudes about the limits or restrictions that critical habitat may impose, which can cause real economic effects to property owners, regardless of whether such limits are actually imposed (stigma effects). As the public becomes aware of the true regulatory burden imposed by critical habitat, the impact of the designation on property markets may decrease. Thus, although stigma impacts may occur when critical habitat is first designated, and may be a real concern to landowners, research shows those impacts should be temporary.

Regulatory Concerns

(66) Comment: Minnkota Power Cooperative commented that emergency response events due to storms or other causes demand that we be able to react quickly to restore damaged systems (*e.g.*, transmission lines) without delay.

Our Response: Rain and snow storms may be considered a disaster or an act of God under section 7 of the Endangered Species Act (50 CFR 402.05). Therefore, consultation under section 7 may be required only if there may be an effect to a listed species or its critical habitat resulting from activities that have occurred during or immediately following an emergency situation. We suggest contacting your State's Ecological Services office to discuss typical actions taken during emergencies that may affect a species or its critical habitat.

Management Concerns

(67) Comment: The Society for Range Management commented that listing and critical habitat designation in North Dakota will have a negative effect on the conservation of native grasslands. They further stated that conservation and management plans are a viable option to maintaining and improving native grasslands in North Dakota and that management of native grasslands is essential to maintaining their ecological integrity. The Society indicated that threats to native grasslands not only include conversion to cropland but also detrimental invasive plants such as leafy spurge, Kentucky bluegrass, and smooth brome, and that control of these species can only be provided by the ranchers who are also the reason that the Dakota skipper population has remained stable in North Dakota.

Our Response: We agree that conservation of Dakota skipper populations relies on careful implementation of management practices that conserve its habitat while minimizing adverse effects. Landowners deserve credit for their stewardship, and we want to encourage their management practices that support the butterflies.

(68) Comment: The Basin Electric Cooperative stated that the large amount of the proposed critical habitat for the Dakota skipper and Poweshiek skipperling is either private or State-owned land. They encouraged the Service to work with States and private landowners to preserve habitat and to educate private landowners on best practices, particularly regarding grazing, as this would greatly benefit both species. Furthermore, they stated that industry-specific agencies and groups may have greater access to farmers and ranchers and may be able to provide insight into the most effective way to educate private landowners.

Our Response: We agree that education regarding the practices to maintain and enhance those habitats through grazing or other measures is a crucial part of endangered species conservation. The Service has been working with private landowners to encourage conservation and will continue to do so.

Exclusion Comments

(69) Comment: The South Dakota Chapter of the Wildlife Society commented that, due to the importance of private lands to the recovery of these species, the Service should consider potential concerns from private landowners with lands proposed for critical habitat designation. Many of the landowners with lands proposed for critical habitat are already engaged as conservation partners through agreements with the Service, Natural Resources Conservation Service, or Farm Services Agency and we encourage the Service to use those existing partnerships as you weigh the benefits of excluding parcels of land in the final designation. However, others may be less familiar with opportunities to work cooperatively with the Service. The organization recommends that the Service exercise maximum flexibility when considering requests for critical habitat exclusions.

Our Response: We have repeatedly contacted private landowners who own land within the boundaries of proposed critical habitat and specifically requested their input on any conservation plans, programs, or partnerships in place on any or all of their land, if a critical habitat designation would change how any of those plans, partnerships, or agreements were implemented, and if they had any other comments on potential impacts of critical habitat designations on their property. As discussed in detail in the Consideration of Impacts under section 4(b)(2) of the Act section of this rule, we are excluding some areas that are covered by a variety of conservation plans and partnerships that provide a conservation benefit to Dakota skipper or Poweshiek skipperling.

Primary Constituent Elements

(70) Comment: The South Dakota Chapter of the Wildlife Society commented that Primary Constituent Element (PCE) 3 for Dakota skipper and PCE 4 for Poweshiek skipperling deviate significantly from what is described in the listing rule as important habitat for both species. PCE 3 for Dakota skipper and PCE 4 for Poweshiek skipperling describe dispersal habitat that would be designated as critical habitat even though such areas may be entirely composed of nonnative grasslands or previously plowed ground. Since native prairie with a quality forb component is the key habitat needed for these species, we encourage the Service to rethink whether designation of tracts of invasive nonnative grass species should be included as critical habitat for these species. There is not good documentation provided in the proposed rule that invasive nonnative grasslands provide good dispersal habitat for these butterfly species and, therefore, if the Service chooses to designate such areas as critical habitat, we recommend providing additional documentation that nonnative grasslands really provide an essential habitat for these species versus just an occasional or theoretical dispersal corridor.

Our Response: During mapping of critical habitat areas, those areas suitable for dispersal were kept to a minimum amount of land to connect two or more good or better quality native prairies. Several dispersal areas have been excluded from our designations including 252 ac (102 ha) of dispersal habitat at DS North Dakota Unit 3, a total of 425 ac (172 ha) at PS South Dakota Unit 3B, and 156 ac (ha) at DS North Dakota Unit 5. The largest area of dispersal habitat in the designation is approximately 160 ac (65 ha). There are no critical habitat units that consist solely of PCE 3 for Dakota skipper and PCE 4 for Poweshiek skipperling. These corridors are essential to connect areas of higher quality habitat.

(71) Comment: The South Dakota Chapter of the Wildlife Society commented that, if the Service chooses to include dispersal habitat as critical habitat between two or more tracts of property, at least one of the tracts should actually be occupied by the species. In the proposed critical habitat rule there are numerous tracts of private land proposed as dispersal critical habitat that connect only unoccupied parcels of native prairie. The commenter questioned designation of dispersal critical habitat on private lands between other unoccupied parcels when there is no plan to attain occupancy on those parcels.

Our Response: Some of the lands we are considering to be ''unoccupied'' for critical habitat analyses have actually had very recent records of the species but have had only 1 or 2 years of negative surveys (no detections during the survey season). So, even though the Service has analyzed them as if they are unoccupied for the purposes of determining if the areas were essential for conservation of the species, there is still a reasonable chance that populations exist in those ''unknown'' areas. In our designation, there are 12 Poweshiek skipperling units and 7 Dakota skipper units with dispersal areas that connect higher quality native prairies. For Dakota skipper, most dispersal areas connect native prairies where the species was observed in 2012, so there is a reasonable chance that the species exists at those locations. In addition, two units had dispersal areas connecting native prairies with slightly older records (2008 and 2006). The Dakota skipper unit with an older record (1997) of the species is largely under Federal ownership (111 ac), with some State (6 ac) and private (2 ac) ownership. The private land is largely in a railroad right-of-way and serves as dispersal habitat. Eight of the 12 Poweshiek skipperling units with dispersal habitat have records in 2005 or more recently, so there is a reasonable chance that the species may exist at some of those locations as well. Many of the private areas in these units have been excluded (see our Consideration of Impacts under section 4(b)(2) of the Act section of this rule for details on exclusions). For the four other units, one is entirely owned by The Nature Conservancy, and three have some private land (<72 ac). One of these units overlaps entirely with the Dakota skipper unit described above with the railroad right-of-way. The private land at one of the two remaining Poweshiek skipperling units consists of about 28 ac (11 ha) of native prairie and 43 ac (17 ha) dispersal habitat. The 22 ac (9 ha) of private land in PS Minnesota Unit 11 is purely dispersal area. Since dispersal areas (*e.g.*, previously tilled areas, areas dominated by nonnative species, etc.) are not suitable for larval growth, the dispersal areas are only utilized during the adult flight period. Therefore, the likelihood of take of the species outside of June or July would be highly unlikely. Only those projects or actions that occur in areas where the butterflies may be present or on designated critical habitat and that have a Federal nexus (in other words, funded, authorized, or carried out by a Federal agency) must undergo consultation with the Service under section 7 of the Act. In such cases, it is the responsibility of the Federal agency involved to complete the consultation.

(72) Comment: The South Dakota Chapter of the Wildlife Society commented that critical habitat designations of unoccupied habitat on non-Federal lands are likely to make future reintroductions or translocations

much more difficult because of potential landowner opposition resulting from critical habitat designation without consent.

Our Response: See our response to the previous comment regarding unoccupied lands. To maintain conservation partnerships with private landowners, we have excluded many parcels of private land due to existing conservation efforts (see Consideration of Impacts under section 4(b)(2) of the Act section of this final rule). Property owners are often willing partners in species recovery, however, some property owners may be reluctant to undertake activities that support or attract listed species on their properties, due to fear of future restrictions related to the Act. There are tools available to address this concern, such as a safe harbor agreement (SHA) that provides assurances to participating landowners that future property use restrictions will not occur. SHAs are intended to provide a net conservation benefit that contributes to the recovery of the covered species. We recommend that landowners who are interested in conservation partnerships discuss opportunities with the Service Ecological Services Field Office in their State.

Criteria for Critical Habitat

(73) Comment: One commenter suggested that the Service's methodology for classifying occupancy for purposes of identifying critical habitat for recovery is well supported. Given the difficulties of detecting these small butterflies most observable in the brief period per year when they are in the adult life stage, a conservative approach is justified. The timing of the adult flight period and the species' abundance varies greatly among years, due to climatic variation. At least 3 years of surveys are needed before an area should be considered extirpated. Furthermore, those 3 years of surveys need to be detailed efforts per survey, with multiple dates of surveys per year.

Our Response: Thank you for your comment. We agree that multiple dates of surveys per year are desired to verify non-detection of the species in a given year. We have added language to clarify that point in the Background section of this final rule as well as the final listing rule published on October 24, 2014 (79 FR 63671).

(74) Comment: The Nature Conservancy in Minnesota, North Dakota, and South Dakota stated that while all the sites designated as critical habitat were based on current or very recent occupancy, inventory work leading to the identification of those sites in the past has been sporadic and not comprehensive. Not all potential habitat was surveyed, and the inventory work that was done tended to focus on the same easily accessible prairie tracts. Restricting critical habitat to only the tracts inventoried may miss other potentially suitable habitat. A landscape analysis identifying areas of suitable habitat based on the description of physical and biological features necessary to support both species as described in the proposed critical habitat would strengthen the justification and objectivity for critical habitat designations.

Our Response: We agree that there has not been a range-wide systematic sampling design implemented to identify new locations of the Dakota skipper and Poweshiek skipperling. The search for additional potential locations of both species has been conducted using a variety of different approaches over the years and potential sites have been narrowed down on the landscape by examining topographic and aerial maps, State natural heritage habitat mapping data, aerial surveys, roadside surveys, and other methods. Other sites have been surveyed due to a proposed project and the potential for suitable habitat in the area or proximity to other known locations of one or both species. Many sites are repeatedly surveyed in order to understand long-term trends in the presence of the species or to quantify other population parameters. Although only a small fraction of all grassland in North Dakota, South Dakota, and Minnesota has been surveyed for Dakota skippers, a significant proportion of the unsurveyed area is likely not suitable for Dakota skipper. For example, the species was never detected at approximately 108 additional locations in North Dakota that were surveyed for the species from 1991 through 2013 (USFWS 2014, unpubl. geodatabase). Similarly, in South Dakota and Minnesota, 79 and 148 additional locations, respectively, were surveyed for the species from 1991 through 2013 (USFWS 2014, unpubl. geodatabase). Many of these sites have been surveyed multiple times over several years. Surveys for the Dakota skipper are typically conducted only in areas where floristic characteristics are indicative of their presence. New potential sites surveyed are generally focused on prairie habitats that appear suitable for the species and have a good potential of finding the species; in other words, sites are not randomly selected across the landscape. Therefore, these sites have a higher likelihood of detecting the species than at sites randomly selected across the landscape. Based on these surveys, the likelihood that significant numbers of undiscovered Dakota skipper populations occur in North Dakota, South Dakota, and Minnesota is low. Likewise, the likelihood that significant numbers of undiscovered Poweshiek skipperling populations occur in its range is low. We acknowledge that there may be some undiscovered populations and additional areas of suitable habitats, however, and are starting to explore the potential of using spatially explicit modeling to develop probability occurrence maps of both species to help direct future surveys and conservation efforts.

(75) Comment: The Nature Conservancy in Minnesota, North Dakota, and South Dakota supported the Service's justification for why representation, redundancy, and resiliency are important for conservation of species. While good evidence is presented as to how the sites proposed as critical habitat provide good redundancy across the species' historic geographic ranges, evidence that these areas will be sufficient to support viable populations of butterflies long term is lacking. They further encouraged the Service to make explicit the rationale for critical habitat designation and the goals of critical habitat designation. A spatially explicit population viability analysis would be a valuable addition to the information provided and would help provide clarity to the need for designating critical habitat in unoccupied areas. Data or evidence to suggest that currently occupied habitat is insufficient or that the current portfolio of occupied and unoccupied sites is sufficient would strengthen the case for designating all the sites as critical habitat.

Our Response: We are interested in potentially utilizing spatially explicit population viability analysis as a tool for determining important recovery areas in addition to our designated critical habitat units, to help support viable populations of butterflies into the future. To conduct this type of analysis, it will be important to gather additional population demography and habitat data. For the long term, for example, it would be important to have models that predicted response of prairie remnant habitats to climate change and other landscape-level stressors. The rationale and importance of critical habitat designation is discussed in the Critical Habitat section of this rule.

(76) Comment: The South Dakota Chapter of the Wildlife Society stated that areas that have never been surveyed

for the butterflies can be considered occupied if near occupied areas, but within a critical habitat unit comprising multiple landowners, there can be wide disparity between management practices among owners that can heavily influence occupancy. Therefore, they encouraged the Service to revise the idea of identifying private lands within a critical habitat unit as occupied if those private lands have not been surveyed or surveyed within the last 3 to 5 years. Furthermore, they encouraged the Service to identify within the Dakota skipper critical habitat units which tracts were found to be occupied rather than assigning occupancy to the entire unit. For example, in extreme cases, surveys dating to 1993 and conducted on a Federal land parcel could be used to assign occupancy onto private lands that have never been surveyed and then propose those private lands for designation as occupied critical habitat. The organization stated that this level of overreach, to assert Dakota skipper occupancy onto unsurveyed private lands, will likely make the partnerships needed for reintroductions or translocations much more difficult.

Our Response: There are five Dakota skipper critical habitat units which we analyzed as unoccupied that do not have recent records (since 2002). Two of the five Dakota skipper units have portions owned by private citizens, totaling 21 acres (8 ha). Since the Dakota skipper has an estimated maximum dispersal of about 1 km (0.8 mi) during its adult flight period, we assume that the butterfly could move across ownerships unless there was a barrier to dispersal. When determining if areas were suitable for inclusion in our designations, we closely examined the land using aerial photography interpretation coupled with recent on-the-ground information that was provided to us. Although we did these analyses using only biological and ecological information (without looking at landownership), it was usually very clear from the aerial photographs, when land was managed in ways that were not conducive to the species. Unless those areas provided dispersal areas between two high-quality native remnant prairies, those areas were not included in our designations.

Unit-Specific Comments

(77) Comment: Several organizations and private citizens provided suggestions for specific revisions to some units.

Our Response: We have considered the comments and made revisions as appropriate, based on our analysis.

(78) Comment: Several organizations and private citizens suggested that certain units be excluded from critical habitat.

Our Response: We have considered the comments and made revisions as appropriate, based on our analysis.

(79) Comment: The Michigan Nature Association (MNA) commented that the prairie fens in Michigan, which contain the remaining Poweshiek skipperling populations, are dependent upon functional fen hydrology. The high quality of these fen communities relies on consistent groundwater input and their related groundwater recharge areas. MNA stated that the critical habitat designated areas do not appear to address this hydrological component of the prairie fen dynamic or be at a scale that can address the hydrology of these fens, which is critical to maintaining the species.

Our Response: We recognize the importance of maintaining functional hydrology in prairie wetlands, particularly prairie fens in Michigan. This is further discussed in the Habitats Protected from Disturbance or Representative of the Historical, Geographic, and Ecological Distributions of the Species section of this final rule. Primary Constituent Element 2d directly states that the prairie fens require functional hydrology necessary to maintain fen habitat, which will be considered during section 7 consultations for projects on critical habitat with a Federal nexus. We are interested in working with hydrologists during recovery planning and implementation for these species.

Public Comments

General

(80) Comment: One commenter requested that the Service post the two internal Service documents that are cited in the proposed ruling.

Our Response: The Service's databases were referenced several times within the document (*e.g.*, USFWS 2014, unpublished geodatabase). These databases were built using hundreds of sources, including unpublished reports, published papers, and State heritage data. We referenced these databases in the proposed and final critical habitat document in places where we summarized data across many sources. Those sources, listed in the literature-cited supporting document, are available upon request from the Twin Cities Field Office.

(81) Comment: One commenter stated that it is more appropriate to use public lands, rather than private lands, to protect the Poweshiek skipperling. This reviewer supported the protection of the species as long as doing so does not restrict the life, liberty, and pursuit of happiness of private citizens.

Our Response: The Service considers physical and biological features needed for life processes and successful reproduction of the species, regardless of ownership, when proposing critical habitat areas. That analysis revealed that some of the most important areas for Poweshiek skipperling are on private lands. However, 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 notice of availability of the draft economic analysis was published in the **Federal Register** on September 23, 2014—the economic analysis examined the economic effects of critical habitat designations. In addition, we recognize the importance of maintaining conservation partnerships with landowners who have been participating in various programs, such as conservation easements that prevent cultivation of native grasslands, and have excluded those areas from this final designation. Conservation easements that prevent cultivation of native grasslands provide essential protections against this most basic and severe threat to the habitats of Dakota skipper and Poweshiek skipperling. See the Consideration of Impacts Under Section 4(b)(2) of the Act section of this final ruling for further details. Proposed projects in areas where one or both species may be present or on designated critical habitat that have a Federal nexus (in other words, funded, authorized or carried out by a Federal agency) will be required to undergo consultation with the Service under section 7 of the Act.

(82) Comment: A few individuals asked why the public, and specifically, affected land owners, were not informed of the proposed critical habitat earlier in the process.

Our Response: We notified landowners once we analyzed our information and developed the proposed rule. We were only able to notify landowners after the analysis was completed.

(83) Comment: One individual commented that many of the proposed critical habitat tracts appear to be those areas where private landowners allowed surveyors to search for these butterflies. Its seems like the Service is now penalizing those landowners, who in

the past cooperated with butterfly surveyors, by now proposing, without their permission, their private lands as critical habitat. The perception that the Service targeted those landowners who granted permission for surveys to propose their lands is very real and potentially damaging to the Service's brand. The commenter stated that, for the sake of good Service programs and the butterflies, the Service should address this in the final rule and be deferential to the wishes of landowners who protected habitat for these butterflies and allowed surveys.

Our Response: The Service acknowledges the importance of landowner cooperation in conserving the Dakota skipper and Poweshiek skipperling. Landowners deserve credit for their stewardship and permission to allow surveys, and we want to encourage their management practices that support the butterflies. Some landowners responded to the proposed designation of critical habitat on their lands by refusing permission to conduct surveys for Dakota skipper. In 2014, for example, about half of the private landowners in North Dakota who had allowed access for surveys before the Service had proposed their land as critical habitat refused permission to the Service's contractor to access the site (Royer *et al.* 2014, p. v). We think that excluding lands covered by certain conservation plans from the final critical habitat designation will increase the likelihood that we will find the number of cooperative landowners that we will need to recover the species. For more information on which private lands were excluded, see the Consideration of Impacts Under Section 4(b)(2) of the Act section of this final rule.

(84) Comment: The Service's definition of occupied critical habitat includes areas that have never been surveyed for these butterflies and instead relies upon surveys going back up to 20 years on nearby lands where the butterfly was found. That is then used as a reason to declare nearby private lands as occupied. This process is inappropriate and does not take into account the different management that can occur on private land tracts that can impact butterfly presence. This situation is not a good way to develop partnerships or promote endangered species conservation. The commenter recommended that the Service modify the definition of occupied critical habitat to require surveys that actually located the species on a tract of land within the last 3 years. Landowners who have cooperated by allowing surveys and doing conscientious management to keep Dakota skippers present should not be penalized with critical habitat designations unless they contact the Service and indicate their willingness to be included in critical habitat.

Our Response: Most units that are considered occupied by the Dakota skipper for purposes of this designation have very recent records (2002 or more recently), with only a few exceptions. In areas without recent records or butterfly surveys, recent habitat evaluations (2010–2013) have confirmed the presence of suitable habitat.

(85) Comment: One commenter wanted to know who was out in Critical Habitat Unit 12 to survey for butterflies.

Our Response: Butterfly surveys in North Dakota and elsewhere were conducted by qualified surveyors with sufficient experience to identify the species and their habitats. Survey reports are cited in this final ruling and the final listing rule, published on October 24, 2014.

(86) Comment: One commenter wanted to know if they could get the aerial photography of the butterflies.

Our Response: The aerial photography we referred to in our proposals and this final designation is taken at a scale (approximately 1:1,000,00 to 1:6,000) that is unsuitable for detecting individual butterflies, instead, aerial photography is used for examining habitat. We conducted aerial photograph interpretation using the National Agriculture Imagery Program (NAIP) aerial imagery, which was acquired during the 2010–2011 agricultural growing seasons, to draw and refine polygons around areas that contain the physical or biological features essential for the conservation of the species. County-specific NAIP aerial imagery that we used is available upon request from the Twin Cities Field Office (See **FOR FURTHER INFORMATION CONTACT**). Regularly updated aerial imagery is publically available at *http://www.arcgis.com/home/webmap/viewer.html?webmap=c1c2090ed8594e0193194b750d0d5f83.*

Economic Concerns

(87) Comment: One individual asked to be provided a copy of the critical habitat economic analysis when it becomes available for public review. In South Dakota, land that is designated as critical habitat is likely to be valued differently (lower) than a tract of similar land not so designated because future prospective buyers of that property will be wary of the Endangered Species Act. Thus, the commenter stated that if a landowner wants to sell land that is designated as critical habitat, they are likely to receive less money for that land than other non-encumbered similar land. It will be important for the economic analysis to consider property devaluation/resale value and incorporate it into the economic impact analysis being conducted.

Our Response: We announced the public availability of the economic analysis on September 23, 2014, and sent copies of the news release and links to the draft economics memorandums to each private landowner within proposed critical habitat areas. We also made publically available a separate memorandum that analyzed the land value issue. See the Supplemental Information on Land Values—Critical Habitat Designation for the Dakota Skipper and Poweshiek Skipperling regarding perceptions of monetary value of property designated as critical habitat. The draft Screening Analysis of the Likely Economic Impacts of Critical Habitat Designation for the Dakota Skipper and Poweshiek Skipperling and the Supplemental Information on Land Values—Critical Habitat Designation for the Dakota Skipper and Poweshiek Skipperling became publically available on September 23, 2014, at *http://www.fws.gov/midwest/Endangered/insects/dask/pdf/TwoButterfliesScreeningMemo8Sept2014.pdf* and *http://www.fws.gov/midwest/Endangered/insects/dask/pdf/TwoButterfliesPerceptionEffectsMemo8Sept2014.pdf.*

(88) Comment: One commenter stated that the critical habitat designation is not overly prohibitive to economic development.

Our Response: The Service agrees with this statement. As summarized in the draft economic analysis screening memo released on September 23, 2014, the Service does not anticipate significant impacts as a result of this critical habitat designation.

(89) Comment: One individual commented that, because the proposed critical habitat units would not be protected preserves, per se, development and agriculture could still exist on them. Practices would be limited in order to ensure the conservation of the species, but by and large, previous uses of the land could continue. This provides an economically conscious compromise for all parties. Locations with large amounts of industrial development are not included in the designations, which lessens the economic burden.

Our Response: The commenter is correct that critical habitat designations do not equate to a preserve. Federal agencies are required to consult with the Service when a project they are funding, permitting, or working on is likely to

affect the species for which critical habitat is designated.

(90) Comment: One individual stated that, even though some lands proposed for critical habitat may be occupied at the present, it appears that many critical habitat tracts that the Service thinks are occupied by Dakota skipper now may not be so in the near future based on the information in the proposed rule for Minnesota and Iowa. The commenter wanted to know how the Service would evaluate the economic impacts of critical habitat for lands that shift from occupied to unoccupied status.

Our Response: The occupancy status of the critical habitat units is that at the time of listing, which occurred on October 24, 2014. We suggest you contact the Service's Ecological Services Field Office in your State to determine whether or not the species may or may not be present. Projects with a Federal nexus, proposed in unoccupied critical habitat areas, will need to undergo consultation under section 7 of the Act.

(91) Comment: An individual commented that they and the individual's family has maintained one of the two best examples of a natural fen in the world for the past 52 years. There is no assistance with taxes, trespassers, land quality maintenance, or treachery, and there are no protections afforded a land owner from fraudulent claims of eminent domain. The commenter wanted to know what is the benefit of supporting this initiative, what would this do to the family's ability to sell or otherwise use this land, and what assistance is available to mitigate the tax burden.

Our Response: Landowners deserve credit for their stewardship, and we want to encourage their management practices that support the butterflies. We are unaware of a tax burden that would affect private property designated as critical habitat. The Service and other conservation agencies may purchase property from willing sellers, and we recommend you contact your State's Ecological Services Field Office to discuss further opportunities.

(92) Comment: One individual wondered why a potential buyer would purchase a parcel inside of designated critical habitat when it would be easier to purchase land outside of designated critical habitat and avoid Federal permitting.

Our Response: A critical habitat designation generally has no effect on situations that do not involve a Federal agency—for example, a private landowner undertaking a project that involves no Federal funding or permit. Although stigma impacts may occur when critical habitat is first designated, and may be a real concern to landowners, research shows those impacts should be temporary.

Regulatory Concerns

(93) Comment: One individual asked what happens to areas designated as critical habitat when they are no longer occupied. Specifically, do regulatory restrictions still apply? Why or why not?

Our Response: The occupancy status of the units is that at the time of listing, which occurred on October 24, 2014. While the occupancy status may change over time based on new survey information, the critical habitat designations would remain in effect until the species is taken off the endangered species list or revisions to the critical habitat designations are published in the **Federal Register** as part of a new rulemaking process.

(94) Comment: A commenter asked if critical habitat designations would affect, slow down, or complicate a landowner's ability to get loans from banks or Federal agencies that loan money to landowners to operate their ranches or start up new economic endeavors on their private lands.

Our Response: Proposed projects in areas where one or both species may be present or on designated critical habitat that have a Federal nexus (in other words, funded, authorized, or carried out by a Federal agency) will be required to undergo consultation with the Service under section 7 of the Act. In those instances, the action agency would contact the Service's Ecological Services Field Office in their State if they are planning an activity with a Federal nexus that may affect the species or its critical habitat. For more information about section 7 consultations, visit the Service's Web site (*http://www.fws.gov/endangered/what-we-do/consultations-overview.html*). 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. Notice of availability of the draft economic analysis was published in the **Federal Register** on September 23, 2014.

(95) Comment: One commenter wondered if critical habitat designations would affect or slow down FEMA or other Federal agencies' ability to deliver services to landowners.

Our Response: Emergency services would not be delayed by critical habitat designations. Section 7(a)(2) of the Act requires Federal agencies to consult with the Service to ensure that actions they fund, authorize, permit, or otherwise carry out will not jeopardize the continued existence of any listed species or adversely modify designated critical habitat.

(96) Comment: One individual stated that the critical habitat designation makes normal use of land subject to violation of Federal laws. The commenter stated that he hikes across the land to access portions of his property, uses it for deer hunting, and controls beaver dam water levels. The commenter questioned whether any of these activities is potentially a violation of Federal law if conducted within critical habitat.

Our Response: Only activities that involve a Federal permit, license, or funding, and are likely to destroy or adversely modify the area of critical habitat will be affected. The activities the commenter mentions do not have a Federal nexus and are not likely to adversely affect Dakota skipper or Poweshiek skipperling habitat.

Management Concerns

(97) Comment: One commenter asked if pesticides and herbicides can be used on the critical habitat areas if occupied and if they can be used on unoccupied areas.

Our Response: Pesticides and herbicides can be used according to their labels in occupied and unoccupied critical habitat areas, however, the Environmental Protection Agency (EPA) sets forth geographically specific pesticide use limitations for the protection of endangered or threatened species and their designated critical habitat.

(98) Comment: One individual wondered if the EPA or pesticide labels restrict use of certain pesticides in critical habitat areas.

Our Response: Endangered Species Protection Bulletins are a part of EPA's Endangered Species Protection Program. Bulletins set forth geographically specific pesticide use limitations for the protection of endangered or threatened species and their designated critical habitat. You can obtain Bulletins using EPA's Bulletins Live! System (*http://137.227.233.155/espp_front/view.jsp*). If your pesticide label directs you to this Web site, you are required to follow the pesticide use limitations found in the Bulletin for your county, pesticide active ingredient, and application month.

Criteria for Critical Habitat

(99) Comment: One private citizen questioned the Service's apparent

hurried approach to propose critical habitat, stating that there are hundreds or thousands of acres of similar habitat southeast and northwest of the Glacial Lakes state park in Pope County, Minnesota, that were not included in the proposal.

Our Response: We have reviewed the best available scientific and commercial information in making our final critical habitat determination. Specific information provided by the commenter helped us refine the critical habitat boundaries for DS Minnesota Unit 1 and PS Minnesota Unit 1.

(100) Comment: One commenter stated that even though Swengel and Swengel (1999) do demonstrate a significant area effect for Dakota skipper, it is still desirable to include smaller sites in critical habitat because the species does occupy small sites. Although small size is a risk factor, it can be counteracted by optimizing other factors, such as management. Conversely, large size is not sufficient to counteract all adverse factors. Patch size is just one among many relevant factors affecting positive and negative skipper outcomes.

Our Response: We did not specify a minimum size for critical habitat units; however, almost all of the proposed Dakota skipper critical habitat units are larger than 30 ha (74 ac) and are, therefore, more resilient to stochastic events. Swengel and Swengel (1997; 1999) found no Dakota skippers on the smallest remnants (<20 ha (49 ac)), and significantly lower abundance on intermediate size (30–130 ha (74–321 ac)) than on larger tracts (>140 ha (346 ac)) during systematic surveys in Minnesota prairies. We agree that some smaller units may still be important to Dakota skipper, however, and have included two units that are smaller than 30 ha (74 ac). We further agree that even relatively large-sized units may not be immune to all adverse stressors and threats. For that reason, we have included additional units to satisfy the conservation principle of redundancy in our designations.

(101) Comment: One commenter supported the scale and method of site selection for designating critical habitat for both species. They recommended that PS Wisconsin Unit 2 consist of all the sedge meadow and prairie vegetation contained in the public land of Puchyan Prairie.

Our Response: We have reviewed the designation in Green Lake County, Wisconsin, and believe we have included the entire appropriate habitat as described in this final ruling within 1 km of the Poweshiek skipperling point locations there. Some modifications were made based on new ecological information we received. The unit now consists of 116 ac (47 ha) of State land.

(102) Comment: One individual stated that the proposed critical habitat rule did not include maps of Dakota skipper South Dakota units 20, 21, and 22.

Our Response: The maps for South Dakota units 20, 21, and 22 were omitted in error. The Service published the maps on their Web site at (*http://www.fws.gov/midwest/endangered/insects/dask/CHmaps/DS_SD_20-22.pdf*), posted the maps to the public comment docket, and included the maps in the notice of availability for the economic analysis and opening of the second comment period which was published in the **Federal Register** on September 23, 2014.

(103) Comment: Three private landowners in McKenzie County, North Dakota did not know if the Dakota skipper exists on the private portion of North Dakota Unit 12. If so, it is living in the current conditions, including living with cattle and there is no need to change anything, including designating the land as critical habitat, since the land is well cared for now.

Our Response: The Dakota skipper and Poweshiek skipperling remain only on lands where management has allowed them to survive, while the butterflies have died off elsewhere. Landowners deserve great credit for their stewardship, and we want to encourage their management practices that support the butterflies. Based on new ecological information we received, DS North Dakota Unit 12 has been revised to better reflect Dakota skipper habitat. The unit is entirely federally owned.

Summary of Changes From Proposed Rule

In developing the final critical habitat designation for the Dakota skipper and Poweshiek skipperling, we reviewed public comments received on the proposed rule (78 FR 63625), the revision to the proposed rule (79 FR 56704), and the draft economic analysis (79 FR 56704).

Based on information we received regarding a study of Dakota skipper habitat, we refined our description of the primary constituent elements (PCEs) to more accurately reflect the habitat needs of the species. Royer *et al.* (2008) only examined occupied areas for edaphic parameters; therefore, the statistical and biological significance of these edaphic variables cannot be determined from his study. Thus, the precisely quantified soil parameters as stated in the PCEs for the Dakota skipper in the proposed rule were removed in this final critical habitat determination.

In our revised proposed rule (September 23, 2014; 79 FR 56704), we modified some critical habitat boundaries and proposed additional critical habitat units based on new information received. Other units underwent further revisions based on new information we received during the second comment period. Based on new or updated biological and ecological information, this final critical habitat designation includes two additional units for the Poweshiek skipperling in Minnesota and removes two units that were included in the proposal (one for the Dakota skipper in Minnesota and one for the Poweshiek skipperling in North Dakota).

The units that were added to this final critical habitat designation include PS Minnesota Unit 19 and PS Minnesota Unit 20. PS Minnesota Unit 19 is the exact same property as DS Minnesota Unit 13, which was included in the original critical habitat proposal. This unit is approximately 262 acres (106 ha) of State-owned land in Kittson County, Minnesota. Originally it was proposed as critical habitat only for the Dakota skipper, but is now also included as critical habitat for the Poweshiek skipperling. Information received from the Minnesota Department of Natural Resources and a peer reviewer indicated that this area retains good-quality habitat for the Poweshiek skipperling.

PS Minnesota Unit 20 comprises 2,761 ac (1,117 ha) of State and federally owned land in Polk County, Minnesota. This unit is designated as critical habitat for the Poweshiek skipperling because we recently received multiyear survey results from an amateur butterfly surveyor verifying the species presence in this unit. The validity of the surveys and habitat suitability was verified by an MN DNR butterfly expert. Since the September 23, 2014, proposal, we removed 10 ac (4 ha) of State land that was not suitable habitat.

The units that were removed from the critical habitat designation due to new biological or ecological information include DS Minnesota Unit 15, PS North Dakota Unit 3, and DS North Dakota Unit 14. We received new or updated information that indicates that these areas do not meet our criteria for critical habitat because the habitat is no longer suitable for the butterflies. DS Minnesota Unit 15 was 268 ac (108 ha) in Polk County owned primarily by The Nature Conservancy (252 ac (102 ha)) and included the Pankratz Memorial Prairie. The remaining 15 ac (6 ha) was private land. PS North Dakota Unit 3 was 117 ac (47 ha) of federally owned

land and included Krause Wildlife Production Area in Sargent County. DS North Dakota Unit 14 was 242 ac (98 ha) of privately owned land in Wells County.

We also revised the boundaries of the critical habitat units listed below, because we received better information about the habitat quality in these units, allowing us to refine the boundaries to include suitable habitat and remove habitat that is of poor quality or unsuitable (*e.g.,* lakes) for these butterflies. Other minor revisions were made due to mapping errors, and are included in the descriptions below.

(1) DS Minnesota Unit 1 and PS Minnesota Unit 1: Removed 485 ac (196 ha) of private land, 856 ac (364 ha) of State land, and 8 ac (3 ha) of county land. The total net decrease is 1,349 ac (546 ha) of land.

(2) DS Minnesota Unit 2 and PS Minnesota Unit 2: Removed 59 ac (24 ha) of private land.

(3) DS Minnesota Unit 4 and PS Minnesota Unit 4: Added 397 ac (161 ha) of The Nature Conservancy (TNC) land and 79 ac (32 ha) of State land. The net increase in area is 476 ac (193 ha).

(4) DS Minnesota Unit 5: Removed 746 ac (302 ha) of private land, 37 ac (15 ha) of State land, 22 ac (9 ha) of TNC land, and 49 ac (20 ha) of county land. The net decrease in area is 855 ac (346 ha).

(5) PS Minnesota Unit 5 (a portion corresponds to DS Minnesota Unit 5): Removed 746 ac (302 ha) of private land, 22 ac (9 ha) of TNC land, and 49 ac (20 ha) of county land. We also added 355 ac (144 ha) of State land. The net decrease in area is 500 ac (202 ha).

(6) DS Minnesota Unit 7 and PS Minnesota Unit 7: Added 23 ac (9 ha) of State land and removed 5 ac (2 ha) of private land. The total net increase in area is 18 ac (7 ha).

(7) DS Minnesota Unit 8 and PS Minnesota Unit 8: Removed 31 ac (13 ha) of privately owned land.

(8) DS Minnesota Unit 10 and PS Minnesota Unit 10: Added 54 ac (ha) of State land and 835 ac (338 ha) of TNC land. The net increase in area is 889 ac (360 ha).

(9) PS Minnesota Unit 11: Added 40 acres (16 ha) of TNC land.

(10) PS Minnesota Unit 13: Added 170 acres (69 ha) of TNC land and 84 ac (34 ha) of privately owned land; removed 14 ac (6 ha) of private land due to mapping errors. The net increase in area is 240 ac (97 ha).

(11) PS Iowa Unit 3: Removed 26 ac (11 ha) of private land.

(12) PS Iowa Unit 5: Added 0.6 ac (0.2 ha) of private land and removed 0.01 ac (0.0 ha, due to previous mapping error). The total net increase is less than 1 ac (0.4 ha).

(13) PS Michigan Unit 3: Added 0.23 ac (0.1 ha) of private land, removed 26 ac (11 ha) of county land, removed 9 ac (4 ha) of private conservation land, and removed 27 ac (11 ha) of private land. The total net decrease is 62 ac (25 ha).

(14) PS Michigan Unit 4: Added 0.28 ac (ha) of private land, removed 98 ac (ha) of private land, and removed 15 ac (ha) of private conservation land. The total net decrease is approximately 112 ac (45 ha).

(15) PS Michigan Unit 6: Removed 2 ac (1 ha) of State land and 9 ac (4 ha) of private land. The total net decrease is 11 ac (4 ha).

(16) PS Michigan Unit 7: Removed 3 ac (1 ha) of private conservation land and 0.3 ac (0.1 ha) of private land. The total net decrease is approximately 3 ac (1 ha).

(17) DS North Dakota Unit 3: Removed 313 ac (127 ha) of private land.

(18) DS North Dakota Unit 4: Removed 98 ac (40 ha) of private land.

(19) DS North Dakota Unit 8: Removed 0.04 ac (0.00 ha) of private land due to a mapping error.

(20) DS North Dakota Unit 9: Removed 147 ac (59 ha) of private land and 81 ac (33 ha) of Tribal lands. The total net decrease is 227 ac (92 ha).

(21) DS North Dakota Unit 11: Added a total of 263 ac (ha) of Federal land and removed 47 ac (19 ha) of private land. The total net increase is 215 ac (87 ha).

(22) DS North Dakota Unit 12: Removed a total of 62 ac (25 ha) of Federal land and removed 13 ac (5 ha) of private land. The total net decrease is approximately 74 ac (30 ha).

(23) DS North Dakota Unit 14: Removed 242 ac (98 ha) of private land.

(24) DS South Dakota Unit 1 and PS South Dakota Unit 1: Removed 103 ac (42 ha) of Federal land.

(25) DS South Dakota Unit 13 and PS South Dakota Unit 13: Removed 38 ac (15 ha) of Tribal land and 18 ac (7 ha) of private land.

(26) DS South Dakota Unit 17: Removed 102 ac (41 ha) of Federal land.

(27) PS Wisconsin Unit 2: Removed 164 ac (66 ha) of State land. Approximately 0.33 ac (0.13 ha) of private land that was originally proposed changed ownership to State land and then was removed (acreage included in the State land total removed).

In addition to the modifications made based on new ecological information, we are excluding areas from the final designation pursuant to section 4(b)(2) of the Act. In this final critical habitat designation, we are excluding lands covered by Service permanent conservation easements, certain lands covered by current management agreements with the Service's Partners for Fish and Wildlife Program (PFFW), Tribal lands, and other lands owned by Service easement landowners.

We evaluated whether certain lands in the proposed critical habitat were appropriate for exclusion from this final designation, pursuant to section 4(b)(2) of the Act. We are excluding land from the final designation of critical habitat for Dakota skipper as follows:

414 ac (166 ha) in DS Minnesota Unit 1,

894 ac (358 ha) in DS North Dakota Unit 3,

100 ac (40 ha) in DS North Dakota Unit 4,

1,393 ac (557 ha) in DS North Dakota Unit 5,

48 ac (19 ha) in DS North Dakota Unit 8,

639 ac (256 ha) in DS North Dakota Unit 10,

319 ac (128 ha) in DS South Dakota Unit 7,

159 ac (64 ha) in DS South Dakota Unit 9,

117 ac (47 ha) in DS South Dakota Unit 10,

75 ac (30 ha) in DS South Dakota Unit 11,

676 ac (270 ha) in DS South Dakota Unit 12A,

189 ac (76 ha) in DS South Dakota Unit 14,

13 ac (5 ha) in DS South Dakota Unit 15,

363 ac (147 ha) in DS South Dakota Unit 19,

255 ac (103 ha) in DS South Dakota Unit 20, and

198 ac (80 ha) in DS South Dakota Unit 21.

We are excluding land from the final designation of critical habitat for Poweshiek skipperling as follows:

414 ac (166 ha) in PS Minnesota Unit 1,

425 ac (170 ha) in PS South Dakota Unit 3B,

319 ac (128 ha) in PS South Dakota Unit 7,

159 ac (64 ha) in PS South Dakota Unit 9,

117 ac (47 ha) in PS South Dakota Unit 10,

75 ac (30 ha) in PS South Dakota Unit 11,

676 ac (270 ha) in PS South Dakota Unit 12A,

189 ac (76 ha) in PS South Dakota Unit 14, and

13 ac (5 ha) in PS South Dakota Unit 15.

The rationale for these exclusions is discussed in detail under the Exclusions

section of this final rule. As indicated above, we excluded 75 ac of land from DS South Dakota Unit 11 and PS South Dakota Unit 11. This amount was out of a total of 89 acres that had been proposed for designation. The remaining 14 ac is not enough land to support a designation of critical habitat because that amount no longer meets our criteria in regard to resiliency. Therefore, DS South Dakota Unit 11 and PS South Dakota Unit 11 are not included in this final critical habitat designation.

The occupancy of several units has changed since the proposal, based on new survey information. DS North Dakota Unit 9 is now considered occupied because the Dakota skipper was observed during the most recent survey year. The following units, which were considered to be occupied in the proposed critical habitat rule, are now considered unoccupied due to negative detections of the species in the most recent survey year: DS Minnesota Unit 1, DS Minnesota Unit 2, DS Minnesota Unit 9, DS South Dakota Unit 2, DS South Dakota Unit 4, DS South Dakota Unit 7, PS Michigan Unit 8, and PS Wisconsin Unit 1. At the time of the proposed critical habitat rule, the occupancy of the following seven units was uncertain: DS South Dakota Unit 18, PS Minnesota Unit 3, PS Minnesota Unit 5, PS Minnesota Unit 9, PS Minnesota Unit 12, PS South Dakota Unit 4, PS South Dakota Unit 7. However, we now believe the species to be extirpated at all seven of these units due to 3 sequential years of negative surveys on those units. PS Minnesota Unit 19 was erroneously proposed as occupied; the unit is unoccupied.

Critical Habitat

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.

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 consultation requirements of section 7(a)(2) of the Act would apply, but even in the event of a destruction or adverse modification finding, the obligation of the Federal action agency and the landowner is not to restore or recover the species, but to 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 principal biological or physical constituent elements (primary constituent elements such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type) that are essential to the conservation of the species. Primary constituent elements are those specific elements of the physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

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. For example, an area currently occupied by the species but that was not occupied at the time of listing may be essential to the conservation of the species and may be included in the critical habitat designation. We designate critical habitat in areas outside the geographical area occupied by a species only when a designation limited to its range would be inadequate to ensure the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific and commercial 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 developed during the listing process for the species. Additional information sources may include 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) section 9 of the Act's prohibitions on taking any individual of the species, including taking caused by actions that affect habitat. 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

In accordance with section 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12, in determining which areas within the geographical area occupied by the species at the time of listing to designate as critical habitat, we consider the physical or biological features essential to the conservation of the species and which may require special management considerations or protection. These include, but are not limited to:

(1) Space for individual and population growth and for normal behavior;

(2) Food, water, air, light, minerals, or other nutritional or physiological requirements;

(3) Cover or shelter;

(4) Sites for breeding, reproduction, or rearing (or development) of offspring; and

(5) Habitats that are protected from disturbance or are representative of the historical, geographical, and ecological distributions of a species.

We derive the specific physical or biological features essential for the Dakota skipper from studies of this species' habitat, ecology, and life history as described in the Critical Habitat section of the proposed rule to designate critical habitat published in the **Federal Register** on October 24, 2013 (78 FR 63625), and in the information presented below. Additional information can be found in the final listing rule published in the **Federal Register** on October 24, 2014 (79 FR 63672). We have determined that the Dakota skipper requires the following physical or biological features:

Space for Individual and Population Growth and for Normal Behavior

Dakota skippers are obligate residents of remnant (untilled) high-quality prairie—habitats that are dominated by native grasses and that contain a high diversity of native forbs (flowering herbaceous plants). Dakota skipper habitat has been categorized into two main types: Type A habitat is described as high-quality, low (wet-mesic) prairie with little topographic relief that occurs on near-shore glacial lake deposits, dominated by little bluestem grass (*Schizachyrium scoparium*), with the likely presence of wood lily (*Lilium philadelphicum*), bluebell bellflower (*Campanula rotundifolia*), and mountain deathcamas (smooth camas; *Zigadenus elegans*) (McCabe 1981, p. 190; Royer and Marrone 1992a, pp. 8, 14–16, 21). Type B habitat is described as rolling native-prairie terrain over gravelly glacial moraine deposits and is dominated by bluestems and needlegrasses (*Hesperostipa spp.*) with the likely presence of bluebell bellflower, wood lily, purple coneflower (*Echinacea angustifolia*), upright prairie coneflower (*Ratibida columnifera*), and blanketflower (*Gaillardia aristata*) (Royer and Marrone 1992a, pp. 21–22).

Dry prairies are described to have a sparse shrub layer (less than 5 percent cover) composed mainly of leadplant (*Amorpha canescens*), with prairie rose (*Rosa arkansana*) and wormwood sage (*Artemisia frigida*) often present (Minnesota Department of Natural Resources 2012a, p. 1). Taller shrubs, such as smooth sumac (*Rhus glabra*), may also be present. Occasional trees, such as bur oak (*Quercus macrocarpa*) or black oak (*Quercus velutina*), may also be present but must remain less than approximately 5 percent cover (Minnesota Department of Natural Resources 2012a, p. 1). Similarly, wet-mesic prairies are described to have a sparse shrub layer (less than 5 to 25 percent cover) of leadplant, prairie rose, wolfberry (*Symphoricarpos occidentalis*), and other native shrubs such as gray dogwood (*Cornus racemosa*), American hazelnut (*Corylus americana*), and wild plum (*Prunus americana*) (Minnesota Department of Natural Resources 2012b, p. 1). Therefore, based on the information above, we identify high-quality Type A or Type B native remnant (untilled) prairie, as described above, containing a mosaic of native grasses and flowering forbs and sparse shrub and tree cover to be a physical or biological feature essential to the conservation of the Dakota skipper.

Nonnative invasive plant species, such as Kentucky bluegrass (*Poa pratensis*) and smooth brome (*Bromus inermus*), may outcompete native plants and lead to the deterioration or elimination of native vegetation that is necessary for the survival of Dakota skipper. Dakota skippers depend on a diversity of native plants endemic to tallgrass and mixed-grass prairies; therefore, when nonnative or woody plant species become dominant, Dakota skipper populations decline due to insufficient sources of larval food and nectar for adults (*e.g.,* Skadsen 2009, p. 9; Dana 1991, pp. 46–47). Therefore, native prairies, as described above, with an absence or only sparse presence of nonnative invasive plant species is a physical or biological feature essential to the conservation of the Dakota skipper.

Royer and Marrone (1992a, p. 25) concluded that Dakota skippers are ''not inclined to dispersal,'' although they did not describe individual ranges or dispersal distances. Concentrated activity areas for Dakota skippers shift annually in response to local nectar sources and disturbance (McCabe 1979, p. 9; 1981, p. 186). Marked adults moved across less than 200 meters (m) (656 feet (ft)) of unsuitable habitat between two prairie patches and moved along ridges more frequently than across valleys (Dana 1991, pp. 37–38). Average movements of recaptured adults were less than 300 m (984 ft) over 3–7 days. Dana (1997, p. 6) later observed lower movement rates across a small valley with roads and crop fields compared to movement rates in adjacent widespread prairie habitat.

Dakota skippers are not known to disperse widely and have low mobility; experts estimate the Dakota skipper has a mean mobility of 3.5 (standard deviation = 0.71) on a scale of 0 (sedentary) to 10 (highly mobile) (Burke *et al.* 2011, supplementary material; Fitzsimmons 2012, pers. comm.). Skadsen (1999, p. 2) reported possible movement of unmarked Dakota skippers from a known population at least 800 m

(2,625 ft) away to a site with an unusually heavy growth of purple coneflower where he had not found Dakota skippers in three previous years when coneflower production was sparse. However, the two sites were connected by ''native vegetation of varying quality'' with a few asphalt and gravel roads interspersed (Skadsen *in litt.* 2001). Five Dakota skipper experts interviewed in 2001 indicated that it was unlikely that Dakota skippers were capable of moving distances greater than 1 kilometer (km) (0.6 miles (mi)) between patches of prairie habitat, even when separated by structurally similar habitats (*e.g.,* perennial grassland, but not necessarily native prairie) (Cochrane and Delphey 2002, p. 6). The species will not likely disperse across unsuitable habitat, such as certain types of row crops (*e.g.,* corn, beets), or anywhere not dominated by grasses (Cochrane and Delphey 2002, p. 6.).

Dakota skippers may move in response to a lack of local nectar sources, disturbance, or in search of a mate. The tallgrass prairie that once made up a vast ecosystem prior to European settlement has now been reduced to fragmented remnants that make up 1 to 15 percent of the original land area across the species' range (Samson and Knopf 1994, p. 419). Similarly, mixed-grass prairie has been reduced to fragmented remnants that make up less than 1, 19, and 28 percent of the original land area in Manitoba, Saskatchewan, and North Dakota, respectively (Samson and Knopf 1994, p. 419). Before the range-wide fragmentation of prairie habitat, the species could move freely (through suitable dispersal habitat) between high-quality tallgrass and mixed-grass prairie. Now, remaining fragmented populations of Dakota skipper need immigration corridors for dispersal from nearby populations to prevent genetic drift, to reestablish a population after local extirpation, and expand current populations. Therefore, based on the information above, we identify undeveloped dispersal habitat, structurally similar to suitable high-quality prairie habitat, as described above, to be a physical or biological feature essential to the conservation of the Dakota skipper. These dispersal habitats should be adjacent to or between high-quality prairie patches, within the known dispersal distance of Dakota skipper, and within 1 km (0.6 mi) of suitable high-quality Type A or Type B prairie; have limited shrub and tree cover; and have no or limited amounts of certain row crops, which may act as barriers to dispersal.

In summary, we identify high-quality wet-mesic or dry (Type A and Type B) remnant (untilled) prairie containing a mosaic of native grasses and flowering forbs to be a physical or biological feature necessary to allow for normal behavior and population growth of Dakota skipper. Both wet-mesic and dry prairies have limited tree and low shrub coverage that may act as barriers to dispersal and limited or no invasive plant species that may lead to a change in the plant community. Dispersal habitat, structurally similar to suitable high-quality prairie habitat and adjacent to or between high-quality prairie patches, should be located within the known dispersal distance of Dakota skipper [within 1 km (0.6 miles) from suitable high-quality Type A or Type B prairie] to help maintain genetic diversity and to provide refuges from disturbance.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

Dakota skipper larvae feed only on a few native grass species; little bluestem is a frequent food source (Dana 1991, p. 17; Royer and Marrone 1992a, p. 25), although they have also been found on *Dichanthelium spp.* and other native grasses (Royer and Marrone 1992a, p. 25). When presented with no other choice, Dakota skipper larvae may feed on a variety of native and nonnative grasses (*e.g.,* Kentucky bluegrass), at least until diapause (period of suspended development) (Dana 1991, p. 17). The timing of growth and development of grasses, relative to the Dakota skipper larval period, are likely important in determining the suitability of grass species as larval host plants. Large leaf blades, leaf hairs, and the distance from larval ground shelters to palatable leaf parts preclude the value of big bluestem and Indian grass as larval food plants, particularly at younger larval stages (Dana 1991, p. 46). The strong empirical correlation between occurrence of Dakota skippers and the dominance of native grasses in the habitat indicates that population persistence requires native grasses for survival (Dana 2013, pers. comm.). Consequently, based on the information above, we identify native grass species, such as little bluestem, to be a physical or biological feature essential to the conservation of the Dakota skipper. These native grasses should be available during the larval stage of Dakota skipper.

Adult Dakota skippers may use several species of native forbs as nectar sources, which can vary regionally. Examples of adult nectar sources include: Purple coneflower, bluebell bellflower, white prairie clover (*Dalea candida*), upright prairie coneflower, fleabanes (*Erigeron* spp.), blanketflower, black-eyed Susan (*Rudbeckia hirta*), yellow sundrops (*Calylophus serrulatus*), prairie milkvetch (*Astragalus adsurgens*) *(syn. A. laxmannii),* deathcamas (smooth camas), common primrose, white sweetclover (*Melilotus alba*), purple prairie clover (*Petalostemon purpureus*), yellow evening-primrose (*Oenothera biennis*), palespike lobelia (*Lobelia spicata*), fiddleleaf hawksbeard (*Crepis runcinata*), and upland white aster (*Solidago ptarmicoides*) (McCabe and Post 1977b, p. 36; McCabe 1979, p. 42; 1981, p. 187; Royer and Marrone 1992a, p. 21; Swengel and Swengel 1999, pp. 280–281; Rigney 2013a, pp. 4, 57). Swengel and Swengel (1999, pp. 280–281) observed nectaring at 25 plant species, but 85 percent of the observations were at the following three taxa, in declining order of frequency: Purple coneflower, blanketflower, and prairie milkvetch. Dana (1991, p. 21) reported the use of 25 nectar species in Minnesota, with purple coneflower most frequented. Plant species likely vary in their value as nectar sources for Dakota skippers due to the amount of nectar available to the species during the adult flight period (Dana 1991, p. 48). The Dakota skipper flight period occurs during the hottest part of the summer and typically lasts about 3 weeks. Flowering forbs also provide water necessary to avoid desiccation (drying out) during the flight period (Dana 2013, pers. comm.). Therefore, based on the information above, we identify the availability of native nectar plant species, including but not limited to, those listed above to be a physical or biological feature for this species. These nectar plant species should be flowering during the Dakota skipper's adult flight period. Having suitable native plant species as nectar sources is critical at this time as the adult flight period is the only time that the Dakota skipper can reproduce.

Dakota skipper larvae are vulnerable to desiccation during hot, dry weather, and this vulnerability may increase in the western parts of the species' range (Royer *et al.* 2008, p. 15). Compaction of soils in the mesic and relatively flat Type A habitats may alter vertical water distribution and lead to decreased relative humidity levels near the soil surface (Miller and Gardiner 2007, pp. 36–40, 510–511; Frede 1985 in Royer *et al.* 2008, p. 2), which would further increase the risk of desiccation (Royer 2008 *et al.,* p. 2). Soils associated with

dry and wet-mesic prairies are described as having a seasonally high water table and moderate to high permeability. Soil textures in Dakota skipper habitats are classified as loam, sandy loam, or loamy sand (Royer and Marrone 1992b, p. 15; Lenz 1999, pp. 4–5, 8; Swengel and Swengel 1999, p. 282); soils in moraine deposits (Type B) are described as gravelly, but the deposits associated with glacial lakes are not described as gravelly. The native-prairie grasses and flowering forbs detailed in the above sections are typically found on these soil types (Lenz 1999, pp. 4–5, 8), and plant species diversity is generally higher in remnant prairies where the soils have never been tilled (Higgins *et al.* 2000, pp. 23–24). Cultivation changes the physical state of the soil, including changes to bulk density (an indicator of soil compaction), which may hinder seed germination and root growth (Tomko and Hall 1986, pp. 173–175; Miller and Gardiner 2007, pp. 510–511). Furthermore, certain native prairie plants are found only in prairies that lack a tillage history (Higgins *et al.* 2000, p. 23). Bulk density also affects plant growth (Miller and Gardiner 2007, p. 36) and, therefore, can alter the plant community. Dakota skippers appear to be generally absent from Type A habitat in North Dakota, when it is grazed, due to a shift away from a plant community that is suitable for the species (McCabe 1979, p. 17; McCabe 1981, p. 179). However, it is not certain if the change in plant community is due to compaction. Therefore, we identify loam, sandy loam, loamy sand, or gravelly soils that have never been plowed or tilled to be a physical feature essential to the conservation of the Dakota skipper.

In summary, the biological features that provide food sources include native grass species for larval food, such as little bluestem and prairie dropseed, and native forb plant species for adult nectar sources, such as purple coneflower, bluebell bellflower, white prairie clover, upright prairie coneflower, fleabanes, blanketflowers, black-eyed Susan, and prairie milkvetch. Such prairies have undisturbed (untilled) edaphic (related to soil) features that are conducive to the development and survival of larval Dakota skipper and soil textures that are loam, sandy loam, loamy sand, or gravelly.

Cover or Shelter

Dakota skippers oviposit (lay eggs) on broadleaf plants such as *Astragalus spp.* (McCabe 1981, p. 180) and grasses such as: little bluestem, big bluestem (*Andropogon gerardii*), sideoats gramma, prairie dropseed, porcupine grass (*Hesperostipa spartea*), and Wilcox's Panic Grass (*Dichanthelium wilcoxianum*) (Dana 1991, p. 17). After hatching, Dakota skipper larvae crawl to the bases of grasses where they form shelters at or below the ground surface with plant tissue fastened together with silk (Dana 1991, p. 16). Dakota skippers overwinter in their ground-level or subsurface shelters during either the fourth or fifth instar (Dana 1991, p. 15; McCabe 1979, p. 6; 1981; Royer and Marrone 1992a, pp. 25–26). In the spring, larvae resume feeding and undergo two additional molts before they pupate. During the last two instars (developmental stages), larvae shift from buried shelters to horizontal shelters at the soil surface (Dana 1991, p. 16). Therefore, sufficient availability of grasses used to form shelters at or below the ground surface is a physical or biological feature essential for cover and shelter for Dakota skipper larvae.

As discussed above, Dakota skipper larvae are vulnerable to desiccation (drying out) during hot, dry weather; this vulnerability has been hypothesized to increase in the western parts of the species' range (Royer *et al.* 2008, p. 15). During a drought, the species may also succumb to starvation or dehydration if no hydrated plant tissue remains (Dana 2013, pers. comm.). Compaction of soils in the mesic and relatively flat Type A habitats may alter vertical water distribution and lead to decreased relative humidity levels near the soil surface (Miller and Gardiner 2007, pp. 36–40, 510–511; Frede 1985 in Royer 2008 *et al.,* p. 2), which would further increase the risk of desiccation (Royer 2008 *et al.,* p. 2). Soils associated with wet-mesic prairies are described as having a seasonally high water table and moderate to high permeability (Lenz 1999, pp. 4–5). Cultivation changes the physical state of soil (Tomko and Hall 1986, pp. 173–175; Miller and Gardiner 2007, pp. 510–511), by, for example, changes to bulk density (compaction) that result in slower water movement through the soil (*e.g.,* Tomko and Hall 1986, pp. 173–175). Furthermore, because Dakota skippers spend a portion of their larval stage underground, the soil must remain undisturbed (untilled) during that time. Therefore, we identify untilled glacial soils including, but not limited to, loam, sandy loam, loamy sand, or gravelly soils to be a physical feature essential to the conservation of the Dakota skipper.

Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring

The annual, single generation of adult Dakota skippers emerges from mid-June to early July, depending on the weather, with flights starting earlier farther west in the range (McCabe 1979, p. 6; 1981, p. 180; Dana 1991, p. 1; Royer and Marrone 1992a, p. 26, Skadsen 1997, p. 3; Swengel and Swengel 1999, p. 282). During this time, adult male Dakota skippers typically perch on tall grasses and forbs, and occasionally appear to patrol in search of mating opportunities (Royer and Marrone 1992a, p. 25). Therefore, the physical or biological features essential to the conservation of the Dakota skipper include above-ground parts of grasses and forbs for perching that are available during the adult flight period.

The flight period lasts 2 to 4 weeks, and mating occurs throughout this period (McCabe 1979, p. 6; 1981, p. 180; Dana 1991, p. 15). Adults are thought to disperse a maximum of 0.6 mi (1.0 km) in search of a mate or nectar sources (Cochrane and Delphey 2002, p. 6). During this time, adult Dakota skippers depend on nectar plants for food and water. Therefore, it is important that nectar plants are available in close proximity to areas suitable for oviposition and larval feeding.

Dakota skippers lay eggs on broadleaf plants such as *Astragalus* spp. (McCabe 1981, p. 180) and grasses such as little bluestem, big bluestem, sideoats gramma, prairie dropseed, porcupine grass, and Wilcox's panic grass (Dana 1991, p. 17), although larvae feed mostly on native grasses, such as little bluestem (Dana 1991, p. 17; Royer and Marrone 1992a, p. 25) and prairie dropseed (*Sporobolus heterolepis*) (Royer and Marrone 1992a, p. 25). After hatching, Dakota skipper larvae crawl to the bases of grasses where they form shelters at or below the ground surface (Dana 1991, p. 16) and emerge at night from their shelters to forage (McCabe 1979, p. 6; 1981, p. 181; Royer and Marrone 1992a, p. 25). Dakota skippers overwinter in their ground-level or subsurface shelters during either the fourth or fifth instar (McCabe 1979, p. 6; 1981, p. 181; Dana 1991, p. 15; Royer and Marrone 1992a, pp. 25–26). In the spring, larvae resume feeding and undergo two additional molts before they pupate. During the last two instars, larvae shift from buried shelters to horizontal shelters at the soil surface (Dana 1991, p. 16). Therefore, the physical or biological features essential to the conservation of the Dakota skipper include above- and below-ground parts of grasses for oviposition and larval shelters and foraging; these grasses should be in close proximity to nectar plants where the adults are feeding during the short flight period.

Dakota skipper larvae spend most of the summer at or near the soil surface (McCabe 1981, p. 181; Dana 1991, p. 15). Therefore, biological factors such as availability of nectar and larval food sources, edaphic features such as bulk density and soil moisture, as well as related non-biotic factors such as temperature and relative humidity at and near (to a 2.0 centimeters (cm) depth (0.79 inches (in)) the soil surface may limit the survival of the sensitive larval and pupal stages (Royer *et al.* 2008, p. 2). Relatively high humidity may also be necessary for larval survival during winter months, since the larvae cannot consume water during that time and depend on humid air to minimize water loss through respiration (Dana 2013, pers. comm.). Soil evaporation rates in the north-central United States are affected substantially by microtopography (variations of the soil surface on a small scale) (Cooper 1960 in Royer *et al.* 2008, p. 2). For example, removal of vegetation due to heavy livestock grazing, plowing, fire, and soil compaction alters evaporation and water movement through the soil, thereby altering the humidity of soil near the surface (*e.g.,* Tomko and Hall 1986, pp. 173–175; Zhao *et al.* 2011, pp. 93–96), although the timing and intensity of these operations may affect the results. Livestock grazing can increase soil bulk density (Greenwood *et al.* 1997, pp. 413, 416–418; Miller and Gardiner 2007, pp. 510–511; Zhao *et al.* 2007, p. 248), particularly when the soil is wet (Miller and Gardiner 2007, p. 510), and these increases have been correlated with decreased soil water content and movement of water through the soil (Zhao *et al.* 2007, p. 248). The loss of porosity results in higher bulk densities, thereby decreasing water movement through the soil (Warren *et al.* 1986, pp. 493–494).

Similarly, vehicle traffic (including tilling and harvesting) increases compaction (Miller and Gardiner 2007, pp. 36, 510), and tilled land has higher bulk densities (*e.g.,* Tomko and Hall 1986, pp. 173–175) and alters the habitat in many other ways (Dana 2013, pers. comm.). These changes in the soil restrict the movement of shallow groundwater to the soil surface, thus resulting in a dry soil layer during the hot and dry summer months, when Dakota skipper larvae are vulnerable to desiccation (Royer *et al.* 2008, p. 2). Furthermore, bulk density affects plant growth (Miller and Gardiner 2007, p. 36) and, therefore, higher densities (or compacted soil) can alter the plant community. Dakota skippers appear to be generally absent from Type A habitat in North Dakota, when it is grazed, due to a rapid shift away from a plant community that is suitable for the species (McCabe 1979, p. 17; McCabe 1981, p. 179; Royer and Royer 1998, p. 23).

Royer *et al.* (2008, pp. 14–15) measured microclimalogical levels (climate in a small space, such as at or near the soil surface) within ''primary larval nesting zones'' (0 to 2 cm (0.8 in) above the soil surface) at occupied sites throughout the range of Dakota skippers, and found an acceptable range-wide seasonal (summer) mean temperature range of 18 to 21 degrees Celsius (°C) (64 to 70 degrees Fahrenheit (°F)), a range-wide seasonal mean dew point ranging from 14 to 17 °C (57 to 63 °F), and a range-wide seasonal mean relative humidity between 73 and 85 percent. Royer *et al.* (2008, entire) only measured these parameters in occupied areas; therefore, the statistical and biological significance of these edaphic variables cannot be determined from his study.

Soil textures in Dakota skipper Type A habitats are classified as loam, sandy loam, or loamy sand (Royer *et al.* 2008, pp. 3–5, 14–15). Type B habitats are associated with gravelly glacial landscapes of predominantly sandy loams and loamy sand soils with relatively higher relief, more variable soil moisture, and slightly higher soil temperatures than Type A habitats (Royer *et al.* 2008, p. 15). Furthermore, intensive livestock grazing can increase soil bulk density—the effects of grazing are dependent on the intensity and timing of grazing and soil type. The increases in soil bulk density have been correlated with decreased soil water content and movement of water through the soil. Therefore, untilled glacial soils that are not subject to intensive grazing pressure are physical or biological features essential to the conservation of the Dakota skipper.

Habitats Protected From Disturbance or Representative of the Historical, Geographic, and Ecological Distributions of the Species

The Dakota skipper has a geographic distribution that is restricted to small colonies that are highly isolated from one another. Species whose populations exhibit a high degree of isolation are extremely susceptible to extinction from both random and nonrandom catastrophic natural or human-caused events. Therefore, it is essential to maintain the native tallgrass prairies and native mixed-grass prairies upon which the Dakota skipper depends. This means protection from destruction or conversion, disturbance caused by exposure to land management actions (*e.g.,* intense grazing, fire management, early haying, and broad use of herbicides or pesticides), flooding, lack of management, and nonnative species that may degrade the availability of native grasses and flowering forbs. The Dakota skipper must, at a minimum, sustain its current distribution for the species to continue to persist. Invasive nonnative species are a serious threat to native tallgrass prairies and native mixed-grass prairies on which the Dakota skipper depends (Orwig 1997, pp. 4 and 8; Skadsen 2002, p. 52; Royer and Royer 2012, pp. 15–16, 22–23); see both *Factor C: Disease and Predation,* and *Factor E: Other Natural or Manmade Factors Affecting Its Continued Existence* sections of our final listing rule published in the **Federal Register** on October 24, 2014 (79 FR 63672). Because the current distribution of the Dakota skipper consists of colonies highly isolated from one another and its habitat is so restricted, introduction of certain nonnative species into its habitat could have significant negative consequences.

Dakota skippers typically occur at sites embedded in agricultural or developed landscapes, which makes them more susceptible to nonnative or woody plant invasion. Potentially harmful nonnative species include: leafy spurge (*Euphorbia esula*), Kentucky bluegrass, alfalfa (*Medicago sativa*), glossy buckthorn *(Frangula alnus*), smooth brome, purple loosestrife (*Lythrum salicaria*), Canada thistle (*Cirsium arvense*), reed canary grass (*Phalaris arundinacea*), and others (Orwig 1997, pp. 4 and 8; Skadsen 2002, p. 52; Royer and Royer 2012, pp. 15–16, 22–23). Once these plants invade a site, they often replace or reduce the coverage of native forbs and grasses used by adults and larvae. Leafy spurge displaces native plant species and its invasion is facilitated by actions that remove native plant cover and expose mineral soil (Belcher and Wilson 1989, p. 172). The threat from nonnative invasive species is compounded by the encroachment of native woody species into native-prairie habitat. Invasion of tallgrass and mixed-grass prairie by woody vegetation such as glossy buckthorn reduces light availability, total plant cover, and the coverage of grasses and sedges (Fiedler and Landis 2012, pp. 44, 50–51). This in turn reduces the availability of both nectar and larval host plants for the Dakota skipper.

In summary, Dakota skippers are obligate residents of undisturbed high-quality prairie, ranging from wet-mesic tallgrass prairie to dry-mesic mixed-grass prairie (Royer and Marrone 1992a,

pp. 8, 21). High-quality prairie contains a high diversity of native species, including flowering herbaceous species (forbs). Degraded habitat consists of a high abundance of nonnative plants, woody vegetation, and a low abundance of native grasses and flowering forbs available during the larval growth period and a low abundance of native flowering forbs available during adult nectaring periods. Intensive grazing or imprudent fire management practices, early haying, flooding, as well as lack of management create such degraded habitats. Conversion to agriculture or other development also degrades or destroys native-prairie habitat. Therefore, based on the information above, we identify the necessary physical or biological features for the Dakota skipper as nondegraded native tallgrass prairie and native mixed-grass prairie habitat devoid of nonnative plant species, or habitat in which nonnative plant species and nonnative woody vegetation are maintained at levels that allow persistence of native tall grass species and forbs and, therefore, the persistence of the Dakota skipper.

Poweshiek Skipperling

We derive the specific physical or biological features essential for the Poweshiek skipperling from studies of this species' habitat, ecology, and life history as described in the Critical Habitat section of the proposed rule to designate critical habitat published in the **Federal Register** on October 24, 2013 (78 FR 63625), and in the information presented below. Additional information can be found in the final listing rule published in the **Federal Register** on October 24, 2014 (79 FR 63672). We have determined that the Poweshiek skipperling requires the following physical or biological features:

Space for Individual and Population Growth and for Normal Behavior

The full range of habitat preferences for Poweshiek skipperling includes high-quality prairie fens, grassy lake and stream margins, remnant moist meadows, and wet-mesic to dry tallgrass remnant (untilled) prairies. These areas are dominated by native-prairie grasses, such as little bluestem and prairie dropseed, but also contain a high diversity of native forbs, including black-eyed Susan and palespike lobelia. The disjunct populations of Poweshiek skipperling in Michigan occur in prairie fens, specifically in peat domes within larger prairie fen complexes in areas co-dominated by mat muhly (*Muhlenbergia richardsonis*) and prairie dropseed (Cuthrell 2011, pers. comm.).

Dry prairies are described to have a sparse shrub layer (less than 5 percent of cover) composed mainly of leadplant, with prairie rose and wormwood sage often present (Minnesota Department of Natural Resources 2012a, p. 1). Taller shrubs, such as smooth sumac, may also be present. Occasional trees, such as bur oak or black oak, may also be present but remain less than 5 percent cover (Minnesota Department of Natural Resources 2012a, p. 1). Similarly, wet-mesic prairies are described to have a sparse shrub layer (less than 5–25 percent cover) of leadplant, prairie rose, wolfberry, and other native shrubs such as gray dogwood, American hazelnut, and wild plum (Minnesota Department of Natural Resources 2012b, p. 1).

Nonnative invasive plant species, such as Kentucky bluegrass and smooth brome, may outcompete native plants that are necessary for the survival of Poweshiek skipperling and lead to the deterioration or elimination of native vegetation. Poweshiek skipperlings depend on a diversity of native plants endemic to tallgrass prairies and prairie fens; therefore, when nonnative or woody plant species become dominant, Poweshiek skipperling populations decline due to insufficient sources of larval food and nectar for adults (*e.g.,* Michigan Natural Features Inventory 2011, unpubl. data). Therefore, native prairies as defined above, with an absence or only sparse presence of nonnative invasive plant species is a physical or biological feature essential to the conservation of the Poweshiek skipperling.

The vegetative structure of prairie fens is a result of their unique hydrology and consists of plants that thrive in wetlands and calcium-rich soils mixed with tallgrass prairie and sedge meadow species (Michigan Natural Features Inventory 2012, p. 1). Three or four vegetation zones are often present in prairie fens, including diverse sedge meadows, wooded fen often dominated by tamarack (*Larix laricina*), and an area of calcareous groundwater seepage with sparsely vegetated marl precipitate (clay- or lime-rich soils that formed from solids that separated from water) at the surface (Michigan Natural Features Inventory 2012, p. 3). Shrubs and trees that may be present include shrubby cinquefoil (*Potentilla fruticosa*), bog birch (*Betula pumila*), and others (Michigan Natural Features Inventory 2012, p. 3).

Based on the information above, we identify high-quality remnant (untilled) wet-mesic to dry tallgrass prairies, moist meadows, or prairie fen habitat, as described above, containing a high diversity of native plant species and sparse tree and shrub cover to be a physical or biological feature essential to the conservation of the Poweshiek skipperling. These native prairies should have no or low coverage of nonnative invasive plant species.

Poweshiek skipperling are not known to disperse widely. The maximum dispersal distance for male Poweshiek skipperling travelling across contiguous suitable habitat is estimated to be approximately 1.6 km (1.0 mi) (Dana 2012a, pers. comm.). The species was evaluated among 291 butterfly species in Canada and is thought to have relatively low mobility, lower mobility than that of the Dakota skipper (Burke *et al.* 2011; Fitzsimmons 2012, pers. comm.). Therefore, it may be wise to consider a more conservative estimated dispersal distance such as that of the Dakota skipper, approximately 1 km (0.6 mi) (Cochrane and Delphey 2002, p. 6). Poweshiek skipperling may perch on vegetation, but males also patrol in search of mating opportunities (Royer and Marrone 1992b, p. 15). In Minnesota, the Poweshiek skipperling was observed almost exclusively as a patroller (Dana 2013, pers. comm.). Poweshiek skipperling may move between patches of prairie habitat separated by structurally similar habitats (*e.g.,* perennial grasslands but not necessarily native prairie); small populations need immigration corridors for dispersal from nearby populations to prevent genetic drift and to reestablish a population after local extirpation. The species will not likely disperse across unsuitable habitat, such as certain types of row crops (*e.g.,* corn, beets), or anywhere not dominated by grasses (Westwood 2012, pers. comm.; Dana 2012a and b, pers. comm.).

Poweshiek skipperling may move in response to availability of nectar sources, disturbance, or in search of a mate. The tallgrass prairie that once made up a vast ecosystem prior to European settlement has now been reduced to fragmented remnants that make up 1 to 15 percent of the original land area across the species' range (Samson and Knopf 1994, p. 419). Before the range-wide fragmentation of prairie habitat, the species could move freely (through suitable dispersal habitat) between high-quality tallgrass prairies and mixed-grass prairies. Now, remaining fragmented populations of Poweshiek skipperling need immigration corridors for dispersal from nearby populations to prevent genetic drift, perhaps to reestablish a population after local extirpation, and to expand current populations. Therefore, based on the information above, we identify undeveloped dispersal habitat,

structurally similar to suitable high-quality prairie habitat, as described above, to be a physical or biological feature essential to the conservation of the Poweshiek skipperling. These dispersal habitats should be adjacent to or between high-quality prairie patches, within the conservative estimates of dispersal distance of Poweshiek skipperling, within 1 km (0.6 mi) of suitable high-quality tallgrass prairie or prairie fen; should have limited shrub and tree cover; and should not consist of certain row crops, which may act as barriers to dispersal.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

Preferred nectar plants vary across the geographic range of the Poweshiek skipperling. Smooth ox-eye (*Heliopsis helianthoides*) and purple coneflower were noted as the most frequently visited nectar plants in North Dakota, Iowa, and Minnesota (Swengel and Swengel 1999, p. 280; Selby 2005, p. 5). In Wisconsin, other documented nectar species include: stiff tickseed (*Coreopsis palmata*), black-eyed Susan, and palespike lobelia (Borkin 1995b, p. 6). On the relatively wet-prairie habitats of Canada and prairie fens in Michigan, preferred nectar plants are black-eyed Susan, palespike lobelia, sticky tofieldia (*Triantha glutinosa*), and shrubby cinquefoil (Bess 1988, p. 13; Catling and Lafontaine 1986, p. 65; Holzman 1972, p. 111; Nielsen 1970, p. 46; Summerville and Clampitt 1999, p. 231). Recent studies in Manitoba indicate that the most frequently used nectar plants are black-eyed Susan, upland white aster (*Solidago ptarmicoides*), and self-heal (*Prunella vulgaris*) (Dupont Morozoff 2013, pp. 70–71). Nectar from flowering forbs also provides water necessary to avoid desiccation during the flight period (lasting 2 to 4 weeks between June and August) (Dana 2013, pers. comm.). Prevention of desiccation is particularly important during the flight period, because it is the only time that Poweshiek skipperlings can reproduce. Therefore, based on the information above, we identify the presence of native nectar plants, as listed above, that are flowering during the adult flight period of Poweshiek skipperlings to be a physical or biological feature essential to the conservation of the Poweshiek skipperling.

Poweshiek skipperling larvae may not rely on a single species of grass for food, but instead may be able to use a narrow range of acceptable plant species at a site (Dana 2005, pers. comm.). Dana (2005, pers. comm.) noted that larvae and ovipositing (laying of eggs) females prefer grasses with ''very fine, threadlike blades or leaf tips.'' Observations indicate that prairie dropseed is the preferred larval food plant for some Poweshiek skipperling populations (Borkin 1995b, pp. 5–6); larval feeding has also been observed on little bluestem (Borkin 1995b, pp. 5–6) and sideoats grama (*Bouteloua curtipendula*) (Dana 2005, pers. comm.). Oviposition has been observed on mat muhly (Cuthrell 2012, pers. comm.). In general, to sustain all larval instars (developmental stages) and metamorphosis, Poweshiek skipperling require the availability of native, fine-leaved grasses. Therefore, based on the information above, we identify native, fine-leaved grasses, including but not limited to prairie dropseed, little bluestem, sideoats grama, and mat muhly to be a physical or biological feature essential to the conservation of the Poweshiek skipperling. These native grasses should be available during the larval stage and oviposition of Poweshiek skipperling.

Soil textures in areas that overlap with Poweshiek skipperling sites are classified as loam, sandy loam, or loamy sand (Royer *et al.* 2008, pp. 3, 10); soils in moraine deposits are described as gravelly, but the deposits associated with glacial lakes are not described as gravelly. Michigan prairie fen habitat soils are described as saturated organic soils (sedge peat and wood peat) and marl, a calcium carbonate ($CaCO_3$) precipitate (Michigan Natural Features Inventory Web site accessed August 3, 2012). The native-prairie grasses and flowering forbs detailed earlier in this document are typically found on the types of soils described above (Royer *et al.* 2008, p. 4, Michigan Natural Features Inventory 2012, pp. 1–3). Plant species community composition is generally higher in remnant prairies where the soils have never been tilled (Higgins *et al.* 2000, pp. 23–24), and certain native prairie plants are found only in prairies that lack a tillage history (Higgins *et al.* 2000, p. 23). The physical state of cultivated soil can result in slower water movement, which can hamper root growth and seed germination (*e.g.,* Tomko and Hall 1986, pp. 173–175). Therefore, we identify loam, sandy loam, loamy sand, gravel, organic peat or marl soils that have never been tilled to be a physical feature essential to the conservation of the Poweshiek skipperling.

Cover or Shelter

Poweshiek skipperlings oviposit near native-grass leaf-blade tips (McAlpine 1972, pp. 85–93); McAlpine did not identify the grasses, but Dana (2005, pers. comm.) noted that larvae and ovipositing females prefer grasses with very fine, threadlike blades or leaf tips such as: prairie dropseed (Borkin 1995b, pp. 5–6); little bluestem (Borkin 1995b, pp. 5–6), sideoats grama (Dana 2005, pers. comm.), and mat muhly (Cuthrell 2012, pers. comm.). After hatching, Poweshiek skipperling larvae crawl out near the tip of grasses and may remain stationary (McAlpine 1972, pp. 88–92). Poweshiek skipperlings have also been documented laying eggs on the entire length of grass leaf blades and on low-growing deciduous foliage (Dupont Morozoff 2013, p. 133). Unlike Dakota skippers, Poweshiek skipperlings are not known to form shelters (McAlpine 1972, pp. 88–92; Borkin 1995a, p. 9; Borkin 2008, pers. comm.). The larvae overwinter up on the blades of grasses and on the stem near the base of a plant (Borkin 2008, pers. comm.; Dana 2008, pers. comm.). Borkin (2008, pers. comm.) observed larvae moving to the tip of grass blades to feed on the outer and thinner edges of the blades, later moving down the grass blades. Therefore, sufficient availability of above ground grasses is a physical or biological feature essential for cover and shelter for Poweshiek skipperling larvae.

Similar to the Dakota skipper, and as discussed above, Poweshiek skipperling larvae are vulnerable to desiccation during hot, dry weather and may require wet low areas to provide relief from high summer temperatures (Borkin 1994, p. 8; 1995a, p. 10). Poweshiek skipperling adults may also require low wet areas to provide refugia from fire (Borkin 1994, p. 8; 1995a, p. 10). Therefore, based on the information above, we identify the presence of low wet areas that provide shelter and relief from high summer temperatures and fire, for both larvae and adults, to be a physical or biological feature for the Poweshiek skipperling.

Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring

The annual, single generation of adult Poweshiek skipperling emerges from mid-June to early July, although the actual flight period varies somewhat across the species' range and can also vary significantly from year to year depending on weather patterns (Royer and Marrone 1992b, p. 15; Swengel and Swengel 1999, p. 282). The flight period in a given locality lasts 2 to 4 weeks, and mating occurs throughout this period (McCabe and Post 1977a, p. 38; Swengel and Swengel 1999, p. 282). During this time, adult Poweshiek skipperling depend on the nectar of

flowering forbs for food and water. Therefore, it is important that nectar plants are available in close proximity to areas suitable for oviposition and larval feeding. Adult male Poweshiek skipperling may perch on tall grasses and forbs, and appear to patrol in search of mating opportunities (Royer and Marrone 1992b, p. 15); in Minnesota, the Poweshiek skipperling was observed almost exclusively as a patroller (Dana 2013, pers. comm.). Therefore, the physical or biological features essential to the conservation of Poweshiek skipperling include above-ground parts of grasses and forbs for perching.

As described above, Poweshiek skipperling lay their eggs near the tips of leaf blades (McAlpine 1972, pp. 85–93). Poweshiek skipperling larvae crawl out near the tips of grasses and may remain stationary (McAlpine 1972, pp. 88–92). Poweshiek skipperlings do not form shelters underground (McAlpine 1972, pp. 88–92; Borkin 1995a, p. 9; Borkin 2008, pers. comm.). Rather than forming shelters, the larvae overwinter on the tip of the blade of grasses and on the stem near the base of the plants (Borkin 2008, pers. comm.; Dana 2008, pers. comm.). Borkin (2008, pers. comm.) observed larvae moving to the tips of grass blades to feed on the outer and thinner edges of the blades, later moving down to the base of the blades. Therefore, the physical or biological features essential to the conservation of Poweshiek skipperling include above-ground parts of grasses for oviposition and larval foraging and shelter; these grasses should be in close proximity to nectar plants, where the adults can feed during the short flight period.

Poweshiek skipperling larvae are vulnerable to desiccation during hot, dry weather (Borkin 1994, p. 8; 1995a, p. 10). After hatching, Poweshiek larvae crawl to the blades and leaf tips of grasses, but do not form shelters underground. Therefore, nonbiotic factors such as temperature and relative humidity at and near blade tips may limit the survival of the sensitive larval and pupal stages of Poweshiek skipperling. The plant community may be influenced by tilling and grazing. For example, removal of vegetation due to livestock grazing, tilling, fire, and soil compaction alters evaporation and water movement through the soil (*e.g.,* Tomko and Hall 1986, pp. 173–175; Zhao *et al.* 2011, pp. 93–96). Livestock grazing increases soil bulk density (an indicator of soil compaction) (Greenwood *et al.* 1997, pp. 416–418; Zhao *et al.* 2007, p. 248), and these increases have been correlated with decreased soil water content and movement of water through the soil (Zhao *et al.* 2007, p. 248). The loss of porosity results in higher bulk densities, thereby decreasing water movement through the soil (Warren *et al.* 1986, pp. 493–494). Bulk density affects plant growth (Miller and Gardiner 2007, p. 36) and, therefore, can alter the plant community. For example, a rapid shift in plant community was documented in wet-mesic habitats in North Dakota that were grazed, due to decreased soil water content (McCabe 1979, p. 17; 1981, p. 179). The shift in plant community due to intensive grazing composition may occur rapidly (McCabe 1981, p. 179; Royer and Royer 1998, p. 23). Similarly, tilled land increases bulk densities (*e.g.,* Tomko and Hall 1986, pp. 173–175) and alters the habitat in many other ways. Soil conditions conducive to Poweshiek skipperling larvae survival are characteristic of untilled glacial soils without intense grazing pressure. Therefore, untilled glacial soils that are not subject to intense grazing pressure are physical or biological features essential to the conservation of the Poweshiek skipperling.

Habitats Protected From Disturbance or Representative of the Historical, Geographic, and Ecological Distributions of the Species

The Poweshiek skipperling has a restricted geographic distribution. Species whose populations exhibit a high degree of isolation are extremely susceptible to extinction from both random and nonrandom catastrophic natural or human-caused events. Therefore, it is essential to maintain the native tallgrass prairies and prairie fens upon which the Poweshiek skipperling depends. This means protection from disturbance caused by exposure to land management actions (cattle grazing, fire management, destruction or conversion, early haying, and broad herbicide or pesticide use), flooding, water withdrawal or depletion, water contamination, lack of management, and nonnative species that may degrade the availability of native grasses and flowering forbs. Introduced nonnative species are a serious threat to native tallgrass prairies and prairie fens on which Poweshiek skipperling depends (Orwig 1997, pp. 4 and 8; MNFI unpubl. data 2011; Skadsen 2002, p. 52; Royer and Royer 2012, pp. 15–16, 22–23); see both *Factor C: Disease and Predation,* and *Factor E: Other Natural or Manmade Factors Affecting Its Continued Existence* sections of our final listing rule published in the **Federal Register** on October 24, 2014). The Poweshiek skipperling must, at a minimum, sustain its current distribution for the species to continue to persist.

The geographic distribution of the Poweshiek skipperling is restricted to small colonies that are highly isolated from each other. Due to its strongly restricted habitat, an introduction of certain nonnative plant species into its habitat could be devastating. Poweshiek skipperling typically occur at sites embedded in agricultural or developed landscapes, which makes them more susceptible to nonnative or woody plant invasion. Potentially harmful nonnative species include leafy spurge (*Euphorbia esula*), Kentucky bluegrass, alfalfa (*Medicago sativa*), glossy buckthorn *(Frangula alnus*), smooth brome, purple loosestrife (*Lythrum salicaria*), Canada thistle (*Cirsium arvense*), reed canary grass (*Phalaris arundinacea*), and others (Orwig 1997, pp. 4 and 8; MNFI unpubl. data 2011; Skadsen 2002, p. 52; Royer and Royer 2012, pp. 15–16, 22–23). Once these plants invade a site, they replace or reduce the coverage of native forbs and grasses used by adults and larvae. Leafy spurge displaces native plant species, and its invasion is facilitated by actions that remove native plant cover and expose mineral soil (Belcher and Wilson 1989, p. 172). The threat from nonnative invasive species is compounded by the encroachment of native woody species into native prairie habitat. Invasion of tallgrass prairie by woody vegetation such as glossy buckthorn reduces light availability, total plant cover, and the coverage of grasses and sedges (Fiedler and Landis 2012, pp. 44, 50–51). This in turn reduces the availability of both nectar and larval host plants for Poweshiek skipperling.

In Michigan, Poweshiek skipperlings live on prairie fens, which occur on poorly drained outwash channels and outwash plains in the interlobate regions of southern Michigan (Kost *et al.* 2007, pp. 69–73, Cohen *et al.* 2014, pp. 70–73). Prairie fens are typically found where these glacial outwash features abut coarse-textured end moraine or ice-contact features and where coarse glacial deposits provide high hydraulic connectivity that forces groundwater to the surface (Moran 1981 in Michigan Natural Features Inventory 2012, p. 1). Small lakes, headwater streams, or rivers are often associated with prairie fens. The sapric peat (partially decomposed vegetation with less than one-third recognizable plant fibers) substrate typical of prairie fens is saturated with calcareous (rich in calcium and magnesium bicarbonate) groundwater as a result of its filtration through glacial deposits. These bicarbonates often precipitate as marl at

the soil surface. The typical pH ranges from 6.8 to 8.2 (Michigan Natural Features Inventory 2012, p. 1). As described above, prairie fens may include some low shrubs and trees, but the amount of tree and shrub cover should not cause a barrier to dispersal (*i.e.,* greater than 15 percent trees or shrubs). Prior to European settlement, fires on upland habitats likely spread to adjacent prairie fens, which inhibited shrub invasion and maintained the open prairie fen plant community (Michigan Natural Features Inventory 2012, pp. 1–3). Now, the vegetation is largely a result of the unique hydrology; the plant community consists of obligate wetland and calcicolous species (species that thrive in lime-rich soils) mixed with tallgrass prairie and sedge meadow species (Michigan Natural Features Inventory 2012, pp. 1–3). The hydraulic processes connecting groundwater to the surface are essential to maintain the vegetative structure of prairie fens and are, therefore, a physical or biological feature essential to the conservation of the Poweshiek skipperling.

Poweshiek skipperling are obligate residents of untilled high-quality prairie, ranging from wet-mesic tallgrass prairies to dry-mesic mixed-grass prairies to prairie fens (Royer and Marrone 1992a, pp. 8, 21). High-quality remnant tallgrass prairies and prairie fens contain a high diversity of native species, including flowering herbaceous species (forbs) (Dana 2001, pers. comm.). Degraded habitat consists of a high abundance of nonnative plants, woody vegetation, and a low abundance of native grasses and flowering forbs available during the larval growth period and a low abundance of native flowering forbs available during the adult nectaring periods. Intense grazing, imprudent fire management practices, early haying, flooding, as well as lack of management create such degraded habitats. Conversion to agriculture or other development also degrades or destroys native prairie habitat. Therefore, based on the information above, we identify the necessary physical or biological features for the Poweshiek skipperling as nondegraded habitat devoid of nonnative plant species, or habitat in which nonnative plant species and nonnative woody vegetation are maintained at levels that allow persistence of Poweshiek skipperling.

Summary

We identify high-quality remnant untilled tallgrass prairies, moist meadows, or prairie fen habitats containing a high diversity of native plant species including a mosaic of native grasses and flowering forbs to be a physical or biological feature necessary for population growth and normal behavior of Poweshiek skipperling. These prairies have features that support the development and survival of larval Poweshiek skipperling and soil textures that are loam, sandy loam, loamy sand, gravel, or peat. Biological features that provide food sources for larvae are native fine-leaved grass species, such as prairie dropseed, little bluestem, sideoats grama or mat muhly, and native forb plant species for adult nectar and water sources such as: purple coneflower, black-eyed Susan, stiff tickseed, palespike lobelia, sticky tofieldia, and shrubby cinquefoil. Physical or biological features for breeding, reproduction and offspring include grasses and forbs used for perching by adults and grasses used for oviposition as well as for larval shelter. Physical or biological features that provide cover or shelter dispersed within or adjacent to native prairies include areas for relief from high summer temperatures and fire, such as depressional wetlands, low wet areas, within or adjacent to prairies and edaphic features that are conducive to the development and survival of larval Poweshiek skipperling.

These high-quality native tallgrass prairies and prairie fens have limited tree and low shrub coverage that may act as barriers to dispersal. These habitats also have limited or no invasive plant species that may lead to a change in the plant community. Contiguous prairie habitat that once characterized the historical distribution of the species has been severely fragmented; therefore, dispersal habitat, structurally similar to suitable high-quality prairie habitat and adjacent to or between high-quality prairie patches within the known dispersal distance of Poweshiek skipperling (within 1 km from suitable high-quality prairie or prairie fens) is another physical and biological feature identified for the Poweshiek skipperling to help maintain genetic diversity and to provide refuges from disturbance. The unique hydrology that supports prairie fen vegetation is an essential physical and biological feature for Poweshiek skipperlings in Michigan prairie fens.

Primary Constituent Elements for the Dakota Skipper

Under the Act and its implementing regulations, we are required to identify the physical or biological features essential to the conservation of the Dakota skipper in areas occupied at the time of listing, focusing on the features' primary constituent elements. Primary constituent elements are those specific elements of the physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes, we determine that the primary constituent elements specific to the Dakota skipper are:

(1) Primary Constituent Element 1—Wet-mesic tallgrass or mixed-grass remnant untilled prairie that occurs on near-shore glacial lake soil deposits or high-quality dry-mesic remnant untilled prairie on rolling terrain consisting of gravelly glacial moraine soil deposits, containing:

a. A predominance of native grasses and native flowering forbs,

b. Glacial soils that provide the soil surface or near surface (between soil surface and 2 cm depth) micro-climate conditions conducive to Dakota skipper larval survival and native prairie vegetation,

c. If present, trees or large shrub cover of less than 5 percent of area in dry prairies and less than 25 percent in wet-mesic prairies; and

d. If present, nonnative invasive plant species occurring in less than 5 percent of area.

(2) Primary Constituent Element 2—Native grasses and native flowering forbs for larval and adult food and shelter, specifically:

a. At least one of the following native grasses to provide larval food and shelter sources during Dakota skipper larval stages: Prairie dropseed *(Sporobolus heterolepis)* or little bluestem *(Schizachyrium scoparium);* and

b. One or more of the following forbs in bloom to provide nectar and water sources during the Dakota skipper flight period: Purple coneflower *(Echinacea angustifolia),* bluebell bellflower *(Campanula rotundifolia),* white prairie clover (*Dalea candida),* upright prairie coneflower *(Ratibida columnifera),* fleabane *(Erigeron* spp.), blanketflower *(Gaillardia* spp.), black-eyed Susan *(Rudbeckia hirta),* yellow sundrops *(Calylophus serrulatus),* prairie milkvetch *(Astragalus adsurgens),* or common gaillardia *(Gaillardia aristata).*

(3) Primary Constituent Element 3—Dispersal grassland habitat that is within 1 km (0.6 mi) of native high-quality remnant prairie (as defined in Primary Constituent Element 1) that connects high-quality wet-mesic to dry tallgrass prairies or moist meadow habitats. Dispersal grassland habitat consists of undeveloped open areas dominated by perennial grassland with

limited or no barriers to dispersal including tree or shrub cover less than 25 percent of the area and no row crops such as corn, beans, potatoes, or sunflowers.

With this final designation of critical habitat, we intend to identify the physical or biological features essential to the conservation of the species, through the identification of the features' primary constituent elements sufficient to support the life-history processes of the species. All units and subunits designated as critical habitat that are currently occupied by the Dakota skipper contain the primary constituent elements sufficient to support the life-history needs of the species. Additional unoccupied units that we determine are essential for the conservation of the species also contain the primary constituent elements sufficient to support the life-history needs of the species.

Primary Constituent Elements for the Poweshiek Skipperling

Under the Act and its implementing regulations, we are required to identify the physical or biological features essential to the conservation of Poweshiek skipperling in areas occupied at the time of listing, focusing on the features' primary constituent elements. We consider primary constituent elements to be the elements of physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species.

Based on our current knowledge of the physical or biological features and habitat characteristics required to sustain the species' life-history processes, we determine that the primary constituent elements specific to the Poweshiek skipperling are:

(1) Primary Constituent Element 1—Wet-mesic to dry tallgrass remnant untilled prairies or remnant moist meadows containing:

a. A predominance of native grasses and native flowering forbs;

b. Undisturbed (untilled) glacial soil types including, but not limited to, loam, sandy loam, loamy sand, gravel, organic soils (peat), or marl that provide the edaphic features conducive to Poweshiek skipperling larval survival and native prairie vegetation;

c. If present, depressional wetlands or low wet areas, within or adjacent to prairies that provide shelter from high summer temperatures and fire;

d. If present, trees or large shrub cover less than 5 percent of area in dry prairies and less than 25 percent in wet-mesic prairies and prairie fens; and

e. If present, nonnative invasive plant species occurring in less than 5 percent of the area.

(2) Primary Constituent Element 2—Prairie fen habitats containing:

a. A predominance of native grasses and native flowering forbs;

b. Undisturbed (untilled) glacial soil types including, but not limited to, organic soils (peat), or marl that provide the edaphic features conducive to Poweshiek skipperling larval survival and native prairie vegetation;

c. Depressional wetlands or low wet areas, within or adjacent to prairies that provide shelter from high summer temperatures and fire;

d. Hydraulic features necessary to maintain prairie fen groundwater flow and prairie fen plant communities;

e. If present, trees or large shrub cover less than 25 percent of the unit; and

f. If present, nonnative invasive plant species occurring in less than 5 percent of area.

(3) Primary Constituent Element 3—Native grasses and native flowering forbs for larval and adult food and shelter, specifically;

a. At least one of the following native grasses available to provide larval food and shelter sources during Poweshiek skipperling larval stages: Prairie dropseed *(Sporobolus heterolepis),* little bluestem *(Schizachyrium scoparium),* sideoats grama *(Bouteloua curtipendula),* or mat muhly *(Muhlenbergia richardsonis);* and

b. At least one of the following forbs in bloom to provide nectar and water sources during the Poweshiek skipperling flight period: Purple coneflower *(Echinacea angustifolia),* black-eyed Susan *(Rudbeckia hirta),* smooth ox-eye *(Heliopsis helianthoides),* stiff tickseed *(Coreopsis palmata),* palespike lobelia *(Lobelia spicata),* sticky tofieldia *(Triantha glutinosa),* or shrubby cinquefoil *(Dasiphora fruticosa ssp. floribunda).*

(4) Primary Constituent Element 4—Dispersal grassland habitat that is within 1 km (0.6 mi) of native high-quality remnant prairie (as defined in Primary Constituent Element 1) that connects high quality wet-mesic to dry tallgrass prairies, moist meadows, or prairie fen habitats. Dispersal grassland habitat consists of the following physical characteristics appropriate for supporting Poweshiek skipperling dispersal: Undeveloped open areas dominated by perennial grassland with limited or no barriers to dispersal including tree or shrub cover less than 25 percent of the area and no row crops such as corn, beans, potatoes, or sunflowers.

With this final designation of critical habitat we intend to identify the physical or biological features essential to the conservation of the species through the identification of the features' primary constituent elements sufficient to support the life-history processes of the species. Many of the units designated as critical habitat are currently occupied by the Poweshiek skipperling and contain the primary constituent elements sufficient to support the life-history needs of the species. Additional unoccupied units also contain the primary constituent elements sufficient to support the life-history needs of the species.

Special Management Considerations or Protections

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. All areas proposed for designation as critical habitat as described below may require some level of management to address the current and future threats to the physical or biological features essential to the conservation of Dakota skipper and Poweshiek skipperling. In all of the described units, special management may be required to ensure that the habitat is able to provide for the biological needs of both species.

A detailed discussion of the current and future threats to Dakota skipper and Poweshiek skipperling can be found in the final listing rule to list each species as an endangered species, which was published in the **Federal Register** on October 24, 2014. In general, the features essential to the conservation of Dakota skipper and Poweshiek skipperling may require special management considerations or protection to reduce the following individual threats and their interactions:

(A) The direct and indirect impacts of land use conversions, primarily from urban and energy development, gravel mining, and conversion to agriculture;

(B) invasive species encroachment and secondary succession of woody plants;

(C) grazing that reduces or continues to suppress the availability or predominance of native plants that provide larval food and adult nectar;

(D) wetland destruction and degradation such that the affected area is flooded or drained of water permanently or over a long term such that it increases the risk of invasive species invasion, changes the prairie

plant community, or eliminates wet areas used as relief from high temperatures and fire;

(E) herbicide application;

(F) the stochastic effects of drought or floods;

(G) fire that that reduces or continues to suppress the availability or predominance of native plants that provide larval food and adult nectar;

(H) development, mining, or other such activies that disrupt or degrade the hydraulic function of fens and their groundwater recharge areas necessary to maintain the prairie fen habitat and availability or predominance of native plants that provide larval food and adult nectar; and

(I) pesticide application.

The greatest, overarching threats to the Dakota skipper and Poweshiek skipperling are habitat curtailment, destruction, and fragmentation. The aforementioned activities will require special management consideration not only for the direct effects of the activities on the species and their habitat, but also for their indirect effects and how they are cumulatively and individually increasing habitat curtailment, destruction, and fragmentation. Based on our analysis of threats to Dakota skipper and Poweshiek skipperling, special management activities that could ameliorate these threats include, but are not limited to, habitat maintenance or restoration activities that occur at an intensity, duration, spatial arrangement, or timing that is not detrimental to the species. These activities include, but are not limited to, the following: Late-season haying (after the adult flight period), brush or tree removal, prescribed low-intensity rotational grazing, invasive species control, habitat preservation, and prescribed fire.

Management activities should be of the appropriate timing, intensity, and extent to be protective of Dakota skipper and Poweshiek skipperling during all life stages (*e.g.,* eggs, larvae, pupae, and adults) and to maximize habitat quality and quantity. Some management activities, depending on how they are implemented, can have intensive impacts to the species, its habitat, or both. Depending on site-specific conditions, management that includes prescribed fire and some low-intensity grazing must affect no more than one-quarter to one-third of the occupied habitat at a site in any single year to ensure that the resulting mortality or effects to reproduction do not have undue impacts on population viability. Management activities should protect the primary constituent elements for the species by conserving the extent of the habitat patches, the quality of habitat within the patches, and connectivity among occupied patches (*e.g.,* see Schmitt, 2003). Appropriate management helps increase the number of individuals reproducing each year by minimizing the activities that may harm Dakota skippers or Poweshiek skipperling during adult, larval, or pupal stages.

Such special management activities may be required to protect the physical or biological features and support the conservation of Dakota skipper and Poweshiek skipperling by preventing or reducing the loss, degradation, and fragmentation of native prairie landscapes. Additionally, management of critical habitat lands can increase the amount of suitable habitat and enhance connectivity among Dakota skipper and Poweshiek skipperling populations through the restoration of areas that were previously composed of native tallgrass and mixed-grass prairie communities. The limited extent of native tallgrass and mixed-grass prairie habitats, particularly the eastern portion of the Poweshiek skipperling range, emphasizes the need for additional habitat into which the Poweshiek skipperling could expand to survive and recover as well as to allow for adjustment to changes in habitat availability that may result from climate change.

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 occupied areas at the time of listing that contain the features essential to the conservation of the species. If, after identifying currently occupied areas, we determine that those areas are inadequate to ensure conservation of the species, in accordance with the Act and our implementing regulations at 50 CFR 424.12(e), we then consider whether designating additional areas—outside those currently occupied—are essential for the conservation of the species. We are designating critical habitat in areas within the geographical area occupied by the Dakota skipper and Poweshiek skipperling at the time of listing on October 24, 2014. We also are designating specific areas outside the geographical area occupied by the Dakota skipper and Poweshiek skipperling at the time of listing that were historically occupied, but where we are uncertain of the current occupancy, and areas that are presently unoccupied, because such areas are essential for the conservation of the species.

Species Occupancy

We generally considered a species to be ''present'' at sites where it was detected during the most recent survey, if the survey was conducted in 2002 or more recently and no evidence suggests that the species is now extirpated from the site, (*e.g.,* no destruction or obvious and significant degradation of the species' habitat), with the exception of one Poweshiek skipperling site and three Dakota skipper sites, which are discussed in detail in the listing rule published on October 24, 2014, in the **Federal Register**. At these four sites, there is no evidence to suggest the species is not still present because the habitat and management is still considered to be conducive to the species, the occupancy status was supported by the species expert review of the site, and all but one of these sites had recent 2010–2013 habitat assessment that concluded that the habitat was suitable for the species.

We assigned a status of ''unknown'' if the species was found in 1993 or more recently, but not in the most recent one to two sequential survey year(s) since 1993, and we found no evidence to suggest the species is now extirpated from the site (*e.g.,* no destruction or obvious and significant degradation of the species' habitat). We considered a species to be ''possibly extirpated'' at sites where it was detected at least once prior to 1993, but not in the most recent 1 to 2 sequential survey years(s). A species is also considered ''possibly extirpated'' at sites where it was found prior to 1993 and no surveys have been conducted in 1993 or more recently. We considered the species ''extirpated'' from a site when at least 3 sequential years of negative surveys existed, no matter what years they were conducted. We required at least 3 years of sequential surveys because of the difficulty of detecting the species, as explained further in this section. A species was also considered ''extirpated'' at sites where habitat for the species is no longer present.

When determining whether the species occupancy is unknown, possibly extirpated, or extirpated at a particular site, we used the survey year 1993 as a cut-off date. Most known sites (more than 81 percent of known Poweshiek skipperling sites and more than 86 percent of known Dakota skipper sites) have been surveyed at least once since 1993, and survey data more than 20

years old may not reflect the current status of a species or its habitat at a site. For example, suitable habitat may no longer exist at a site due to habitat loss from secondary succession of woody vegetation or a change in plant communities due to invasive species. Although it cannot be presumed that the species is absent at sites not surveyed since 1993, the likelihood of occupancy of these sites should be considered separately from sites with more recent survey data. When analyzing survey results, we disregarded negative surveys conducted outside of the species' flight period (outside of June or July) or under unsuitable conditions (*e.g.,* high wind speeds over approximately 16 mph). We only accepted survey data from individual surveyors whom we were confident could identify the species in the field.

After we applied these standards to initially ascertain the status of the species, we asked species experts and Service personnel to help verify, modify, or correct species' occupancy at each site, particularly for sites with questionable habitat quality or those that have not been surveyed recently. In most cases, we used the status as confirmed through these experts' review, unless we received additional information (*e.g.,* additional survey or habitat data provided after the expert reviews) that suggested a different status at a particular site.

Timing of surveys was based on initial field checks of nectar plant blooms and sightings of butterfly species with synchronous emergence (butterfly species that emerge at the same time as Dakota skipper and Poweshiek skipperling). More recently, emergence was also estimated by a degree-day emergence model using high and low daily temperature data from weather stations near the survey sites (Selby, undated, unpublished dissertation). Surveys were conducted during flight periods when the species' abundance is expected to be at levels at which the species can be detected; however, detection probabilities are imperfect and some uncertainty remains between non-detection and true absence (Gross *et al.* 2007, pp. 192, 197–198; Pellet 2008, pp. 155–156). Three sequential years of negative surveys is sufficient to capture variable detection probabilities, since each survey year typically encompasses more than one visit (*e.g.,* the average number of visits per Dakota skipper site per year ranges from 1 to 11) and the probability of false absence after 5–6 visits drops below 5 percent for studied butterfly species with varying average detection probabilities (Pellet 2008, p. 159). Therefore, the site is considered ''extirpated'' if there are 3 sequential years of negative surveys; preferably, each year has more than one survey date.

It cannot be presumed that the species is extirpated at a site only because there have not been recent surveys. The year 1993 was chosen based on habitat-related inferences, specifically, the estimated time for prairie habitat to degrade to unsuitable habitat due to encroachment of woody vegetation and nonnative species. For example, native prairies with previous light-grazing management that were subsequently left idle transitioned from mixed grass to a mix of woody vegetation and mixed grass in 13 years, and it was predicted that these idle prairies would be completely lost due to woody succession in 30 years (Penfound 1964, pp. 260–261). The time for succession of idle prairie depends on numerous factors, such as the size of the site, edge effects (the changes that occur on the boundary of two habitat types), and the plant composition of adjacent areas. In general, long-term studies show that the succession rates and abundance of woody plants in tallgrass prairie depends on management, but generally both increase over time (Fitch 2006, p. 1; Briggs *et al.* 2005, p. 248; Briggs *et al.* 2002, pp. 290–294; Heisler *et al.* 2005, pp. 2253–2256; Penfound 1964, pp. 260–261).

The approach described above is the most objective way to evaluate range-wide data. Most sites have been surveyed over multiple years, although the frequency and type of surveys varied among sites and years. Surveys are conducted using various protocols (*e.g.,* Pollard walks (Pollard *et al.* 1975, entire), modified Pollard walks, wandering transects, timed transects) depending on the objective of the survey, funding, or available resources and staff. In several cases, species experts provided input on occupancy based on their familiarity with the habitat quality and stressors to populations at particular sites.

We determined current occupancy using occurrence data from the Service's Dakota skipper geodatabase (USFWS 2014, unpubl, geodatabase) and Poweshiek skipperling database (USFWS 2014, unpubl. data), which were built based on survey reports from throughout the range of the species and expert input. Areas with recent occurrence records or sites classified as ''present'' (see Background of the final listing rule and above for definitions) are considered occupied, while areas where the species is presumed extirpated or possibly extirpated are considered currently unoccupied, but occupied historically. For the purposes of this critical habitat designation, we also considered areas classified as ''unknown'' (see Background of the final listing rule and above for definitions) as unoccupied.

Several proposed critical habitat units contain several nearby survey sites (or point occurrences) that occur within the maximum estimated dispersal distance of the Dakota skipper and Poweshiek skipperling. Because the species could move between these sites (or occurrences) if several sites were contained within one critical habitat unit, we used the ''best'' status for the species to determine occupancy in areas where the habitat was contiguous. For example, if there are two sites (or occurrences) within a proposed critical habitat unit and one site had a status of present and the other status is unknown, we used the status of present and considered the unit to be occupied. We did this because we found it reasonable to assume that the species could travel between sites (or point occurrence locations) if they were within the maximum dispersal distance of each other and if we determined that the habitat between point locations was suitable for dispersal. Furthermore, the delineation of what constituted a ''site'' by surveyors was often not ecologically based, but was instead based on ownership or political boundaries and may only roughly approximate the extent of a suitable habitat patch.

The status of the species is unknown at a number of sites—in other words, we are not certain whether the species may be extant at densities that are so low that it has not been recently detected, or if it is truly absent at these sites. Therefore, we are uncertain of the occupancy in units where the best species status is ''unknown.'' Areas with an uncertain occupancy were examined to determine if they were essential for the conservation of the species. For the purposes of these critical habitat designations, we are considering these areas to be unoccupied at the time of listing, and we examined these areas with uncertain occupancy using the same criteria as we used for unoccupied areas. We also examined lands where the status of the species is considered to be possibly extirpated or extirpated to determine if such areas are essential for the conservation of the species.

Areas Occupied at Time of Listing

We reviewed available information that pertains to the ecology, natural history, and habitat requirements of each species and evaluated all known species locations using data from the

following sources: Spatial data for known species locations from the Minnesota Natural Heritage Program (MN DNR 2012, entire data set), Michigan Natural Heritage Program (MI DNR 2011, entire data set), Michigan Natural Features Inventory (MNFI, unpubl.), regional Geographic Information System (GIS) coverages, recent biological surveys and reports; site visits and site-specific habitat evaluations; research published in peer-reviewed articles and presented in academic theses or reports; and discussions with species experts.

Criteria for selecting critical habitat units were based on species' survey data and the extent and distribution of essential habitat features. Our selection criteria were based on the best available scientific information on habitat and distribution of the species (see ''Background'' section of the proposed listing rule). The criteria for selecting the occupied sites were: (1) Type, amount, and quality of habitat associated with occupied areas; (2) presence of the physical or biological features essential for the species; and (3) estimated population viability of the species in a particular area, if known.

We considered occupied areas containing plant communities classified as (or based on the best available information and recent aerial photography) dry prairie, dry-mesic prairie, mesic prairie, or wet-mesic remnant (untilled) prairie as potential suitable habitat for Dakota skipper and Poweshiek skipperling. Prairie fens, as defined by the MNFI (Michigan Natural Features Inventory 2012, pp. 1–5), were also considered as potential suitable habitat for Poweshiek skipperling in Michigan. Using State natural heritage rankings, habitat information from recent reports, and expert knowledge, we selected areas with habitat quality ratings of fair to excellent because these areas are most likely to contain the physical or biological features essential for the conservation of the species. In some cases the habitat was not given a quality rating, but instead the site was given an estimated population viability rating, which directly reflects the quality of the habitat (*e.g.,* excellent population viability rating indicates the presence of high-quality native prairie habitat). Therefore, we selected sites with viability ranks of fair to excellent from the most recent reports available because these areas are most likely to contain the physical or biological features essential for the conservation of the species. Grassland-dominated areas necessary for dispersal between higher quality prairies is another physical or biological feature essential for the conservation of the species. Therefore, we also considered including areas that contain potential dispersal habitat to connect patches of higher quality native prairies that (1) are lesser quality (or unrated) native dry-mesic prairie, mesic prairie, or wet-mesic remnant prairies or other habitat types such as wet meadow, oak savannas, and other types of grassland-dominated areas suitable for dispersal and (2) span a distance not greater than 1 km (0.6 mi) between another higher (fair to excellent) quality native prairie. In other words, more than one site may be contained in a single unit if the habitats are connected by areas that contain the physical or biological features essential for the conservation of the species.

Why Occupied Areas Are Not Sufficient for the Conservation of Dakota Skippers and Why Unoccupied Areas Are Essential for the Conservation of the Species

The Dakota skipper has experienced recent declines in large parts of its historical range. The species is now considered to be present at 41 sites in the United States, including 11 sites in Minnesota, 16 sites in North Dakota, and 14 sites in South Dakota. More than one site can be contained in a single critical habitat unit; consequently, we are designating a total of 18 occupied units (*i.e.,* 3 occupied units in Minnesota, 9 occupied units in North Dakota, and 6 occupied units in South Dakota). The remaining sites where the species is considered to be present are located in Canada (42 of total 83), mostly within three isolated complexes, and were observed in either 2002 or 2007 with no subsequent surveys. Four additional locations where we consider the species to be present in Manitoba had positive detections of the species as recently as 2012 (Rigney 2013a, p. 117).

The areas of unoccupied habitat that we are designating as critical habitat were recently occupied (had positive records in 1993 or more recently) and are within the historical range of the species. The areas of habitat where we are uncertain of the occupancy that we are designating as critical habitat were recently occupied (generally, a site with an unknown occupancy had positive records in 2002 or more recently but may have had 1 or 2 years of negative surveys or were determined by a species expert in the State to have an unknown occupancy), and are within the historical range of the species. We determine that these unoccupied areas or areas of uncertain occupancy are essential for the Dakota skipper's conservation because the range of the species has been severely curtailed, occupied habitats are limited and isolated, population sizes are small, and additional habitat will be necessary to recover the species.

Furthermore, the unoccupied units and units where we are uncertain of occupancy are needed to satisfy the conservation principles of redundancy, resiliency, and representation for the Dakota skipper, as there may be too few occupied areas remaining to ensure conservation of the species—the species having been extirpated from substantial portions of its range. The inclusion of unoccupied habitat and habitat where we are uncertain of the occupancy as critical habitat is essential for the species' conservation in three ways: (1) It would substantially increase the diversity of historically occupied habitats and geographic areas and increase the chances of the species persisting despite demographic and environmental stressors that are not uniformly distributed; (2) it would help to ensure that at least some populations may be sufficiently large to withstand stochastic events; and (3) it would help to ensure that geographic areas of recent importance to the species contain sufficient numbers of populations to maintain the species.

Specifically, we are designating unoccupied critical habitat units and units with uncertain occupancy to conserve habitat that may hold genetic representation of the species that is necessary for the species to conserve its adaptive capabilities across portions of its highly fragmented historical range. The species may be present at such low densities that it was undetectable in units with uncertain occupancy. A 2002 study of Dakota skipper genetics showed that each Dakota skipper population studied had evidence of inbreeding and was subject to genetic drift that may erode its genetic variability over time (Britten and Glasford 2002, pp. 371–372). Therefore, it is essential to conserve the range-wide genetic diversity we have for the species (and the habitats that may contain that diversity) to help safeguard the genetic representation necessary for the species to maintain its adaptive capabilities. The fragmentation of Dakota skipper's populations and reduction in genetic diversity, as well as limited detectability during low population densities, further argue for the conservation value of locations that may have populations, though at undetectable levels. We are certain of the species' presence at relatively few sites, and there remains some likelihood of Dakota skipper presence at sites where they have not been detected during recent surveys. In light of the species' fragmentation and

the need to preserve any remaining genetic diversity, we believe it is also essential to conserve Dakota skipper at units where the occupancy of the species is unknown, since the species may be present, but at undetectable levels.

Since a species' genetics is shaped by its environment, successful conservation should aim to preserve a species across the array of environments in which it occurs (Shaffer and Stein 2000, p. 308), especially if much remains unknown about the nature and extent of its genetic diversity. Conservation of habitat and genetic material is vital in the core of the species' range, but it is also critical to preserve the species in less typical habitats on the periphery of its range, for example, wet-mesic prairies in North Dakota, to preserve the adaptive capabilities of the species over the long term.

Genetic variation allows populations to tolerate a range of environmental stressors such as new infectious diseases, parasites, pollution, variable food sources, predators, and changes in climate. Fragmentation of a species' habitat across its range can ''exacerbate genetic drift and random fluctuations in allele frequencies, causing the genetic variation originally present within a large population to become redistributed among the remaining subpopulations'' (Redford *et al.* 2011, p. 41). Furthermore, a ''fully representative sample of founders is required, if the population is to encompass the genetic diversity in the wild and minimize subsequent inbreeding'' (Frankham *et al.* 2009, p. 434). Because there is evidence of range-wide genetic isolation and inbreeding, the Dakota skipper's historical genetic variation may be fragmented unevenly among the remaining subpopulations. As a basis of future reintroductions, a sample of founders representative of appropriate types and levels of genetic diversity (*e.g.,* to minimize inbreeding) is essential to conserve the genetic material at units where we are uncertain of the occupancy (where the species may be present but at undetectable levels).

We are also designating critical habitat units with uncertain occupancy and unoccupied units to help capture the habitats necessary for population persistence despite stochastic events—in other words, we would increase the likelihood that units would contain large enough populations to be resilient to those stressors. We do not know the minimum population size needed to attain an acceptable likelihood of population persistence of Dakota skipper, but we make inferences using data from populations for which we have some evidence of persistence—in general, the chances of maintaining a species is thought to increase with the size of the sites. Insects may need a population size of more than 10,000 individuals to maintain population viability for 40 generations (Trail *et al.* 2007 in Frankham *et al.* 2009, pp. 518–519). By increasing the resiliency of each unit (*e.g.,* by ensuring an appropriate size), we are hoping to increase the chance of species persistence in individual units. In systematic surveys on Minnesota prairies, Swengel and Swengel (1997; 1999) found no Dakota skippers on the smallest remnants (< 20 ha (49 ac)), and significantly lower abundance on intermediate size tracts (30–130 ha (74–321 ac)) than on larger tracts (>140 ha (346 ac)). We did not specify a minimum size for critical habitat units; however, almost all of the proposed Dakota skipper critical habitat units are larger than 30 ha (74 ac) and are, therefore, more resilient to stochastic events. In general, researchers have made consistent observations of relatively small critical habitat units that demonstrate persistence of the species or are one of a few units representative of a specific eco-region or eco-region subsection (see the redundancy discussion below in this section), or a combination of these factors.

Furthermore, it is important to conserve habitats at locations that were, until recently, considered to support some of the best populations rangewide, even though the sites are presently unoccupied or their occupancy is uncertain. These sites are important because the past population vigor indicates that they contained particularly good habitat for the species. For example, some of the areas where we are uncertain of the species occupancy have had positive detections as recently as 2012. Other unoccupied units also had relatively recent detections; for example, one unoccupied unit in South Dakota had positive detections of the species in 2008, but the species is now thought to be extirpated at the site. In addition, some of these areas were considered to have, until recently, some of the best populations of Dakota skippers, but the populations have apparently suddenly disappeared or have been reduced to undetectable numbers, not due to habitat degradation or destruction, but instead due to unknown stressors (see further discussion in Factor E of the final listing rule published on October 24, 2014, in the **Federal Register**). These unoccupied units and units with uncertain occupancy are essential for the conservation of the Dakota skipper, particularly for future reintroduction efforts to aid species' recovery, because they contain the habitat that is conducive to the species.

Finally, by designating unoccupied units and units where we are uncertain of the occupancy, we include areas that help to provide adequate redundancy within the Dakota skipper's recent geographic distributions and full variety of habitat types. By including unoccupied units and units with uncertain occupancy, we will help to ensure that geographic areas of recent importance to the species contain sufficient numbers of populations to maintain the species, if these locations still harbor undetected populations or if reintroduction efforts are successful. In order to conserve the Dakota skipper across the array of environments in which it occurs, we capture habitat redundancy by including a number of sites within each eco-region (based on Bailey 1983, entire) section and subsection of critical habitat units that is roughly proportional to the number of sites with recent records within those areas. The Dakota skipper historically ranged across at least 10 eco-region sections and 18 eco-region subsections, with the majority of historically documented sites from the Red River Valley, North Central Glaciated Plains, and North East Glaciated Plains eco-region sections (USFWS 2014, unpubl. geodatabase).

Occupied units occur on 9 eco-region subsections within 4 eco-regions, the Red River Valley, North Central Glaciated Plains, North West Great Plains sections, and North East Glaciated Plains. By including unoccupied units and units with uncertain occupancy, we are capturing areas in one additional eco-region subsection within one section (*i.e.*, Lake Agassiz-Aspen Parklands eco-region sections). Furthermore, by including unoccupied units and units with uncertain occupancy, we are including more areas within the eco-regions where a larger number of sites are located (*e.g.*, Red River Valley, North Central Glaciated Plains, and North East Glaciated Plains eco-region sections); therefore, the number of units within each section and subsection is roughly proportional to the number of sites with recent records within those areas. These unoccupied units and units with uncertain occupancy are essential for the conservation of the Dakota skipper, particularly for future reintroduction efforts to aid species recovery, because

they contain the habitat that is conducive to the species and help capture the environmental variability across the range of the species.

In summary, representation, resiliency, and redundancy are the three conservation principles important to threatened and endangered species recovery (Shaffer and Stein 2000, p. 307; USFWS 2004, p. 89). Representation involves conserving the breadth of the genetic makeup of the species to conserve its adaptive capabilities; resiliency involves ensuring that each population is sufficiently large to withstand stochastic events; and redundancy involves ensuring a sufficient number of populations to provide a margin of safety for the species to withstand catastrophic events (USFWS 2004, p. 89). Both the occupied and unoccupied units are needed to satisfy the conservation principles of redundancy, resiliency, and representation for the Dakota skipper because there may be too few occupied areas remaining to ensure the species' conservation. The concepts of representation, resiliency, and redundancy are not mutually exclusive; populations that contribute to the resiliency of a species may also contribute to its redundancy or representation. Furthermore, it may not be necessary for a single population to contribute to all three conservation principles to be important for maintaining the species across its range in the long term—because the Dakota skipper is being evaluated across its range, a particular population may not meet the strictest test of one of the three conservation principles yet contribute to the others.

Why Occupied Areas are not Sufficient for the Conservation of the Poweshiek Skipperling and why Unoccupied Areas are Essential for the Conservation of the Species

The Poweshiek skipperling has experienced recent declines in large parts of its historical range. The species is now considered to be present at 9 sites in Michigan, 1 site in Minnesota, 1 site in Wisconsin, and 1 site in Manitoba. More than 1 site can be contained in a single proposed critical habitat unit; consequently, we are designating a total of 9 occupied units (*i.e.*, 7 occupied units in Michigan, 1 occupied unit in Minnesota, and 1 occupied unit in Wisconsin). Until relatively recently, Poweshiek skipperling was also present in native prairies in Iowa, Minnesota, North Dakota, and South Dakota—none of these areas are included in occupied areas.

The areas of unoccupied habitat that we are designating as critical habitat were recently occupied (had positive records in 1993 or more recently) and were within the historical range of the species. The areas of habitat where we were uncertain of the occupancy that we are designating as critical habitat were recently occupied (generally, a site with an unknown occupancy had positive records in 2002 or more recently but may have had 1 or 2 years of negative surveys or were determined by a species expert in the State to have an unknown occupancy), and are within the historical range of the species. We determined that these unoccupied areas are essential for the Poweshiek skipperling's conservation because the range of the species has been severely curtailed, occupied habitats are limited and isolated, population sizes are small, and additional lands will be necessary to recover the species.

Furthermore, the unoccupied units and units where we were uncertain of the occupancy are needed to satisfy the conservation principles of redundancy, resiliency, and representation for the Poweshiek skipperling, as there may be too few occupied areas remaining to ensure conservation of the species—the species having been extirpated from substantial portions of its range. The inclusion of unoccupied habitat and habitat where we were uncertain of the occupancy, as critical habitat, is essential for the species' conservation in three ways: (1) It would substantially increase the diversity of historically occupied habitats and geographic areas and increase the chances of the species persisting despite demographic and environmental stressors that are not uniformly distributed; (2) it would ensure that at least some populations may be sufficiently large to withstand stochastic events; and (3) it would help to ensure that geographic areas of recent importance to the species contain sufficient numbers of populations to maintain the species.

Specifically, we are designating unoccupied critical habitat units and units with uncertain occupancy to conserve habitat that may hold potential genetic representation of the species that is necessary for the species to conserve its adaptive capabilities across portions of its highly fragmented historical ranges. Poweshiek skipperling populations are small and fragmented, and thus are subject to genetic drift and inbreeding (Frankham *et al.* 2009, p. 309). Therefore, it is essential to conserve the range-wide genetic diversity we have for the species (and the habitats that may contain that diversity) to help safeguard the genetic representation necessary for the species to maintain its adaptive capabilities. The reduction of the Poweshiek skipperling's genetic diversity and limited detectability during low population densities further argue for the conservation value of populations currently defined as unknown. We are certain of the species' presence at relatively few sites, and there remains some likelihood of Poweshiek skipperling presence at sites where they have not been detected during recent surveys. In light of the species' fragmentation and the need to preserve any remaining genetic diversity, we believe it is also essential to conserve Poweshiek skipperling at units where the occupancy of the species is unknown.

Since a species' genetics is shaped by its environment, successful conservation should aim to preserve a species across the array of environments in which it occurs (Shaffer and Stein 2000, p. 308), especially if much remains unknown about the nature and extent of its genetic diversity. Conservation of habitat and genetic material is vital in the core of the species' range, but it is also critical to preserve the species in less typical habitats on the periphery of its range, for example, prairie fens in Michigan, to preserve the adaptive capabilities of the species over the long term.

Genetic variation allows populations to tolerate a range of environmental stressors such as new infectious diseases, parasites, pollution, variable food sources, predators, and changes in climate. Fragmentation of a species' habitat across its range can ''exacerbate genetic drift and random fluctuations in allele frequencies, causing the genetic variation originally present within a large population to become redistributed among the remaining subpopulations'' (Redford *et al.* 2011, p. 41). Furthermore, a ''fully representative sample of founders is required, if the population is to encompass the genetic diversity in the wild and minimize subsequent inbreeding'' (Frankham *et al.* 2009, p. 434). Because there is evidence of range-wide genetic isolation and inbreeding, the species' historical genetic variation may be fragmented unevenly among the remaining subpopulations. As a basis of future reintroductions, a sample of founders representative of appropriate types and levels of genetic diversity (*e.g.*, to minimize inbreeding) is essential to conserve the genetic material at units where we are uncertain of the occupancy.

We are also designating critical habitat units with uncertain occupancy

and unoccupied units to help capture the habitats necessary for population persistence despite stochastic events—in other words, we would increase the likelihood that units would contain large enough populations to be resilient to those stressors. We do not know the minimum population size needed to attain an acceptable likelihood of population persistence for either species, but we make inferences using data from populations for which we have some evidence of persistence—in general, the chances of maintaining a species is thought to increase with the size of the sites. Insects may need a population size of more than 10,000 individuals to maintain population viability for 40 generations (Trail *et al.* 2007 in Frankham *et al.* 2009, pp. 518–519). By increasing the resiliency of each unit (*e.g.*, by ensuring an appropriate size), we are hoping to increase the chance of species persistence in individual units. Based on 10 years of surveys in Iowa, Minnesota, and North Dakota, Poweshiek skipperling was found to peak in numbers in ''undegraded (never tilled)'' upland prairie sites that were greater than 30 ha (74 ac) with some topographic diversity (referenced within Swengel and Swengel 2012, p. 3). Systematic surveys on Minnesota prairies show that Dakota skipper abundances increased with increasing size of sites (Swengel and Swengel 1999, pp. 278, 284). We did not specify a minimum size for critical habitat units; however, almost all of the Poweshiek skipperling critical habitat units in Minnesota, Iowa, South Dakota, North Dakota, and Wisconsin are much larger than 30 ha (74 ac) and are, therefore, more resilient to stochastic events. In general, relatively small proposed critical habitat units have had consistent observations that demonstrate persistence of the species or are one of a few units representative of a specific eco-region or eco-region subsection (see the redundancy discussion below in this section), or a combination of these factors.

Furthermore, the importance of conserving habitats with uncertain occupancy and unoccupied units is vital in units that contain sites that were, until recently, considered some of the best populations of the species range-wide. For example, some of the areas where we are uncertain of the species occupancy have had positive detections as recently as 2012. Other unoccupied units also had relatively recent detections: For example, one unoccupied unit in Iowa and two unoccupied units in South Dakota contain sites that had positive detections of the species in 2008, but where the species is now likely extirpated. In addition, some of these areas were considered to have, until recently, some of the best populations of Poweshiek skipperlings, but the populations have apparently suddenly disappeared or have been reduced to undetectable numbers, not due to habitat degradation or destruction, but instead due to unknown stressors (see further discussion in Factor E of the proposed listing rule published in this **Federal Register**). These unoccupied units and units with uncertain occupancy are essential for the conservation of the Poweshiek skipperling, particularly for future reintroduction efforts to aid species recovery, because they contain the habitat that is conducive to the species.

Finally, by designating unoccupied units and units where we are uncertain of the occupancy, we include areas that help to provide adequate redundancy within the Poweshiek skipperling's recent geographic distributions and full variety of habitat types. By including unoccupied units and units with uncertain occupancy, we will help to ensure that geographic areas of recent importance to the species contain sufficient numbers of populations to maintain the species. In order to conserve the Poweshiek skipperling across the array of environments in which it occurs, we capture habitat redundancy by including a number of sites within each Bailey's eco-region (Bailey 1983) section and subsection critical habitat units that is roughly proportional to the number of sites with recent records within those areas. The Poweshiek skipperling historically ranged across at least 12 eco-regions sections and 21 eco-region subsections, with the majority of historically documented sites from the Red River Valley and North Central Glaciated Plains eco-region sections (USFWS 2014, unpubl. geodatabase; USFWS 2014, unpubl.). Occupied units occur on 3 eco-region subsections within 3 eco-regions, the Lake Agasiz-Aspen Parklands, South Central Great Lakes, and the Southwest Great Lakes Morainal sections. By including unoccupied units and units with uncertain occupancy, we are capturing 6 additional eco-region subsections within 3 sections (Red River Valley, North Central Glaciated Plains, and the Minnesota and Northwest Iowa Morainal-Oak Savannah eco-region sections), roughly proportional to the number of sites with recent records within those areas. These additional eco-region subsections include core areas of the species range. These unoccupied units and units with uncertain occupancy are essential for the conservation of the Poweshiek skipperling, particularly for future reintroduction efforts to aid species recovery, because they contain the habitat that is conducive to the species and help capture the environmental variability across the range of the species.

In summary, representation, resiliency, and redundancy are the three conservation principles important to threatened and endangered species recovery (Shaffer and Stein 2000, p. 307; USFWS 2004, p. 89). Representation involves conserving the breadth of the genetic makeup of the species to conserve its adaptive capabilities; resiliency involves ensuring that each population is sufficiently large to withstand stochastic events; and redundancy involves ensuring a sufficient number of populations to provide a margin of safety for the species to withstand catastrophic events (USFWS 2004, p. 89). Both the occupied and unoccupied units are needed to satisfy the conservation principles of redundancy, resiliency, and representation for the Poweshiek skipperling because there may be too few occupied areas remaining to ensure the species' conservation. The concepts of representation, resiliency, and redundancy are not mutually exclusive; populations that contribute to the resiliency of a species may also contribute to its redundancy or representation. Furthermore, it may not be necessary for a single population to contribute to all three conservation principles to be important for maintaining the species across its range in the long term—because the Poweshiek skipperling is being evaluated across its range, a particular population may not meet the strictest test of one of the three conservation principles yet contribute to the others.

Areas Unoccupied at Time of Listing

We also examined lands that were historically occupied by both species, but where we are uncertain of the current occupancy, or that are currently unoccupied. These units were all occupied within the past 20 years (had records in 1993 or more recently) and are essential for the conservation of the species. Some units may have multiple landowner types.

The criteria for selecting unoccupied sites and areas where we are uncertain of the occupancy as critical habitat were: (1) Type, amount, and quality of habitat associated with those occurrences (*e.g.*, high-quality native

remnant prairies); (2) presence of the physical or biological features essential for the species; (3) no known appreciable degradation in habitat quality since the species was last detected; (4) prairies where known threats to the species are few and could feasibly be alleviated (*e.g.*, by modifying grazing practices or controlling invasive species) through conservation measures; (5) prairies where there is reasonable potential for survival of the species if reoccupation were to occur, either by natural means through dispersal from currently occupied sites or by future reintroduction efforts; and (6) prairies currently occupied by other remnant prairie-dependent butterfly species, (*e.g.*, Dakota skipper, Poweshiek skipperling, Ottoe skipper, Argos skipper, Leonard's skipper, or regal fritillary) that share essential habitat features with the species. These areas outside the geographical area currently occupied by the Dakota skipper and Poweshiek skipperling that were historically occupied are essential for the conservation of the species.

For unoccupied areas, and areas where we are uncertain of the occupancy of the species, we considered areas containing plant communities classified as (or based on the best available information and recent aerial photography) dry prairie, dry-mesic prairie, mesic prairie, or wet-mesic remnant (untilled) prairie as potential suitable habitat for Dakota skipper and Poweshiek skipperling. Prairie fens, as defined by the MNFI (Michigan Natural Features Inventory 2012, pp. 1–5), were also considered as potential suitable habitat for Poweshiek skipperling in Michigan. Using State natural heritage rankings, habitat information from recent reports, and expert knowledge, we selected areas with habitat quality ratings of fair to excellent because these areas are most likely to contain the physical or biological features essential for the conservation of the species. In some cases the habitat was not given a quality rating, but instead the site was given an estimated population viability rating, in recent reports or heritage databases, which either directly reflects the quality of the habitat (*e.g.*, excellent population viability rating indicates the presence of high-quality native prairie habitat) or the number of individuals observed (*e.g.*, a poor viability rating indicates few or no individuals observed during the flight period and could indicate poor habitat). Therefore, we selected sites with viability ranks of fair to excellent from the most recent reports available because these areas are recognized to contain the physical or biological features essential for the conservation of the species.

As discussed above in the *Physical or Biological Features* section of this proposal, one physical or biological feature essential for the conservation of the species is grassland-dominated areas that are necessary for dispersal between higher quality prairies. Therefore, we also considered including areas that contain potential dispersal habitat to connect patches of higher quality native prairies that (1) are lesser quality (or unrated) native dry-mesic prairie, mesic prairie, or wet-mesic remnant prairies or other habitat types such as wet meadow, oak savannas, and other types of grassland-dominated areas (*e.g.*, not row crops or dense forests) suitable for dispersal and (2) span a distance not greater than 1 km (0.6 mi) between another higher (fair to excellent) quality native prairie.

Mapping of Critical Habitat Units

The following steps to map potential critical habitat areas were taken separately for each species. We mapped all known locations (points and polygons) of each species in ArcGIS and divided them into occupied and other (either unoccupied (areas with extirpated or possibly extirpated occupancy) or areas where we were uncertain of the occupancy (areas with unknown occupancy)) using the definitions above and the population status provided in the ''Background'' section of the proposed listing rule.

Mapping of Occupied Critical Habitat Units

Mapping occupied units was conducted separately for the two species; however, the general procedure was the same for both species. The following describes our mapping procedure for occupied areas. Occupied areas contain the physical and biological features essential for the conservation of the Dakota skipper or Poweshiek skipperling.

Using State natural heritage rankings, habitat information from recent reports and expert knowledge, as described in more detail above, we chose occupied sites with quality prairie habitat ratings of fair to excellent or population viability ratings of fair to excellent, which directly reflects the habitat quality. If habitat at a site was not previously defined (*e.g.*, we had a point or transect location for the butterfly survey, but the boundaries of the suitable habitat were not mapped in such a way to define the entire area of suitable habitat such as a mapped polygon in a survey report), a circle with a radius of 1 km (0.6 mi) (776 ac (314 ha)) (estimated dispersal distance) was circumscribed around each occurrence point location; the area within the circle was then examined for possible suitable habitat. Polygons were drawn around areas that contain the features essential to the conservation of the species. We conducted aerial photograph interpretation using the National Agriculture Imagery Program (NAIP) aerial imagery, which was acquired during the 2010–2011 agricultural growing seasons, to draw and refine polygons around areas that contain the physical or biological features essential for the conservation of the species. If available, we also used State natural heritage plant community, natural feature polygons, and other habitat mapping information to help refine habitat polygons. Certain State natural resource and natural heritage agencies have specific habitat layers that facilitated critical habitat determination, but not all areas had natural heritage mapping available.

Areas containing plant communities classified as dry prairie, dry-mesic prairie, mesic prairie, or wet-mesic prairie as defined by the MNFI (Michigan Natural Features Inventory 2012, pp. 1–5), MN DNR (MN DNR 2012a, b), recent reports, and expert knowledge were mapped as potentially suitable habitat for Dakota skipper and Poweshiek skipperling, and these areas with fair to excellent quality habitat in particular contain the features essential to the conservation of the species and were included in polygons. Prairie fens, as defined by the MNFI (Michigan Natural Features Inventory 2012, pp. 1–5), also contain the features essential for the conservation of Poweshiek skipperling in Michigan; these areas with fair to excellent quality habitat in particular contain the features essential to the conservation of the species. Patches of wet meadow, oak savannas, and other grassland-dominated prairies contain features essential to the conservation of the species because they provide dispersal habitat between patches of higher quality habitat and, therefore, were also included in the polygons. Patches of grassland-dominated habitats that are lower quality or have not been given a habitat quality rating also contain features essential to the conservation of the species—these areas also provide for dispersal between higher quality prairies. To the maximum extent possible, converted areas (*e.g.*, row crops and housing developments) were excluded from the suitable habitat mapped polygons, as described below in this section.

Dakota skippers and Poweshiek skipperlings may move between patches of prairie habitat separated by structurally similar habitats (*e.g.*, perennial grasslands, but not necessarily native prairie); small populations need immigration corridors for dispersal from nearby populations to prevent genetic drift and to reestablish a population after local extirpation. Thus, a Poweshiek skipperling or Dakota skipper population may require a sufficient amount of undeveloped dispersal habitat to ensure immigration of adults to the population from nearby native prairies. For this reason, if polygons were in close proximity to each other, buffer zones between polygons were examined for suitable dispersal habitat and were combined to create areas containing multiple prairies connected to each other by dispersal habitat corridors.

After initial suitable habitat polygons were refined, we applied a 0.5-km (0.3-mi) radius buffer (half the estimated dispersal distance) to each polygon. If the polygons of two or more buffers overlapped, we examined the areas within the buffers for potential areas of overlapping, contiguous dispersal habitat (*e.g.*, prairies dominated by grasses, not row-crop), which was defined above as one of the essential physical or biological features essential to the conservation of the species, through aerial photograph (NAIP) interpretation and overlaying State natural heritage plant community and natural feature polygons, where available. We then combined overlapping areas of suitable dispersal habitat to form the proposed critical habitat polygons. Generally, polygons separated by less than 1 km (0.6 mi) were defined as subunits of a larger unit encompassing those subunits, if there was a barrier to dispersal between the polygons. Polygons and thus critical habitat subunits of units may have multiple landowners. Units or subunits were named and numbered separately for each State.

When determining critical habitat boundaries, we made every effort to avoid including developed areas such as buildings, paved areas, and other structures that lack primary constituent elements (PCEs) for the Dakota skipper or Poweshiek skipperling. The scale of the maps 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 final rule have been excluded by text in the rule and are not designated as critical habitat. Therefore, a Federal action involving these lands will not trigger section 7 consultation 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.

Mapping of Unoccupied Critical Habitat Units

Mapping unoccupied units (and units with uncertain occupancy) was conducted separately for the two species; however, the general procedure was the same for both species. The following describes our mapping procedure for unoccupied units (and units with uncertain occupancy). As described above, we analyzed areas with uncertain occupancy as if they were unoccupied, in other words, using the standard of ''necessary for the conservation of the species'' as defined in the Act. Both unoccupied areas and areas where we are uncertain of the occupancy are necessary for the conservation of the Dakota skipper or Poweshiek skipperling.

Using State natural heritage rankings, habitat information from recent reports and expert knowledge, as described in more detail above, we chose unoccupied sites (and sites with uncertain occupancy) with higher quality prairie habitat ratings of fair to excellent or population viability ratings of fair to excellent, which directly reflects the habitat quality, and that met our criteria as discussed above. If habitat at a site was not previously defined (*e.g.*, we had a point or transect location for the butterfly survey, but the boundaries of the suitable habitat were not mapped in such a way to define the entire area of suitable habitat such as a mapped polygon in a survey report), a circle with a radius of 1 km (0.6 mi) (776 ac (314 ha)) (estimated dispersal distance) was circumscribed around each occurrence point location; the area within the circle was then examined for possible suitable habitat. Polygons were drawn around areas that were considered to be essential to the conservation of the species. We conducted aerial photograph interpretation using the NAIP aerial imagery, which was acquired during the 2010–2011 agricultural growing seasons, to draw and refine polygons around areas considered to be essential to the conservation of the species. If available, we also used State natural heritage plant community, natural feature polygons, and other habitat mapping information to help refine habitat polygons.

Areas containing plant communities classified as dry prairie, dry-mesic prairie, mesic prairie, or wet-mesic prairie as defined by the MNFI, MN DNR (Michigan Natural Features Inventory 2012,1–5; Minnesota Department of Natural Resources 2012a, b), recent reports, and expert knowledge were mapped as potentially suitable habitat for Dakota skipper and Poweshiek skipperling, and these areas with fair to excellent quality habitat in particular were considered to be essential to the conservation of the species. Prairie fens, as defined by the MNFI (Michigan Natural Features Inventory 2012, pp. 1–5), are essential for the conservation of the Poweshiek skipperling in Michigan, particularly these areas with fair to excellent quality habitat.

Patches of wet meadow, oak savannas, and other grassland-dominated prairies were also considered to be essential to the conservation of the species, primarily because these areas provide the species with dispersal habitat between patches (at a distance of 1 km (0.6 mi)) of higher quality prairie; therefore, these areas were also included in the mapped polygons. Patches of grassland-dominated habitats that are lower quality or have not been given a habitat quality rating were also considered to be essential to the conservation of the species, primarily because these areas provide the species with patches of dispersal habitat between patches of higher quality habitat. To the maximum extent possible, converted areas (*e.g.*, row crops and housing developments) were excluded from the mapped polygons, as described below in this section.

Dakota skippers and Poweshiek skipperlings may move between patches of prairie habitat separated by structurally similar habitats (*e.g.*, perennial grasslands but not necessarily native prairie); small populations need immigration corridors for dispersal from nearby populations to prevent genetic drift and to reestablish a population after local extirpation. Thus, a Poweshiek skipperling or Dakota skipper population may require undeveloped dispersal habitat to ensure immigration of adults to the population from nearby native prairies. For this reason, if polygons were in close proximity to each other, buffer zones between polygons were examined for suitable dispersal habitat and combined to create maps of areas containing multiple prairies connected to each other by dispersal habitat corridors. Dispersal areas, which connect native-prairie habitats, are essential to the conservation of the species.

After initial suitable habitat polygons were refined, we applied a 0.5-km (0.3-mile) radius buffer (half the estimated

dispersal distance) to each polygon. If two or more buffer polygons overlapped, we examined the areas within the buffers for potential areas of overlapping, contiguous dispersal habitat (*e.g.*, prairies dominated by grasses, not row-crop) through aerial photograph (NAIP) interpretation and overlaying State natural heritage plant community and natural feature polygons, where available. We then combined overlapping areas of suitable dispersal habitat to form the proposed critical habitat polygons.

Generally, polygons separated by less than 1 km (0.6 mi) were defined as subunits of a larger unit encompassing those subunits, if there was a barrier to dispersal between the polygons. Polygons and thus critical habitat subunits of units may have multiple landowners. Units or subunits were named and numbered separately for each State. When determining critical habitat boundaries, we made every effort to avoid including developed areas such as buildings, paved areas, and other structures that lack PCEs for the Dakota skipper or Poweshiek skipperling. The scale of the maps 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 final rule have been excluded by text in the rule and are not designated as critical habitat. Therefore, a Federal action involving these lands will not trigger section 7 consultation 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.

We designated as critical habitat lands that we have determined were occupied at the time of listing and contain sufficient elements of physical or biological features to support life-history processes essential for the conservation of the species, and lands outside of the geographical area occupied at the time of listing that we have determined are essential for the conservation of the Dakota skipper and Poweshiek skipperling.

Units were designated based on sufficient elements of physical or biological features being present to support Dakota skipper and Poweshiek skipperling life-history processes. Some units contained all of the identified elements of physical or biological features and supported multiple life-history processes. Some units contained only some elements of the physical or biological features necessary to support the Dakota skipper and Poweshiek skipperling. The critical habitat designation is defined by the map or maps, as modified by any accompanying regulatory text, presented at the end of this document in the rule portion. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. The coordinates or plot points or both on which each map is based and detailed textual descriptions of each unit or subunit are available to the public on *http://www.regulations.gov* at Docket No. FWS–R3–ES–2013–0017, on our Internet site *http://www.fws.gov/midwest/Endangered*, and at the Twin Cities Field Office (see **FOR FURTHER INFORMATION CONTACT** above).

Final Critical Habitat Designation

For the Dakota skipper, we are designating as critical habitat lands that we have determined are occupied at the time of listing and contain sufficient physical or biological features to support life-history processes essential for the conservation of the species and lands outside of the geographical area occupied at the time of listing that we have determined are essential for the conservation of the Dakota skipper. Due to their small numbers of individuals or low population sizes, suitable habitat and space for expansion or reintroduction are essential to achieve population levels necessary for recovery.

We are designating 38 units as critical habitat for Dakota skipper. The critical habitat areas described below constitute our best assessment at this time of areas that meet the definition of critical habitat. Those 38 units are (1) DS Minnesota Units 1–14; (2) DS North Dakota Units 1–3, 5–9, and 11–13; and (3) DS South Dakota Units 1–8, 15–18, and 22. (The unit numbers are discontinuous becase we retained the same unit names that were used in the proposed designation, although some units have been excluded in this final determination.) The occupancy status of all units is listed in Table 1. Table 1 shows the primary type of ownership and approximate area of each critical habitat unit. Each unit contains all of the primary constituent elements of the physical or biological features essential to the conservation of the Dakota skipper, unless otherwise noted.

TABLE 1—DESIGNATED CRITICAL HABITAT UNITS FOR DAKOTA SKIPPER

[Occupancy of Dakota skipper by designated critical habitat units. Area estimates reflect all land within critical habitat unit boundaries. Note: Area sizes may not sum due to rounding. Detailed unit descriptions are posted at *http://www.regulations.gov* and can be found at Docket No. FWS–R3–ES–2013–0017. Some units may have multiple landowner types; the Primary Landowner column gives the type of owner with the most land area in each unit. Occupancy of each unit is noted as either occupied (Yes) or unoccupied (No). Units with uncertain occupancy are noted as unoccupied (No), as they are treated as such for the purposes of this critical habitat designation. The primary constituent elements (PCEs) present in each unit are also given. PCEs are described in detail in the *Primary Constituent Elements for the Dakota Skipper* section of this final rule.]

State	County	Critical habitat unit name	Area in acres (ha)	Primary landowner (type)	Occupied	PCE
MN	Pope	DS MN Unit 1	1,131 (458)	State	No	1, 2
MN	Murray	DS MN Unit 2	846 (342)	Private	No	1, 2, 3
MN	Murray	DS MN Unit 3	126 (51)	Private	No	1, 2
MN	Clay	DS MN Unit 4	2351 (952	Consv. Org.	Yes	1, 2
MN	Clay	DS MN Unit 5	620 (251)	County	Yes	1, 2
MN	Norman	DS MN Unit 6	275 (111)	Consv. Org.	No	1, 2
MN	Lincoln	DS MN Unit 7A	1,330 (538)	State	No	1, 2, 3
MN	Lincoln	DS MN Unit 7B	92 (37)	Consv. Org.	No	1, 2
MN	Lincoln	DS MN Unit 7C	149 (60)	Consv. Org.	No	1, 2
MN	Pipestone	DS MN Unit 8	321 (130)	State	No	1, 2
MN	Pipestone	DS MN Unit 9	416 (168)	State	No	1, 2
MN	Swift/ Chippewa	DS MN Unit 10	1,865 (755)	Consv. Org.	No	1, 2
MN	Pipestone	DS MN Unit 11	197 (80)	State	No	1, 2

TABLE 1—DESIGNATED CRITICAL HABITAT UNITS FOR DAKOTA SKIPPER—Continued

[Occupancy of Dakota skipper by designated critical habitat units. Area estimates reflect all land within critical habitat unit boundaries. Note: Area sizes may not sum due to rounding. Detailed unit descriptions are posted at *http://www.regulations.gov* and can be found at Docket No. FWS–R3–ES–2013–0017. Some units may have multiple landowner types; the Primary Landowner column gives the type of owner with the most land area in each unit. Occupancy of each unit is noted as either occupied (Yes) or unoccupied (No). Units with uncertain occupancy are noted as unoccupied (No), as they are treated as such for the purposes of this critical habitat designation. The primary constituent elements (PCEs) present in each unit are also given. PCEs are described in detail in the *Primary Constituent Elements for the Dakota Skipper* section of this final rule.]

State	County	Critical habitat unit name	Area in acres (ha)	Primary landowner (type)	Occupied	PCE
MN	Lincoln	DS MN Unit 12	549 (222)	Private	Yes	1, 2
MN	Kittson	DS MN Unit 13A	38 (16)	State	No	1, 2
MN	Kittson	DS MN Unit 13B	224 (91)	State	No	1, 2
MN	Polk	DS MN Unit 14	842 (341)	State	No	1, 2
ND	Richland	DS ND Unit 1	119 (48)	Federal	No	1, 2, 3
ND	Ransom	DS ND Unit 2	949 (348)	Federal	No	1, 2
ND	McHenry	DS ND Unit 3	319 (129)	Private	Yes	1, 2, 3
ND	McHenry	DS ND Unit 5	1,053 (426)	Private	Yes	1, 2, 3
ND	McHenry	DS ND Unit 6	80 (33)	State	Yes	1, 2
ND	McHenry	DS ND Unit 7	280 (113)	Private	Yes	1, 2
ND	McHenry	DS ND Unit 8	400 (162)	State	Yes	1, 2, 3
ND	Rolette	DS ND Unit 9	288 (116)	Private	Yes	1, 2, 3
ND	McKenzie	DS ND Unit 11	633 (256)	Federal	Yes	1, 2
ND	McKenzie	DS ND Unit 12	234 (95)	Federal	Yes	1, 2
ND	Ransom	DS ND Unit 13	727 (294)	Federal	Yes	1, 2
SD	Marshall	DS SD Unit 1	348 (141)	Federal	No	1, 2
SD	Brookings	DS SD Unit 2	169 (69)	State	No	1, 2
SD	Deuel	DS SD Unit 3	516 (209)	State	No	1, 2
SD	Grant	DS SD Unit 4	292 (118)	Federal	No	1, 2
SD	Deuel	DS SD Unit 5	119 (48)	Federal	No	1, 2
SD	Roberts	DS SD Unit 6	31 (13)	State	Yes	1, 2
SD	Roberts	DS SD Unit 7	151 (61)	Federal	No	1, 2
SD	Roberts	DS SD Unit 8	501 (203)	Federal	Yes	1, 2
SD	Day	DS SD Unit 15	175 (71)	State	No	1, 2
SD	Day	DS SD Unit 16	348 (141)	Federal	No	1, 2
SD	Roberts	DS SD Unit 17	450 (182)	Federal	Yes	1, 2
SD	Roberts	DS SD Unit 18	217 (88)	Federal	No	1, 2
SD	Brookings	DS SD Unit 22	133 (54)	Private	Yes	1, 2

Note: Area sizes may not sum due to rounding.

For the Poweshiek skipperling, we are designating as critical habitat lands that we have determined are occupied at the time of listing and contain sufficient physical or biological features to support life-history processes essential for the conservation of the species and lands outside of the geographical area occupied at the time of listing that we have determined are essential for the conservation of the Poweshiek skipperling. Due to their small numbers of individuals or low population sizes, suitable habitat and space for expansion or reintroduction are essential to achieve population levels necessary for recovery.

We are designating 56 units as critical habitat for Poweshiek skipperling. The critical habitat areas described below constitute our best assessment at this time of areas that meet the definition of critical habitat. Those 56 units are: (1) PS Iowa Units 1–11; (2) PS Michigan Units 1–9; (3) PS Minnesota Units 1–20; (4) PS North Dakota Units 1 and 2; (5) PS South Dakota Units 1–8, 15–18; and (6) PS Wisconsin Units 1 and 2. (The unit numbers are discontinuous becase we retained the same unit names that were used in the proposed designation, although some units have been excluded in this final determination.) The occupancy status of all units is listed in Table 2. Table 2 shows the primary type of ownership and approximate area of each critical habitat unit. Each unit contains all of the primary constituent elements of the physical or biological features essential to the conservation of the Poweshiek skipperling, unless otherwise noted. The approximate area of each critical habitat unit is shown in Table 2.

TABLE 2—DESIGNATED CRITICAL HABITAT UNITS FOR POWESHIEK SKIPPERLING

[Occupancy of Poweshiek skipperling by designated critical habitat units. Area estimates reflect all land within critical habitat unit boundaries. Note: Area sizes may not sum due to rounding. Detailed unit descriptions are posted at *http://www.regulations.gov* and can be found at Docket No. FWS–R3–ES–2013–0017. Some units may have multiple landowner types; the Primary Landowner column gives the type of owner with the most land area in each unit. Occupancy of each proposed unit is noted as either occupied (Yes) or unoccupied (No). Units with uncertain occupancy are noted as unoccupied (No) as they are treated as such for the purposes of this critical habitat designation. The primary constituent elements (PCEs) present in each unit are also given. PCEs are described in detail in the *Primary Constituent Elements for the Poweshiek Skipperling* section of this final rule.]

State	County	Critical habitat unit name	Area in acres (ha)	Primary landowner (type)	Occupied	PCE
IA	Howard	PS IA Unit 1	237 (96)	State	No	1, 3
IA	Cerro Gordo	PS IA Unit 2	35 (14)	Consv. Org.	No	1, 3
IA	Dickinson	PS IA Unit 3	109 (44)	Consv. Org.	No	1, 3, 4

TABLE 2—DESIGNATED CRITICAL HABITAT UNITS FOR POWESHIEK SKIPPERLING—Continued

[Occupancy of Poweshiek skipperling by designated critical habitat units. Area estimates reflect all land within critical habitat unit boundaries. Note: Area sizes may not sum due to rounding. Detailed unit descriptions are posted at *http://www.regulations.gov* and can be found at Docket No. FWS–R3–ES–2013–0017. Some units may have multiple landowner types; the Primary Landowner column gives the type of owner with the most land area in each unit. Occupancy of each proposed unit is noted as either occupied (Yes) or unoccupied (No). Units with uncertain occupancy are noted as unoccupied (No) as they are treated as such for the purposes of this critical habitat designation. The primary constituent elements (PCEs) present in each unit are also given. PCEs are described in detail in the *Primary Constituent Elements for the Poweshiek Skipperling* section of this final rule.]

State	County	Critical habitat unit name	Area in acres (ha)	Primary landowner (type)	Occupied	PCE
IA	Dickinson	PS IA Unit 4	755 (306)	State	No	1, 3
IA	Osceola	PS IA Unit 5	76 (31)	Private	No	1, 3, 4
IA	Dickinson	PS IA Unit 6	79 (32)	State	No	1, 3
IA	Dickinson	PS IA Unit 7	146 (59)	State	No	1, 3
IA	Osceola	PS IA Unit 8	205 (83)	County	No	1, 3
IA	Dickinson	PS IA Unit 9	312 (126)	State	No	1, 3
IA	Kossuth	PS IA Unit 10	139 (56)	Private	No	1, 3
IA	Emmet	PS IA Unit 11	272 (110)	State	No	1, 3
MI	Oakland	PS MI Unit 1	25 (10)	State	Yes	2, 3
MI	Oakland	PS MI Unit 2	66 (27)	State	Yes	2, 3
MI	Oakland	PS MI Unit 3	394 (159)	Private	Yes	2, 3
MI	Oakland	PS MI Unit 4	257 (104)	Private	Yes	2, 3, 4
MI	Livingston	PS MI Unit 5	23 (10)	Private	No	2, 3
MI	Washtenaw	PS MI Unit 6	257 (104)	County	Yes	2, 3, 4
MI	Lenawee	PS MI Unit 7	120 (48)	Consv. Org.	Yes	2, 3
MI	Jackson/Hilsdale	PS MI Unit 8	363 (147)	Private	No	2, 3, 4
MI	Jackson	PS MI Unit 9	34 (14)	Private	Yes	2, 3
MN	Pope	PS MN Unit 1	1,131 (458)	State	No	1, 3
MN	Murray	PS MN Unit 2	846 (342)	Private	No	1, 3, 4
MN	Murray	PS MN Unit 3	126 (51)	Private	No	1, 3
MN	Clay	PS MN Unit 4	2,351 (952)	Consv. Org.	No	1, 3
MN	Clay	PS MN Unit 5	975 (395)	State	No	1, 3
MN	Norman	PS MN Unit 6	275 (111)	Consv. Org.	No	1, 3
MN	Lincoln	PS MN Unit 7	1,330 (538)	State	No	1, 3, 4
MN	Pipestone	PS MN Unit 8	321 (130)	State	No	1, 3
MN	Pipestone	PS MN Unit 9	416 (168)	State	No	1, 3
MN	Swift/Chippewa	PS MN Unit 10	1,865 (755)	Consv. Org.	No	1, 3
MN	Wilkin	PS MN Unit 11	477 (193)	Consv. Org.	No	1, 3, 4
MN	Lyon	PS MN Unit 12	274 (111)	State	No	1, 3
MN	Lac Qui Parle	PS MN Unit 13	765 (310)	Consv. Org.	No	1, 3, 4
MN	Douglas	PS MN Unit 14	90 (36)	Consv. Org.	No	1, 3
MN	Mahnomen	PS MN Unit 15	1,369 (554)	State	No	1, 3
MN	Cottonwood	PS MN Unit 16	239 (97)	State	No	1, 3
MN	Pope	PS MN Unit 17	431 (174)	Consv. Org.	No	1, 3
MN	Clay	PS MN Unit 18	466 (189)	Consv. Org.	No	1, 3
MN	Kittson	PS MN Unit 19A	38 (16)	State	No	1, 3
MN	Kittson	PS MN Unit 19B	224 (91)	State	No	1, 3
MN	Polk	PS MN Unit 20	2,751 (1,113)	State	Yes	1, 3
ND	Richland	PS ND Unit 1	119 (48)	Federal	No	1, 3, 4
ND	Richland	PS ND Unit 2	47 (19)	Federal	No	1, 3
SD	Marshall	PS SD Unit 1	348 (141)	Federal	No	1, 3
SD	Brookings	PS SD Unit 2	169 (69)	State	No	1, 3
SD	Deuel	PS SD Unit 3A	516 (209)	State	No	1, 3
SD	Deuel	PS SD Unit 3B	157 (63)	Consv. Org.	No	1, 3, 4
SD	Grant	PS SD Unit 4	292 (118)	Federal	No	1, 3
SD	Deuel	PS SD Unit 5	119 (48)	Federal	No	1, 3
SD	Roberts	PS SD Unit 6	31 (13)	State	No	1, 3
SD	Roberts	PS SD Unit 7	151 (61)	Federal	No	1, 3
SD	Roberts	PS SD Unit 8	501 (203)	Federal	No	1, 3
SD	Day	PS SD Unit 15	175 (71)	State	No	1, 3
SD	Day	PS SD Unit 16	348 (141)	Federal	No	1, 3
SD	Moody	PS SD Unit 17	198 (80)	Consv. Org.	No	1, 3
SD	Marshall	PS SD Unit 18	401 (162)	Federal	No	1, 3
WI	Waukesha	PS WI Unit 1	1,535 (621)	State	No	1, 3, 4
WI	Green Lake	PS WI Unit 2	116 (47)	State	Yes	1, 3

We present brief descriptions of all units, and the reasons they meet the definition of critical habitat for the Dakota skipper and the Poweshik skipperling in a supporting document that is available on *www.regulations.gov.*

Effects of Critical Habitat Designation

Section 7 Consultation

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 that is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

Decisions by the 5th and 9th Circuit Courts of Appeals have invalidated our regulatory definition of ''destruction or adverse modification'' (50 CFR 402.02) [see *Gifford Pinchot Task Force* v. *U.S. Fish and Wildlife Service,* 378 F. 3d 1059 (9th Cir. 2004) and *Sierra Club* v. *U.S. Fish and Wildlife Service et al.,* 245 F.3d 434, 434 (5th Cir. 2001)], and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the provisions of the Act, we determine destruction or adverse modification on the basis of whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the 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 actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded or authorized, do not require section 7 consultation.

As a result of section 7 consultation, we document compliance with the requirements of section 7(a)(2) 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, in the Director's opinion, 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 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected and the Federal agency has retained discretionary involvement or control over the action (or the agency's discretionary involvement or control is authorized by law). Consequently, Federal agencies sometimes may need to request reinitiation of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary involvement or control may affect subsequently listed species or designated critical habitat.

Application of the ''Adverse Modification'' Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that alter the physical or biological features to an extent that appreciably reduces the conservation value of critical habitat for the Dakota skipper and the Poweshiek skipperling. As discussed above, the role of critical habitat is to support life-history needs of the 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 destroy or adversely modify such habitat, or that may be affected by such designation.

Activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result in consultation for the Dakota skipper and Poweshiek skipperling. These activities include, but are not limited to:

Actions that would significantly alter the native plant community such that native grasses or flowering forbs are not readily available during the adult flight period or larval stages in the life cycle of the species. Such activities could include, but are not limited to, conversion to agriculture or other nonagricultural development, heavy grazing, haying prior to July 15, spraying of herbicides or pesticides, and fire. These activities could eliminate or reduce the habitat necessary for the growth and reproduction of these species by reducing larval and adult food sources that could result in direct or indirect adverse effects to individuals and their life cycles.

Actions that would significantly disturb the unplowed (untilled) soils and thereby reduce the native plant community and increase the nonnative plant and woody vegetation within the prairie habitat. Such activities could include, but are not limited to, plowing (tilling), heavy grazing, mining, development, and other disturbances to the soil such that the native plant community is reduced and the encroachment of nonnative plants and woody vegetation can outcompete native plants. These activities can result in the loss of the native plant community necessary for adult and larval food sources to levels below the tolerances of the species.

Actions that would significantly alter the hydrology of the prairie or prairie fen habitat. Such activities could include but are not limited to water withdrawal or diversion, agricultural tilling, urban development, mining, and dredging. These activities may lead to changes in water levels that would degrade or eliminate the native-prairie plants and their habitats to levels that are beyond the tolerances of the species.

Exemptions

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

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 geographic areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan (INRMP) 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.'' There are no Department of Defense lands with a completed INRMP within the proposed or final critical habitat designation.

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 she determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless she 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 that determination, 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.

When identifying the benefits of inclusion for an area, we consider the additional regulatory benefits that area would receive from the protection from adverse modification or destruction as a result of actions with a Federal nexus; the educational benefits of mapping essential habitat for recovery of the listed species; and any benefits that may result from a designation due to State or Federal laws that may apply to critical habitat.

When identifying the benefits of exclusion, we consider, among other things, whether exclusion of a specific area is likely to result in conservation; the continuation, strengthening, or encouragement of partnerships; or implementation of a management plan that provides equal to or more conservation than a critical habitat designation would provide.

In the case of the Dakota skipper and Poweshiek skipperling, the benefits of critical habitat include public awareness of the species' presence and the importance of habitat protection, and in cases where a Federal nexus exists, increased habitat protection for the species due to the protection from adverse modification or destruction of critical habitat. In practice, a Federal nexus exists primarily on Federal lands or for projects carried out, authorized, or funded by Federal agencies. On private and other non-Federal lands where the Dakota skipper or Poweshiek skipperling occur, Federal nexuses are not frequent. They are typically related to conservation projects funded or carried out by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) or U.S. Department of the Interior, U.S. Fish and Wildlife Service's Partners for Fish and Wildlife program (PFW).

When we evaluate the existence of a conservation plan when considering the benefits of exclusion, we consider a variety of factors, including but not limited to, whether the plan is finalized; how it provides for the conservation of the essential physical or biological features; whether there is a reasonable expectation that the conservation management strategies and actions contained in a plan will be implemented into the future; whether the conservation strategies in the plan are likely to be effective; whether the plan contains a monitoring program or adaptive management to ensure that the conservation measures are effective and can be adapted in the future in response to new information; and, specific to this analysis, whether a private landowner has demonstrated a willingness to engage in conservation plans that are likely to benefit the Dakota skipper or Poweshiek skipperling on other lands that they own or on which they implement livestock ranching activities.

After identifying the benefits of inclusion and the benefits of exclusion, we carefully weigh the two sides to evaluate whether the benefits of exclusion outweigh those of inclusion. If our analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, we then determine whether exclusion would result in extinction. If exclusion of an area from critical habitat will result in extinction, we will not exclude it from the designation.

Based on the information provided by entities seeking exclusion, as well as any additional public comments received, we evaluated whether certain lands in the proposed critical habitat were appropriate for exclusion from this final designation under section 4(b)(2) of the Act. For the Dakota skipper, we are excluding the following areas from the final designation of critical habitat:

414 ac (166 ha) in DS Minnesota Unit 1,

894 ac (358 ha) in DS North Dakota Unit 3,

100 ac (40 ha) in DS North Dakota Unit 4,

1,393 ac (557 ha) in DS North Dakota Unit 5,

48 ac (20 ha) in DS North Dakota Unit 8,

639 ac (256 ha) in DS North Dakota Unit 10,

319 ac (128 ha) in DS South Dakota Unit 7,

159 ac (64 ha) in DS South Dakota Unit 9,

117 ac (47 ha) in DS South Dakota Unit 10,

75 ac (30 ha) in DS South Dakota Unit 11,

676 ac (270 ha) in DS South Dakota Unit 12A,

189 ac (76 ha) in DS South Dakota Unit 14,

13 ac (5 ha) in DS South Dakota Unit 15,

363 ac (143 ha) in DS South Dakota Unit 19,

255 ac (103 ha) in DS South Dakota Unit 20, and

198 ac (80 ha) in DS South Dakota Unit 21.

For the Poweshiek skipperling, we are excluding the following areas from the final designation of critical habitat:

414 ac (166 ha) in PS Minnesota Unit 1,

425 ac (170 ha) in PS South Dakota Unit 3B,

319 ac (128 ha) in PS South Dakota Unit 7,

159 ac (64 ha) in PS South Dakota Unit 9,

117 ac (47 ha) in PS South Dakota Unit 10,

75 ac (30 ha) in PS South Dakota Unit 11,

676 ac (270 ha) in PS South Dakota Unit 12A,

189 ac (76 ha) in PS South Dakota Unit 14, and

13 ac (5 ha) in PS South Dakota Unit 15.

In total, we are excluding approximately 5,852 ac (2,368 ha) of land from the final designation of critical habitat for the Dakota skipper and 2,387 ac (966 ha) for the Poweshiek skipperling.

TABLE 3—AREAS EXCLUDED FROM CRITICAL HABITAT DESIGNATION BY CRITICAL HABITAT UNIT

[Exclusion types are given in the Exclusion Category column as: Service conservation easements (CE), Service Partners for Fish and Widllife Program (P), Tribal (T), other easements in critical habitat (OEI), other easements outside of critical habitat (OEO).]

Unit	Areas meeting the definition of critical habitat, in acres (Hectares)	Exclusion category	Areas excluded from critical habitat, in acres (Hectares)
DS Minnesota Unit 1	1,545 (625)	CE	389 (157)
		OEO	25 (10)
PS Minnesota Unit 1	1,545 (625)	CE	389 (157)
		OEO	25 (10)
DS North Dakota Unit 3	1,213 (491)	CE	577 (233)
		OEI	12 (5)
		OEO	305 (123)
DS North Dakota Unit 4	100 (40)	CE	70 (28)
		OEI	30 (12)
DS North Dakota Unit 5	2,446 (990)	CE	751 (304)
		P	78 (32)
		OEI	564 (228)
DS North Dakota Unit 8	448 (181)	CE	48 (20)
DS North Dakota Unit 10	639 (259)	T	639 (259)
PS South Dakota Unit 3B	582(236)	CE	425 (172)
DS South Dakota Unit 7	470 (190)	CE	41 (17)
		T	278 (113)
PS South Dakota Unit 7	470 (190)	CE	41 (17)
		T	278 (113)
DS South Dakota Unit 9	160 (65)	CE	24 (10)
		T	133 (54)
		OEI	2 (1)
PS South Dakota Unit 9	160 (65)	CE	24 (10)
		T	133 (54)
		OEI	2 (1)
DS South Dakota Unit 10	117 (47)	T	117 (47)
PS South Dakota Unit 10	117 (47)	T	117 (47)
DS South Dakota Unit 11	89 (36)	T	75(30)
PS South Dakota Unit 11	89 (36)	T	75 (30)
DS South Dakota Unit 12A	676 (274)	CE	238 (96)
		T	438 (177)
PS South Dakota Unit 12A	676 (274)	CE	238 (96)
		T	438 (177)
DS South Dakota Unit 14	189 (76)	T	189 (76)
PS South Dakota Unit 14	189 (76)	T	189 (76)
DS South Dakota Unit 15	188 (76)	T	13 (5)
PS South Dakota Unit 15	188 (76)	T	13 (5)
DS South Dakota Unit 19	363 (147)	CE	326 (132)
		T	37 (15)
DS South Dakota Unit 20	255 (103)	CE	255 (103)
DS South Dakota Unit 21	198 (80)	OEO	198 (80)

Consideration of Economic Impacts

Under section 4(b)(2) of the Act, we consider the economic impacts of specifying any particular area as critical habitat. In order to consider economic impacts, we prepared an incremental effects memorandum (IEM) and screening analysis, which together with our narrative and interpretation of effects, we consider our draft economic analysis (DEA) of the proposed critical habitat designation and related factors (IEC 2014). The analysis, dated September 8, 2014, was made available for public review from September 23, 2014, through October 23, 2014 (79 FR 56704). The DEA addressed probable economic impacts of critical habitat designation for the Dakota skipper and Poweshiek skipperling. 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 Dakota skipper and Poweshiek skipperling is summarized below and available in the screening analysis for the Dakota skipper and Poweshiek skipperling (IEC 2014), available at *http://www.regulations.gov.*

Critical habitat designation for the Dakota skipper and Poweshiek skipperling is unlikely to generate costs exceeding $100 million in a single year. Therefore, the rule is unlikely to meet the threshold for an economically significant rule, with regard to costs, under E.O. 12866.

The majority of acres proposed for designation (92 percent) are considered to be occupied, or occupancy is uncertain but the butterflies have been identified at the site in the past. In these areas, the economic impacts of implementing the rule through section 7 of the Act are likely limited to minor additional administrative effort. In areas the Service is certain are unoccupied (eight percent of the proposed designation), incremental section 7 costs may include both the administrative costs of consultation and the costs of developing and implementing conservation measures. Likely

incremental effects are primarily related to voluntary conservation agreements between private landowners and the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) or the Service, and land management changes on unoccupied Service-managed lands. These effects are expected to be limited, as follows: (1) Total incremental section 7 costs associated with NRCS agreements were predicted to reach $440,000 in 2014 (Costs are likely to be highest in South Dakota due to the relatively larger number of potentially affected projects.); (2) while total incremental costs associated with the Service's land management activities were not quantified, data from the Waubay National Wildlife Refuge suggest these costs are minimal.

Exclusions Based on Economic Impacts

Our economic analysis did not identify any disproportionate costs that are likely to result from the designation. Consequently, the Secretary is not exercising her discretion to exclude any areas from this designation of critical habitat for the Dakota skipper and Poweshiek skipperling based on economic impacts.

A copy of the IEM and screening analysis with supporting documents may be obtained by contacting the Twin Cities, Minnesota Field Office (see **ADDRESSES**) or by downloading from the Internet at *http://www.regulations.gov.*

Exclusions Based on National Security Impacts or Homeland Security Impacts

Under section 4(b)(2) of the Act, we consider whether there are lands owned or managed by the Department of Defense where a national security impact might exist. In preparing this final rule, we have determined that no lands within the designation of critical habitat for the Dakota skipper and Poweshiek skipperling are owned or managed by the Department of Defense or Department of Homeland Security, and, therefore, we anticipate no impact on national security or homeland security. Consequently, the Secretary is not exercising her discretion to exclude any areas from this final designation based on impacts on national security or homeland security.

Exclusions Based on Other Relevant Impacts

Under section 4(b)(2) of the Act, we also consider any other relevant impacts resulting from the designation of critical habitat. We consider a number of factors, including whether the landowners have developed any HCPs or other management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at any tribal issues 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.

Land and Resource Management Plans, Conservation Plans, or Agreements Based on Conservation Partnerships

As discussed below, we are excluding from the final critical habitat designation some areas that are covered by conservation plans and partnerships that provide a conservation benefit to the Dakota skipper or Poweshiek skipperling. We are excluding private lands on which the Service has secured grassland conservation easements and one private property that is covered by an existing conservation agreement under the Service's Partners for Fish and Wildlife Program. In addition, we also considered excluding from critical habitat lands that are owned by persons who have Service conservation easements, but those easements are on other portions of their property not within the areas proposed as critical habitat. The reason we considered this type of exclusion is that landowners with easements on their lands have shown interest in promoting conservation of species with needs and have a proven track record of partnering with the Service. We believe that even if portions of lands are not covered by easements, these landowners will still be proactive in working with the Service in managing their lands overall to benefit the butterflies. We are also excluding Tribal lands from the final designation, based on conservation partnerships.

We did not consider for exclusion from critical habitat any units where the Poweshiek skipperling is likely still present, because of the species' highly imperiled status. We are also not excluding lands from critical habitat that are held by The Nature Conservancy (TNC). Unlike individual private landowners (*e.g.,* ranchers), there are only minimal benefits to be gained from excluding lands owned by TNC from the final critical habitat designation. Our partnership with TNC will be maintained regardless of whether their lands are designated as critical habitat. In fact, TNC has already initiated discussions with the Service to determine how it might manage its lands to continue to conserve extant populations of Dakota skipper and to maintain the essential features of both species' habitats. This sets them apart from many small or individual private landowners for whom the exclusion of certain lands from the critical habitat designation is likely to have a significant positive impact with regard to maintaining partnerships that will facilitate the protection of these species and their habitats.

Benefits of Inclusion

Potential benefits to the Dakota skipper and Poweshiek skipperling of including areas in the final critical habitat designation include (1) the potential for preventing destruction or adverse modification of critical habitat as a result of consultation on Federal actions under section 7(a)(2) of the Act; and, (2) increased awareness of the land's role in the species' conservation. The potential for a critical habitat designation to benefit the Dakota skipper and Poweshiek skipperling in each of these ways is summarized below.

On private lands, Federal actions that will affect Dakota skipper and Poweshiek skipperling critical habitat may primarily consist of voluntary conservation agreements between private landowners and the NRCS or the Service's PFW program. These actions would include prescribed grazing and associated fencing and water facility development, forage harvest management, and upland wildlife habitat management. In general, these actions are likely to benefit Dakota skipper and Poweshiek skipperling habitat, although the Service may cooperate with NRCS to further enhance these benefits. In areas that are not occupied by either species, a critical habitat designation may increase the likelihood that this inter-agency cooperation will occur. Cooperation between NRCS and the Service, however, is not dependent on a critical habitat designation, and there are many existing examples of those agencies working cooperatively to achieve conservation benefits on individual landowner's properties. As part of planning and implementing recovery for the two species, for example, the Service could ensure that NRCS is aware of each area that is important to the conservation of the species, and understands measures that may be incorporated into NRCS actions that would contribute to their conservation. Coordination within the Service between its Endangered Species program and its PFW program may be carried out to an even greater extent. In fact, PFW is likely to implement actions that will play a significant role in recovery of the species, and already

places a high priority on actions that contribute to their conservation.

As part of our analysis of potential economic impacts of the proposed critical habitat designation, we identified ongoing or new projects that may affect areas of critical habitat that may be subject to consultation under section 7(a)(2) of the Act. In addition to the voluntary conservation agreements described above, other activities that may have a Federal nexus and that could result in effects to habitats of either species on private lands include transportation projects, wind energy development, and other development. Transportation projects could affect some areas, but there was only one instance where we could identify a specific transportation project that would affect an area proposed as critical habitat for either species (IEC 2014, p. 16; USFWS 2014b, p. 19). Thus, although there could be some benefits to the species from consultations on transportation projects, as those projects and their effects are likely to be limited, those benefits are also likely to be limited.

We are aware of two ongoing wind energy projects on proposed critical habitat locations occupied by Dakota skipper (IEC 2014, p. 18; USFWS 2014b, p. 19). We are unaware of any wind projects that overlapped with unoccupied proposed critical habitat, but several proposed wind energy projects were in close proximity to unoccupied units in Iowa (IEC 2014, p. 18). Although the timing and magnitude of impacts from wind development are highly uncertain, there is potential for effects on unoccupied critical habitat. Where wind energy projects affect occupied critical habitat, the presence of the species would likely trigger the requirement for the Federal agency to consult with the Service under section 7(a)(2) of the Act, regardless of whether the projects occur on lands designated as critical habitat.

Designating areas as critical habitat would result in some benefit to the species as a result of increased awareness of the importance of these habitats, but the Service may communicate the importance of these areas through other means. For example, the Service will identify for the public all areas important for the recovery of one or both species in recovery outlines or recovery plans and can reach out directly to key individuals, agencies, and organizations to ensure that they are aware of habitats that are important for each species' recovery. The designation of critical habitat for Dakota skipper and Poweshiek skipperling may be unlikely to trigger additional requirements under State or local regulations (IEC, 2014, p. 2).

Benefits of Exclusion

The areas considered for exclusion from critical habitat are important for the recovery of the Dakota skipper and Poweshiek skipperling, but their exclusion may actually provide greater conservation benefit to the species than designation as critical habitat. During the public comment period and in individual meetings with landowners, many landowners indicated that they would be reluctant to partner with the Service to assist recovery efforts if we designated their properties as critical habitat. The recovery of each species will rely heavily on their conservation on private lands and this will, in turn, depend on our ability to maintain existing partnerships with private landowners, and to form new ones. Private land comprises about 46 percent of the sites on which the Dakota skipper may still occur in the United States. As one example of why partnerships are important, surveys to determine the status and distribution of the species and their habitats are an essential component of each species' conservation, and may not be carried out without detailed field work and thorough inspections of habitat conditions. In order to conduct these surveys, we must maintain good working relationships with the landowners who provide access to their property (Royer *et al.* 2014, p. v). Exclusion of private lands from critical habitat, when appropriate, will increase our chances of maintaining or developing enough beneficial partnerships to conserve the species, and to facilitate continued interest among landowners in conservation easements that will be necessary to reduce habitat fragmentation, which poses a significant threat to the species.

Conservation of the species' high-quality native prairie habitats on private lands is best achieved with a cooperative approach. After over 50 years of work to conserve native ecosystems in the northern plains of the United States, the Service has determined that voluntary conservation easements are the only viable means to protect wildlife values on a landscape scale in the region (USFWS 2011, p. 10). To maintain or restore viable populations of Dakota skipper or Poweshiek skipperling at any site, the Service and its partners will have to develop plans that rely on a dynamic accounting of site-specific conditions and land use history. This will require a willingness on the part of the landowner to engage closely with the Service. The Dakota skipper and Poweshiek skipperling may be excluded from lands simply by landowners not knowing about or being proactive in performing simple management activities. The Service can provide assistance and technical direction in how to best manage lands for a balance of use and conservation purposes, and can best do this through effective partnerships and good working relationships with the landowners.

To conserve a landscape that is capable of supporting the recovery of the Dakota skipper and Poweshiek skipperling, we believe it is important to facilitate the continuation of grassland-based agriculture in light of pressures to convert these lands to uses incompatible with the conservation of native prairie species. The Service has found that a strong and vibrant rural lifestyle—with ranching as the dominant land use—is one of the key components for ensuring habitat integrity and wildlife resource protection in the northern grassland region (USFWS 2011, p. 10). A significant potential benefit of acknowledging established conservation partnerships by excluding lands from critical habitat is that it would facilitate our efforts to continue to protect lands through our easement programs or with other incentives where the species' habitats are not yet protected. Our agency's relationships with private landowners on whose land we have proposed critical habitat and who have voluntarily entered into conservation partnerships are extremely valuable to the conservation and recovery of these species. The Service is attempting to accelerate its purchase of wetland and grassland easements, and anticipates that endangered, threatened, and candidate species on private lands will benefit from the extensive habitat protection (USFWS 2011, p. 29).

Service Grassland Conservation Easements

Many of the areas that we considered for exclusion from the final critical habitat designation are covered by conservation easements (as of December 31, 2014). A conservation easement is a legal agreement voluntarily entered into by a property owner and a qualified conservation organization, such as a land trust or government agency. These easements contain permanent restrictions on the use or development of land in order to protect its conservation values. Service easement contracts specify perpetual protection of habitat for trust species by restricting the conversion of wetland and grassland to other uses.

The conservation easements that we considered as a basis for exclusions from critical habitat prevent cultivation of native grasslands and provide an essential means of protecting against this most acute of threats to the habitats of Dakota skippers and Poweshiek skipperlings. Untilled prairies or remnant moist meadows are physical and biological features that are essential to the conservation of both species. Conversion of grasslands for the production of agricultural crops or other uses destroys the species' habitat, increases isolation of the species' populations by impeding dispersal, and increases the risk posed by drift of herbicides and pesticides from cultivated lands. Unlike degraded habitats, once native prairie is cultivated, it is unlikely to again support the essential physical or biological features that comprise the species' critical habitat.

As explained in the final rule to list the species (USFWS 2014a), cultivation of native grassland habitats in the range of the Dakota skipper and Poweshiek skipperling is an ongoing threat. A wide variety of peer-reviewed publications and government reports document recent conversion of native grassland and make it clear that this activity is an ongoing threat to the Dakota skipper and Poweshiek skipperling. Grassland loss in the western corn belt may be occurring at the fastest rate observed since the 1920s and 1930s and at a rate comparable to that of deforestation in Brazil, Malaysia, and Indonesia (Wright and Wimberly 2013, p. 5). In addition, economic and policy incentives are likely to continue to place pressure on landowners to convert native grassland from ranching to agricultural cropland (Congressional Research Service (CRS) 2007, p. 5; United States Government Accountability Office (USGAO) 2007, p. 15; Stephens *et al.* 2008, p. 6; Rashford *et al.* 2011, p. 282; Doherty *et al.* 2013, p. 14; Sylvester *et al.* 2013, p. 13). Between 2006 and 2011, destruction of native grassland was mostly concentrated in North Dakota and South Dakota, east of the Missouri River, an area corresponding closely to the range of the Dakota skipper (Wright and Wimberly 2013, p. 2). In northeastern South Dakota, one of the few remaining strongholds for Dakota skippers, about 270,000 acres (109,265 ha) of grassland was lost—primarily to cropland—between 2006 and 2012 (Reitsman *et al.* 2014, p. 2).

In the areas that we considered for exclusion from critical habitat, conservation easements are the most cost-effective and socially acceptable means to ensure protection of important habitats (U.S. Fish and Wildlife Service 2011, p. 10). Service easements are often used in combination with wetland easements to protect entire prairie wetland ecosystems and are part of the National Wildlife Refuge System. The basic considerations in acquiring an easement interest in private lands are the biological significance of the area, biological requirements of the wildlife species of management concern, existing and anticipated threats to wildlife resources, and landowner interest in the program.

The Service typically acquires conservation easements in the Prairie Pothole Region with Federal Duck Stamp dollars (USFWS 2011, p. 3), and gives highest priority to lands that contain large tracts of grassland with high wetland densities and native prairie or soils most likely to be converted to cropland. Since 1991, easements have been used successfully to retroactively protect grassland habitats around wetlands previously protected by wetland easements and are now used concurrently with wetland easements. In areas where native prairie conservation is a high priority but wetland densities are low, the Service acquires grassland easements in the Dakotas through its Dakota Grassland Conservation Area Land Protection Plan (USFWS 2011, p. 1); in Iowa and Minnesota, it does so as part of the Northern Tallgrass Prairie National Wildlife Refuge (NTPNWR). Unlike a typical national wildlife refuge, the NTPNWR consists of separate and distinct units of native prairie.

The greatest contribution to the conservation of Dakota skipper and Poweshiek skipperling habitat from these easements is that they prevent cultivation, but they provide additional and important benefits. Service easements restrict haying, mowing, and grass seed harvest until after July 15 of each year and are administered according to policy and procedures contained in regional easement manuals. Delayed haying or mowing minimizes the likelihood that late-stage larvae or adults will be killed, that nectar species will be removed before or during the flight period, and that reproduction will be disrupted. Landowners may not cultivate or otherwise alter grasslands, wildlife habitat, and other natural features in the area covered by the easements. They must maintain permanent vegetative cover such as forbs, grasses, and low shrubs. This prevents grassland habitats from becoming dominated by large shrubs or trees, which would preclude the existence or development of the grasses and flowering herbaceous plants that are physical and biological features essential to the conservation of both species. The Service often works with easement landowners through its PFW program to further enhance the quality of native prairie habitats through grazing swaps, inter-seeding native plant species, and implementing prescribed fire.

The Service's monitoring of its easements typically consists of a periodic review of land status through correspondence or meetings with the landowners or land managers to make sure provisions of wetland and grassland easements are being met. The Service uses photo documentation at the time of easement establishment to document baseline conditions. Following procedures contained in its easement manuals, the Service evaluates and administers all requests for uses or activities restricted by an easement (USFWS 2011, p. 36).

Benefits of Inclusion—Service Conservation Easements

Benefits of including areas covered by Service conservation easements in critical habitat include additional protections that could be realized as a result of consultation under section 7(a)(2) of the Act, as well as an increased awareness of the land's role in the species' conservation. On private lands covered by Service easements, Federal actions that affect Dakota skipper and Poweshiek skipperling habitat primarily consist of voluntary conservation agreements between private landowners and the NRCS or the Service's PFW program. These actions would include prescribed grazing and associated fencing and water facility development, forage harvest management, and upland wildlife habitat management. In general, these actions are likely to benefit Dakota skipper and Poweshiek skipperling habitat, although the Service may cooperate with NRCS to further enhance these benefits. These benefits are likely to be reduced, however, because regardless of whether these areas are included in the final critical habitat designation, NRCS and the Service will cooperate to ensure that NRCS is aware of the locations of any lands that are important to the conservation of the two butterflies. As part of planning and implementing recovery for the two species, for example, the Service will ensure that NRCS is aware of each area that is important to the conservation of the species and that its employees understand measures that may be incorporated into NRCS actions to conserve the species' habitats.

In addition to the voluntary conservation agreements described above, other Federal actions that may affect habitats of either species on private lands include transportation projects, wind energy development, and other development. Transportation projects could affect some areas proposed as critical habitat, but are not likely to have broad and major effects on habitat for the two butterfly species. There was only one instance where we could identify a specific transportation project that would affect an area proposed as critical habitat for either species (IEC 2014, p. 16; USFWS 2014b, p. 19). Only unoccupied units were screened for transportation projects, but this is indicative that transportation projects may not have broad and major effects on habitat for the two butterfly species. In addition, we did not find evidence that many areas proposed as critical habitat are likely to be subject to wind energy or other development. Inclusion of areas covered by Service conservation easements could result in some increased protections of the primary physical and biological features of each species' habitats as a result of consultation under section 7(a)(2) of the Act. Under section 7(a)(2), a Federal action may still cause adverse effects to the essential physical and biological features of an individual unit of critical habitat if those effects allow the critical habitat as a whole to serve the intended conservation role for the species. Nevertheless, Federal agencies may still choose to avoid implementing actions that are likely to cause any adverse effects.

The potential benefits of inclusion of lands covered by Service conservation easements are reduced by the scrutiny that the Service already gives to requested uses of these lands. Requested uses, such as pipelines or road construction, that could affect easement grasslands must be reviewed by the Service before they are authorized. This review occurs regardless of whether the area is within critical habitat. When a new right-of-way is requested across an area protected by an easement, the Service works with the utility and the landowner to explore options to avoid and then minimize impacts to protected habitats. Rerouting infrastructure around sensitive areas is a legitimate option and one that the Service pursues when it is reasonable to do so. Once avoidance and minimization options have been considered, the Service accommodates reasonable needs to develop protected lands either by issuing a rights-of-way, by issuing a permit, or by executing an exchange of interests whereby the impacted habitats are replaced elsewhere (USFWS 2011, p. 114).

In South Dakota and North Dakota, installation of wind turbines on areas covered by an easement is similar to other requested uses and is subject to mitigation requirements under the terms of the easement. Landowners must work with the Service to minimize impacts and replace the acres lost with a new easement. This decreases the benefits of critical habitat because section 7(a)(2) consultation is unnecessary to prevent destruction or modification of the species' habitats that might result from the construction and operation of wind energy facilities on areas with easements. In fact, the requirement to replace impacted habitats within an easement would likely exceed what would be required as a result of a site-specific section 7(a)(2) consultation on effects to critical habitat, which would not require replacement or mitigation. In Minnesota, wind energy development is typically precluded by ensuring any leases for wind energy development are relinquished prior to easement acquisition.

Designating areas covered by Service conservation easements as critical habitat would result in some benefit to the species as a result of increased awareness of the importance of these habitats, but the Service may document the importance of these areas through other means. For example, the Service will identify for the public all areas important for the recovery of one or both species in recovery outlines or recovery plans and can reach out directly to individuals, agencies, and organizations to ensure that they are aware of habitats important for each species' recovery. Moreover, the Service has already documented the importance of these areas for conservation by acquiring the conservation easement.

Benefits of Exclusion—Service Conservation Easements

Excluding lands covered by Service conservation easements is likely to provide significant benefits to conserving the species' habitats on private lands. About half of areas identified as the species' habitats are on private lands, and we are unlikely to recover the species unless we form and maintain partnerships with private landowners. On any privately owned site, effective conservation of the species' essential habitat features is likely to be a complex and challenging endeavor that would not be achieved without a productive and cooperative partnership with the landowner. The Dakota skipper and Poweshiek skipperling may be excluded from lands simply by landowners not knowing about or being proactive in performing simple management activities. The Service can provide assistance and technical direction in how to best manage lands for a balance of use and conservation purposes, and can best do this through effective partnerships and good working relationships with the landowners.

Excluding lands covered by Service conservation easements will benefit the species by maintaining existing partnerships with easement landowners and by facilitating additional important land protection actions. Many landowners on whose lands we proposed critical habitat expressed strong opposition to the designation during comment periods, including persons who have sold conservation easements to the Service and that have engaged in other voluntary conservation actions with our agency. For example, surveys to determine the status and distribution of the species and their habitats are an essential component of each species' conservation and may not be carried out without on-the-ground surveys and close inspection of habitat conditions. In order to conduct these surveys, we must maintain good working relationships with the landowners who provide access to their property (Royer *et al.* 2014, p. v).

In some areas that were proposed as critical habitat, conservation plans that are in place offset the benefit that a critical habitat designation would have with regard to effects that might result from the construction and operation of wind energy facilities. On several areas proposed as critical habitat, existing conservation plans prevent development for wind energy production. This is true of Service conservation easements in the Service's Midwest Region, Minnesota Native Prairie Bank easements, and Iowa Natural Heritage Foundation easements. In addition, on areas covered by Service easements in the Service's Mountain-Prairie Region, which includes North Dakota and South Dakota, installation of wind turbines is subject to mitigation requirements under the terms of the easement: Landowners must work with the Service to minimize impacts and replace the acres affected with a new easement.

Exclusion of private lands covered by Service conservation easements from critical habitat is likely to increase our chances of maintaining or developing beneficial partnerships that are sufficient in quantity and quality to conserve the species. In addition, exclusion is likely to facilitate

continued interest among landowners in additional conservation easements that will be necessary to reduce habitat fragmentation, which poses a significant threat to the species. Conservation easements may be the only viable means to protect wildlife values on a landscape scale in these areas (USFWS 2011, p. 10). In addition, exclusion of private lands that are under easement is likely to result in a positive perception of the Service's easement program, which could result in opportunities to cooperate with other key landowners whose lands are currently not protected by easement.

Benefits of Exclusion Outweigh the Benefits of Inclusion—Service Conservation Easements

The benefits of excluding lands covered by Service conservation easements outweigh the benefits of including these areas as critical habitat. With few exceptions, Federal actions that affect the species' habitats on private lands with Service conservation easements are conservation actions entered into voluntarily by the landowners. Inclusion of the areas in critical habitat would have minimal benefits with regard to those actions. In general, they are not likely to have significant adverse effects and the sponsoring agencies—NRCS and the Service (PFW)—are already likely to be cognizant of the need to conserve areas that are important to the conservation of the two species. Other types of Federal actions, such as transportation projects, are not likely to have extensive impacts to lands with Service conservation easements, and their effects will already be minimized or mitigated as a result of standard easement restrictions and review.

Exclusion of lands covered by Service conservation easements will benefit the species' habitats by ensuring that existing conservation partnerships are maintained and strengthened and that landowners continue to sell easements to the Service or otherwise engage in voluntary efforts to conserve the species. By excluding these areas from critical habitat, we can continue to foster the close working partnerships that are necessary to conserve the primary physical and biological features of the species' native prairie habitats. In order to recover the Dakota skipper and Poweshiek skipperling, the Service must continue to build positive working relationships with private landowners who have demonstrated a commitment to conservation by acquiring conservation easements on their lands. These conservation actions provide a greater benefit to the species than do the minimal regulatory and educational benefits of designating critical habitat on these lands.

Exclusion Will Not Result in Extinction of the Species—Service Conservation Easements

Excluding lands covered by Service conservation easements will not result in extinction of either species. We are not excluding any lands that are currently occupied by the Poweshiek skipperling. Reintroduction of the species would be required for it to again inhabit any of the excluded lands, and exclusion is not likely to reduce the likelihood that reintroduction would occur or be successful. In fact, exclusion of lands covered by Service easements is likely to facilitate robust partnerships with private landowners that would be required to support a reintroduction program that would be effective in conserving Poweshiek skipperling. For the Dakota skipper, excluding lands covered by Service conservation easements is likely to restore, maintain, and increase the strength and number of partnerships with private landowners that are needed to recover the species.

Other Lands Owned by Persons Holding Service Conservation Easements

We also considered excluding from critical habitat lands proposed as critical habitat that are owned by persons who have Service easements, but those easements are on other portions of their property not within the areas proposed as critical habitat. The reason we considered this type of exclusion is that landowners with easements on their lands have shown interest in promoting conservation and have a proven track record of partnering with the Service. We believe that even if portions of lands are not covered by easements, these landowners will still be proactive in working with the Service in managing their lands overall to benefit the butterflies. This consideration would affect a total of 939 acres, primarily areas that were proposed as critical habitat for the Dakota skipper in McHenry County, North Dakota (911 acres), as well as two areas proposed as critical habitat for both species, one in Minnesota (25 acres) and one in South Dakota (2 acres).

Benefits of Inclusion—Other Lands Owned by Persons With Service Easements

Benefits of including areas owned by persons with Service easements on other tracts from critical habitat include additional protections that could be realized as a result of consultation under section 7(a)(2) of the Act, as well as an increased awareness of the land's role in the species' conservation. On these lands, Federal actions that affect Dakota skipper and Poweshiek skipperling habitat primarily consist of voluntary conservation agreements between private landowners and the NRCS or the Service's PFW program. In general, these actions benefit Dakota skipper and Poweshiek skipperling habitat, although the Service may cooperate with NRCS to further enhance these benefits. Regardless of whether these areas are included in the final critical habitat designation, the Service will cooperate internally with its PFW program and with NRCS to ensure that personnel are aware of the locations of any lands that are important to the conservation of the two butterflies. This interaction reduces the benefits to conservation that would occur as a result of inclusion in critical habitat.

In addition to the voluntary conservation agreements described above, other Federal actions that may affect habitats of either species on private lands include transportation projects, wind energy development, and other development. Transportation projects could affect some areas proposed as critical habitat, but are not likely to have broad and major effects on habitat for the two butterfly species. In addition, few areas proposed as critical habitat are likely to be subject to wind energy or other development. Inclusion of other lands owned by persons with Service easements could result in some increased protections of the primary physical and biological features of each species' habitats as a result of consultation under section 7(a)(2) of the Act. Under section 7(a)(2), a Federal action may still cause adverse effects to the essential physical and biological features of an individual unit of critical habitat if those effects allow the critical habitat as a whole to serve the intended conservation role for the species. Nevertheless, Federal agencies may still choose to avoid implementing actions that are likely to cause any adverse effects.

Designating areas as critical habitat that are owned by persons who have Service conservation easements on other portions of their property would result in some benefit to the species as a result of increased awareness of the importance of these habitats, but the Service may document the importance of these areas through other means. For example, the Service will identify for the public all areas important for the recovery of one or both species in recovery outlines or recovery plans and can reach out directly to individuals, agencies, and organizations to ensure

that they are aware of habitats important for each species' recovery. As part of planning and implementing recovery of the two species, for example, the Service will ensure that NRCS is aware of each area that is important to the conservation of the species and that its employees understand measures that may be incorporated into NRCS actions to conserve the species' habitats.

Benefits of Exclusion—Other Lands Owned by Persons With Service Easements

Excluding lands owned by persons with Service conservation easements on other tracts is likely to provide significant benefits to conserving the species' habitats on private lands. Our ability to conserve the two species' habitats will be enhanced if we are able to maintain and develop strong partnerships with private landowners. This is especially true in certain geographic areas that are especially important for the recovery of either species. Native prairie in McHenry County, North Dakota, comprises one of the few strongholds for Dakota skipper and contains 97 percent of the lands excluded in this category. Protection and restoration of Dakota skipper habitat in this area will be difficult to achieve unless the Service protects its ability to form and maintain strong partnerships with private landowners and ranchers.

The landowners who have sold conservation easements to the Service have established conservation partnerships with the Service. They often work closely with the Service, in some cases on innovative and voluntary efforts to conserve habitats on their land. In one case, for example, a landowner has worked with a Service Wetland Management District in Minnesota on grazing swaps. Under grazing swaps, landowners are allowed to use their livestock to implement conservation grazing of Service-owned lands in exchange for resting their own private pasture. This allows grazing pressure to be distributed across the landscape, reducing the likelihood that private lands are grazed too heavily and that native prairie on public land is also managed to maximize ecological values.

Exclusion of lands owned by persons with Service easements on other tracts will increase opportunities for the Service to cooperate with key private landowners. On any privately owned site, effective conservation of each species' essential habitat features is likely to be complex and challenging. It will require ongoing monitoring to determine how the species and their essential habitat features respond to management schemes. This level of cooperation is best achieved through a productive and cooperative partnership with the landowner. By excluding lands owned by persons with Service easements on other tracts, we enhance the opportunities to conserve the physical and biological features of each species' habitat on private lands.

Exclusion of private landowners with Service easements from critical habitat will facilitate continued interest among landowners in conservation easements and is expected to assist getting conservation easements purchased on lands that are valuable for butterfly conservation. Habitat fragmentation poses a significant threat to the species because it reduces the likelihood that the species may disperse among habitat areas and increases the likelihood that local populations will be extirpated. Over 50 years of experience in the Prairie Pothole Region strongly suggests that conservation easements may be the only viable means to protect wildlife values on a landscape scale (USFWS 2011, p. 10).

Benefits of Exclusion Outweigh the Benefits of Inclusion—Other Lands Owned by Persons With Service Easements

The benefits of excluding lands owned by persons with Service easements on other tracts outweigh the benefits of including these areas as critical habitat. With some exceptions, Federal actions that affect Dakota skipper and Poweshiek skipperling habitat on private lands are voluntary conservation actions by the landowners. Inclusion of the areas in critical habitat would have minimal benefits with regard to those actions because they are not likely to have significant adverse effects, if any, to the species or their habitats. Moreover, the agencies that sponsor these activities—NRCS and the Service (PFW)—are likely to be aware of the need to conserve areas that are important to the Dakota skipper, regardless of the critical habitat designation. Other types of Federal actions, such as transportation projects, are not likely to have extensive impacts to lands owned by persons with Service conservation easements on other tracts.

Exclusion of lands owned by persons with Service conservation easements on other tracts will benefit the species' habitats by ensuring that existing, important conservation partnerships are maintained and strengthened and that landowners are encouraged to continue to sell easements to the Service or to otherwise engage in voluntary efforts to conserve the species' habitats. By excluding these areas from critical habitat, we can continue to foster the close working partnerships that are necessary to conserve the primary physical and biological features of the species' native prairie habitats. In order to recover the Dakota skipper and Poweshiek skipperling, the Service must continue to build positive working relationships with private landowners who have demonstrated a commitment to conservation by acquiring conservation easements on their lands. These conservation actions provide a greater benefit to the species than do the minimal regulatory and educational benefits of designating critical habitat on these lands.

Exclusion Will Not Result in Extinction of the Species—Other Lands Owned by Persons With Service Conservation Easements

Excluding lands owned by persons with Service conservation easements on other tracts will not result in extinction of either species. We are not excluding any lands that are currently occupied by the Poweshiek skipperling. Reintroduction of this species will be required for it to again inhabit any of the excluded lands, and exclusion is not likely to reduce the likelihood that reintroduction will occur or be successful. In fact, exclusion of lands owned by persons with Service conservation easements on other tracts is likely to facilitate robust partnerships with private landowners that would be required to support a reintroduction program that would be effective in conserving Poweshiek skipperling. For the Dakota skipper, excluding lands owned by persons with Service conservation easements on other tracts is likely to restore, maintain, and increase the strength and number of partnerships with private landowners that are needed to recover the species. These benefits of exclusion are likely to be substantial, whereas the benefits of including these areas as critical habitat are likely to be minimal in light of the limited risk that Federal actions are likely to pose to the species' habitats in the affected areas.

Service's Partners for Fish and Wildlife Program

We considered for exclusion from critical habitat lands covered by management agreements between private landowners and the Service's Partners for Fish and Wildlife Program (PFW) as of December 31, 2014. The PFW program provides technical and financial assistance to private landowners and Tribes who are willing to work with the Service and other partners on a voluntary basis to help

meet the habitat needs of the Service's Federal Trust Species, including threatened and endangered species. Although not always permanent, landowners sign agreements with the Service to maintain the habitat improvements for a specified period of time (generally anywhere from 10 years to perpetuity) and landowners typically assist with implementation through in-kind or financial contributions. These PFW private landowner agreements are voluntary and evidence of the trust and established partnership between the Service and individual landowners that could facilitate additional actions to conserve Dakota skipper or Poweshiek skipperling. The conservation practices often remain in place long after the PFW private landowner agreements have expired. In addition, excluding areas that are covered by PFW agreements from critical habitat may help to avoid the perception by some landowners that increased regulation is a likely outcome of engaging voluntarily with the Service to implement conservation activities on their lands. There are two areas that fit this category that we considered for exclusion, including one site in McHenry County, North Dakota, and one in Brookings County, South Dakota. The area that we are excluding in this category includes the property in North Dakota. It comprises approximately 78 acres (32 hectares) in the proposed Dakota Skipper North Dakota Critical Habitat Unit 5.

Benefits of Inclusion—Lands Covered by Partners for Fish and Wildlife Agreements

Benefits of including areas covered by PFW agreements in the final critical habitat designation include additional protections that could be realized as a result of consultation under section 7(a)(2) of the Act, as well as an increased awareness of the land's role in the species' conservation. On private lands covered by Service PFW agreements, Federal actions that affect Dakota skipper and Poweshiek skipperling habitat primarily consist of voluntary conservation agreements between private landowners and the NRCS and existing or new agreements established by the PFW program. In general, these actions benefit Dakota skipper and Poweshiek skipperling habitat, although the Service may cooperate with NRCS to further enhance these benefits. These benefits are reduced, however, because regardless of whether these areas are included in the final critical habitat designation, the Service will cooperate internally with its PFW program and with NRCS to ensure that personnel are aware of the locations of lands that are important to the conservation of the two butterfly species. As part of planning and implementing recovery of the two species, for example, the Service will ensure that NRCS and the PFW program are aware of areas that are important to the conservation of the species and that employees understand measures that may be incorporated into actions to conserve the species' habitats.

In addition to the voluntary conservation agreements described above, other Federal actions that may affect habitats of either species on private lands include transportation projects, wind energy development, and other development. Transportation projects could affect some areas proposed as critical habitat, but are not likely to have broad and major effects on habitat for the two butterfly species. Moreover, neither site is within 0.5 km of any road or highway that may be likely to be the subject of Federal transportation dollars for improvement or maintenance. In addition, we did not find evidence that many areas proposed as critical habitat are likely to be subject to wind energy or other development. Inclusion of areas covered by PFW agreements could result in some increased protections of the primary physical and biological features of each species' habitats as a result of consultation under section 7(a)(2) of the Act. Under section 7(a)(2), a Federal action may still cause adverse effects to the essential physical and biological features of an individual unit of critical habitat if those effects allow the critical habitat as a whole to serve the intended conservation role for the species. Nevertheless, Federal agencies may still choose to avoid implementing actions that are likely to cause any adverse effects.

Designating areas covered by PFW agreements as critical habitat would result in some benefit to the species as a result of increased awareness of the importance of these habitats, but the Service may document the importance of these areas through other means. For example, the Service will identify for the public all areas important for the recovery of one or both species in recovery outlines or recovery plans and can reach out directly to individuals, agencies, and organizations to ensure that they are aware of habitats important for each species' recovery. Moreover, the Service has already documented the importance of these areas for conservation by establishing the PFW agreement.

Benefits of Exclusion—Lands Covered by Partners for Fish and Wildlife Agreements

Excluding lands owned by persons with PFW agreements provides benefits to conserving Dakota skipper and Poweshiek skipperling habitat on private lands. Excluding these areas from critical habitat encourages additional partnerships with the persons directly affected and may encourage other landowners to enter into similar agreements. Our ability to conserve the two species' habitats will be enhanced by maintaining and developing strong partnerships with private landowners.

The benefits of exclusion from critical habitat are likely of different magnitudes for the two areas that we considered under this category. Native prairie in McHenry County, North Dakota, comprises one of the few strongholds for the Dakota skipper. Lands in this area are relatively flat—some are vulnerable to being plowed up and cultivated, which would destroy Dakota skipper habitat. Protection of Dakota skipper habitat in this area will be difficult to achieve unless the Service protects its ability to form and maintain strong partnerships with private landowners and ranchers. On a second site covered by a PFW agreement and that we considered for exclusion under this category, the benefits of excluding the site with a PFW agreement in South Dakota would likely be less. The site is in Brookings County, South Dakota, where habitat for Dakota skipper is more sparsely distributed and involves fewer landowners. Each site is in an area of rolling topography where grazing will likely remain the primary land use and where cultivation is unlikely. We could find no evidence in this area that a critical habitat designation would place at risk any existing partnerships with private landowners, nor endanger the development of new partnerships.

Benefits of Exclusion Outweigh the Benefits of Inclusion—Lands Covered by Partners for Fish and Wildlife Agreements

The benefits of excluding the McHenry County, North Dakota, site that is covered by a PFW agreement outweighs the benefits of including it as critical habitat; therefore, we are excluding it from critical habitat. As we suggest above, the benefits of excluding the Brookings County, South Dakota, site that was covered by a PFW agreement do not outweigh the benefits of including it, so we are including it in the final critical habitat designation.

As with other private lands, with some exceptions, Federal actions that affect Dakota skipper and Poweshiek skipperling habitat on private lands are voluntary conservation actions by the landowners. Inclusion of the areas in critical habitat would have minimal benefits with regard to those actions, because they are not likely to have significant adverse effects, if any. Moreover, the agencies that sponsor these activities—NRCS and the Service (PFW)—are likely to be aware of the need to conserve areas that are important to the Dakota skipper, regardless of the critical habitat designation. Other types of Federal actions, such as transportation projects, are not likely to have extensive impacts to lands owned by persons who have signed PFW agreements with the Service.

Exclusion of lands owned by persons with PFW agreements could benefit the species' habitats by ensuring that existing important conservation partnerships are maintained and strengthened and that other landowners are encouraged to enter into similar agreements with the Service. By excluding these areas from critical habitat, we can continue to foster the close working partnerships that are necessary to conserve the primary physical and biological features of the species' native prairie habitats. In order to recover the Dakota skipper and Poweshiek skipperling, the Service must continue to build positive working relationships with private landowners who have demonstrated a commitment to conservation by acquiring conservation easements on their lands. These conservation actions provide a greater benefit to the species than do the minimal regulatory and educational benefits of designating critical habitat on these lands. Our ability to form and maintain conservation partnerships with private landowners appears to be significantly different between the two areas under this category. In McHenry County, North Dakota, where we are excluding a 78-acre tract of private property, the Dakota skipper and its habitat is distributed among numerous private landowners and the area is vulnerable to destruction by cultivation. In addition, we found that critical habitat designation raised significant concerns among landowners in McHenry County, which could affect our ability to maintin those partnerships. In Brookings County, South Dakota, where we are including a site covered by a PFW agreement in the final critical habitat designation, there is little reason to conclude that such a designation will affect our ability to form and maintain conservation partnerships.

Exclusion Will Not Result in Extinction of the Species—Lands Covered by Partners for Fish and Wildlife Agreements

Excluding the single private property in North Dakota that is covered by a PFW agreement will not result in extinction of either species. In fact, it is likely to improve our ability to form and maintain conservation partnerships with private landowners in an area with significant importance to Dakota skipper. We are not excluding any lands that are currently occupied by the Poweshiek skipperling. Reintroduction of the species would be required for it to again inhabit any of the excluded lands, and exclusion is not likely to reduce the likelihood that reintroduction would occur or be successful. In fact, exclusion of lands covered by Partners for Fish and Wildlife Agreements is likely to facilitate robust partnerships with private landowners that would be required to support a reintroduction program that would be effective in conserving Poweshiek skipperling. For the Dakota skipper, excluding lands covered by Partners for Fish and Wildlife Agreements is likely to restore, maintain, and increase the strength and number of partnerships with private landowners that are needed to recover the species. These benefits of exclusion are likely to be substantial, whereas the benefits of including these areas as critical habitat are likely to be minimal in light of the limited risk that Federal actions are likely to pose to the species' habitats in the affected area.

Tribal Lands

The Dakota skipper may be present on at least nine sites on the Lake Traverse Reservation of the Sisseton Wahpeton Oyate and on one site on the Ft. Berthold Reservation of the Three Affiliated Tribes. The Poweshiek skipperling occurred on the Sisseton Wahpeton Oyate sites, but is likely extirpated. Therefore, areas on the Lake Traverse Reservation of the Sisseton Wahpeton Oyate are unoccupied by Poweshiek skipperling. Sites where the Dakota skipper still occurs on Sisseton Wahpeton Oyate Tribal lands are typically managed with late summer haying.

Benefits of Inclusion—Tribal Lands

Benefits of including Tribal lands as critical habitat include additional protections as a result of consultation on actions under section 7(a)(2) of the Act, as well as an increased awareness of the land's role in the species' conservation. On Tribal lands, Federal actions that will affect Dakota skipper and Poweshiek skipperling habitat may primarily consist of actions implemented by the Tribes with funding from one or more Federal agencies. The Sisseton Wahpeton Oyate has administered grants, for example, from the Environmental Protection Agency and Bureau of Indian Affairs (BIA) to support a variety of environmental protection activities, including solid waste management, protection of air quality, and development of environmental codes (USFWS 2014, p. 15). These actions may not have a significant likelihood of causing adverse effects to critical habitat for either species. BIA may also request consultations for road construction; housing developments; mineral rights development; developing conservation, land and water management plans; rangeland improvements; noxious weed control; and projects related to grants administered by this agency (USFWS 2014, p. 17). Some of these actions could conceivably result in adverse effects to one or both species' habitats. Nevertheless, the Service has not found actions supported by BIA or other Tribal grants to constitute significant threats to either species or their habitats.

In addition to the grants provided by Federal agencies and administered by the Tribes, other Federal actions that may affect habitats of either species on Tribal lands include transportation projects, wind energy development, oil and gas development, and other development. Transportation projects could affect some areas, but are not likely to have broad and major effects on habitat for the two butterfly species. In addition, few of the Tribal areas that were proposed as critical habitat are likely to be subject to wind energy or other development, although the Fort Berthold Reservation has some ongoing oil and gas development projects. Nevertheless, inclusion of Tribal lands as critical habitat could result in some increased protections of the essential physical and biological features of each species' habitats where any transportation, wind energy, oil and gas development, or other development projects may be funded by a Federal agency.

Designating areas as critical habitat would result in some benefit to the species as a result of increased awareness of the importance of these habitats, but the Service may document the importance of these areas through other means. For example, the Service may, in cooperation with the Tribes,

identify all areas important for the recovery of one or both species in recovery outlines or recovery plans and can reach out directly to granting and other agencies and the Tribes to ensure that they are aware of habitats important for each species' recovery. As part of planning and implementing recovery of the two species, for example, the Service will ensure that the Tribes and the BIA are aware of each area that is important to the conservation of the species within the two reservations. Moreover, the Service will provide information to the agencies and Tribes that will include measures that may be incorporated into actions to protect and conserve the species' habitats.

Benefits of Exclusion—Tribal Lands

The Tribes already possess significant understanding with respect to the species and the conservation of their habitats. Sisseton Wahpeton Oyate, for example, has for many years sponsored surveys on its lands for both species and has managed its lands in such a manner that they support one of the few remaining strongholds for the Dakota skipper. In addition to conservation of prairie butterflies, the Sisseton Wahpeton Oyate has received Tribal Wildlife Grants from the Service to improve its understanding of other species of concern on its lands. The Three Affiliated Tribes are committed to managing potential Dakota skipper habitat on the Fort Betrthold Reservation in accordance with the Dakota Skipper Guidelines; for example, fire is not included in the Reservation's Noxious Weed Management Plan as an alternative for managing habitat on the Reservation. In light of the contributions already provided by the Sisseton-Wahpeton Oyate and the Three Affiliated Tribes to the conservation of Dakota skipper and Poweshiek skipperling habitats, we want to maintain and strengthen ongoing cooperative conservation carried out by the Tribes.

Excluding Tribal lands from critical habitat is likely to provide significant benefits to our ability to conserve the species' habitats in cooperation with the Tribes. Our ability to conserve the two species' habitats will be increased if we are able to maintain and develop strong partnerships with the Tribes. The Sisseton Wahpeton Oyate, for example, has already made strong contributions to the conservation of Dakota skipper. In addition to a long history of monitoring the status of the species on their lands, the Tribe allowed the Minnesota Zoo to collect Dakota skipper eggs from females captured on Tribal lands in 2014. These eggs formed the primary basis for the zoo's attempts to develop methods to propagate the species in captivity, a program that will be vital to recovery efforts. Although the presence of the Dakota skipper is uncertain on the one site on Fort Berthold Reservation, potential habitat remains, and the Three Affiliated Tribes have developed, in close coordination with the Service, a programmatic biological assessment for oil and gas development on the Reservation that addresses the Dakota skipper. The Three Affiliated Tribes have agreed to avoid siting oil and gas development projects within potential Dakota skipper habitat on the Ft. Berthold Reservation. They recently realigned a pipeline project to avoid Dakota skipper habitat (with a 0.5 mile (0.8 km) buffer zone), and intend to continue to restrict oil and gas development to avoid the butterfly's habitat. The Tribe and the Service are continuing to engage in ongoing conversations regarding conservation efforts for the species. Exclusion of Tribal lands is likely to increase opportunities for the Service to cooperate with the Tribes to conserve the two species. Tribal lands, especially those on the Lake Traverse Reservation, will likely play an important role in the recovery of both species. They provide a rare stronghold for the Dakota skipper and may be among the most promising sites for eventual reintroduction of the Poweshiek skipperling, if the means to propagate the species are developed. As on any land inhabited by either species, effective conservation of the species' essential habitat features is likely to be complex and challenging. It will require ongoing monitoring and adaptive management to determine how the species and their essential habitat features respond to management actions and to make appropriate adjustments. This level of cooperation can best be achieved through a productive and cooperative partnership between the Service and the Tribes. By excluding Tribal lands from the final designation of critical habitat, we can better maintain our working partnerships with the Tribes and increase our ability to conserve the physical and biological features of each species' habitat.

Weighing Benefits of Exclusion Against Benefits of Inclusion—Tribal Lands

The benefits of excluding Tribal lands outweigh the benefits of including these areas as critical habitat. Inclusion of Tribal lands in critical habitat may have minimal benefits because federally funded and tribally administered actions that would be subject to section 7(a)(2) consultation are unlikely to have significant adverse effects, if any, to either species' habitat. Other types of Federal actions, such as transportation projects, are also not likely to have extensive impacts to either species' habitats on Tribal lands.

Exclusion of Tribal lands will benefit the species and their habitats by ensuring that existing important conservation partnerships with the Tribes, and the ability to expand on these conservation partnerships, are maintained and that Tribes remain willing to engage in cooperative efforts with the Service to conserve the species' habitats. By excluding Tribal lands from critical habitat, we can continue to foster the close working partnerships that are necessary to conserve the primary physical and biological features of the species' native prairie habitats. These conservation actions provide a greater benefit to the species than do the minimal regulatory and educational benefits of designating critical habitat on these lands.

Exclusion Will Not Result in Extinction of the Species—Tribal Lands

Excluding Tribal lands from the critical habitat designation will not result in extinction of either species. We are not excluding any lands that are currently occupied by the Poweshiek skipperling. Reintroduction of the Poweshiek skipperling would be required for it to again inhabit any of the excluded lands and exclusion from critical habitat is not likely to reduce the likelihood that reintroduction would occur or be successful. In fact, exclusion of lands owned by Tribes may help to facilitate a partnership with the Sisseton Wahpeton Oyate that would be required to support a reintroduction program that would be effective in conserving Poweshiek skipperling. For Dakota skipper, excluding Tribal lands is likely to improve the strength of our partnerships with the Tribes that are needed to recover the species. These benefits of exclusion are likely to be substantial, whereas the benefits of including these areas as critical habitat are likely to be minimal in light of the limited impacts from Federal actions to the species habitats on Tribal lands.

Summary of Exclusions Based on Other Relevant Impacts

In summary, the Service excludes from the final critical habitat designation for the Dakota skipper and Poweshiek skipperling, a variety of lands for which there is evidence of an established conservation partnership with private landowners. We do not exclude from critical habitat any lands where the Poweshiek skipperling is likely to be extant, due to the species'

highly imperiled status. We find that the benefits of the critical habitat exclusions outweigh the benefits of including the areas as critical habitat. This is largely due to (1) the important role that conservation of the species' habitats on private and Tribal lands will play in each species' recovery; (2) the need to maintain or develop cooperative partnerships with private landowners and Tribes; and (3) the likely increase in cooperation from a significant proportion of private landowners that will occur as a result of the exclusions from critical habitat.

Required Determinations

Regulatory Planning and Review (Executive Orders 12866 and 13563)

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

Executive Order 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 if 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.

The Service's current understanding of the requirements under the RFA, as amended, and following recent court decisions, is that Federal agencies are only required to evaluate the potential incremental impacts of rulemaking on those entities directly regulated by the rulemaking itself, and therefore, 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 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 RFA to evaluate the potential impacts to entities not directly regulated. Moreover, Federal agencies are not small entities. Therefore, because no small entities are directly regulated by this rulemaking, the Service certifies that the final critical habitat designation will not have a significant economic impact on a substantial number of small entities.

During the development of this final rule, 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. Based on this information, we affirm our certification that this final 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 Executive Order that outlines nine outcomes that may constitute ''a significant adverse effect'' when compared to not taking the regulatory action under consideration.

The economic analysis describes potential impacts arising from the development of oil fields in North Dakota (IEC 2014a, p. 14); oil and gas development is unlikely in the units considered unoccupied by the two butterflies.

The ConocoPhillips company indicates that the most significant levels of oil and gas development occur at the westernmost edge of the species' range and that the increased level of oil and gas development associated with the Bakken formation is concentrated in specific counties in North Dakota. The critical habitat areas with the highest likelihood for oil development are within McKenzie County. The three units in McKenzie County that are within the oil field development area are all units considered occupied or uncertain. We expect that if a Federal nexus exists, any project modifications recommended by the Service would occur regardless of critical habitat designation. Incremental costs for oil and gas activity are thus limited to administrative costs of considering adverse modification of critical habitat during consultation.

The Service is not aware of any specific plans or proposals to develop wind energy in these areas. Thus, there are no anticipated incremental costs

related to these activities (IEC 2014a, p. 19).

We do not anticipate that the designation of critical habitat will result in significant incremental impacts to the energy industry on a national scale (Industrial Economics, Inc. 2014, p. A–15). 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 it would not produce a Federal mandate of $100 million or greater in any year; that is, it is not a ''significant regulatory action'' under the Unfunded Mandates Reform Act. The final economic analysis concludes that incremental impacts may occur due to administrative costs of conducting section 7 consultation and implementation of any conservation efforts requested by the Service through section 7 consultation to avoid potential destruction or adverse modification of critical habitat; however, these are not expected to significantly affect small governments. Incremental impacts stemming from various species conservation and development control activities are expected to be primarily borne by the Federal Government and State agencies, which are not considered small governments. Consequently, we do not believe that the critical habitat designation would significantly or uniquely affect small government entities. As such, a Small Government Agency Plan is not required.

Takings—Executive Order 12630

In accordance with Executive Order 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for the Dakota skipper and Poweshiek skipperling 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 the Dakota skipper and Poweshiek skipperling 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 assessment is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of this proposed critical habitat designation with, appropriate State resource agencies in Iowa, Michigan, Minnesota, North Dakota, South Dakota, and Wisconsin. We received comments from several State agencies and have addressed them in the Summary of Comments and Recommendations section of the rule. 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 States, or on the relationship between the national government and the States, 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 and 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) would 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 applicable standards set forth in 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, the rule identifies the elements of physical or biological features essential to the conservation of the Dakota skipper and Poweshiek skipperling. 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

This rule does not contain any collections of information that require approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. 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 (NEPA; 42 U.S.C. 4321 *et seq.*) 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.

Tribal lands in North Dakota and South Dakota were included in the proposed designation of critical habitat. Using the criteria found in the Criteria Used to Identify Critical Habitat section, we have determined that Tribal lands meet the definition of critical habitat for the Dakota skipper and Poweshiek skipperling. We sought government-to-government consultation with these tribes throughout the proposal and development of the final designation of critical habitat. We have considered these areas for exclusion from final critical habitat designation to the extent consistent with the requirements of 4(b)(2) of the Act. We informed tribes of how we evaluate areas under section 4(b)(2) of the Act and of our interest in consulting with them on a government-to-government basis. We have excluded all tribal lands from this critical habitat designation.

References Cited

A complete list of all references cited is available on the Internet at *http://www.regulations.gov* and upon request from the Twin Cities Ecological Services Field Office (see **FOR FURTHER INFORMATION CONTACT**).

Authors

The primary authors of this rulemaking are the staff members of the Twin Cities 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—[AMENDED]

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

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

■ 2. Amend § 17.11(h) by revising the entry for ''Skipper, Dakota *(Hesperia dacotae)''* and the entry for ''Skipperling, Poweshiek (*Oarisma poweshiek*)'' under ''INSECTS'' in the List of Endangered and Threatened Wildlife to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
*	*	*	*	*	*		*
INSECTS							

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
*	*	*	*	*	*		*
Skipper, Dakota	*Hesperia dacotae* ...	U.S.A. (IA, IL, MN, ND, SD); Canada (Manitoba, Saskatchewan).	NA	T	851	17.95(i)	17.47(b)
*	*	*	*	*	*		*
Skipperling, Poweshiek.	*Oarisma poweshiek*	U.S.A. (IA, IL, IN, MI, MN, ND, SD, WI); Canada (Manitoba).	NA	E	851	17.95(i)	NA
*	*	*	*	*	*		*

■ 3. In § 17.95, amend paragraph (i) by adding entries for ''Dakota Skipper *(Hesperia dacotae)''* and ''Poweshiek Skipperling *(Oarisma Poweshiek)'',* in the same order that these species appear in the table at § 17.11(h), to read as follows:

§ 17.95 Critical habitat—fish and wildlife.

* * * * *

(i) *Insects.*

* * * * *

Dakota Skipper *(Hesperia dacotae)*

(1) Critical habitat units are designated in Chippewa, Clay, Kittson, Lincoln, Murray, Norman, Pipestone, Polk, Pope, and Swift Counties in Minnesota; McHenry, McKenzie, Ransom, Richland, and Rolette Counties in North Dakota; and Brookings, Day, Deuel, Grant, Marshall, and Roberts Counties in South Dakota, on the maps below.

(2) Within these areas, the primary constituent elements of the physical or biological features essential to the conservation of the Dakota skipper consist of three components:

(i) Primary Constituent Element 1—Wet-mesic tallgrass or mixed-grass remnant untilled prairie that occurs on near-shore glacial lake soil deposits or high-quality dry-mesic remnant untilled prairie on rolling terrain consisting of gravelly glacial moraine soil deposits, containing:

(A) A predominance of native grasses and native flowering forbs;

(B) Glacial soils that provide the soil surface or near surface (between soil surface and 2 cm depth) micro-climate conditions conducive to Dakota skipper larval survival and native-prairie vegetation;

(C) If present, trees or large shrub cover of less than 5 percent of area in dry prairies and less than 25 percent in wet-mesic prairies; and

(D) If present, nonnative invasive plant species occurring in less than 5 percent of area.

(ii) Primary Constituent Element 2—Native grasses and native flowering forbs for larval and adult food and shelter, specifically:

(A) At least one of the following native grasses to provide food and shelter sources during Dakota skipper larval stages: prairie dropseed *(Sporobolus heterolepis)* or little bluestem *(Schizachyrium scoparium);* and

(B) One or more of the following forbs in bloom to provide nectar and water sources during the Dakota skipper flight period: purple coneflower *(Echinacea angustifolia),* bluebell bellflower *(Campanula rotundifolia),* white prairie clover *(Dalea candida),* upright prairie coneflower *(Ratibida columnifera),* fleabane *(Erigeron* spp.), blanketflower *(Gaillardia* spp.), black-eyed Susan *(Rudbeckia hirta),* yellow sundrops *(Calylophus serrulatus),* prairie milkvetch *(Astragalus adsurgens),* or common gaillardia *(Gaillardia aristata)* .

(iii) Primary Constituent Element 3—Dispersal grassland habitat that is within 1 km (0.6 mi) of native high-quality remnant prairie (as defined in Primary Constituent Element 1) that connects high-quality wet-mesic to dry tallgrass prairies or moist meadow habitats. Dispersal grassland habitat consists of undeveloped open areas dominated by perennial grassland with limited or no barriers to dispersal including tree or shrub cover less than 25 percent of the area and no row crops such as corn, beans, potatoes, or sunflowers.

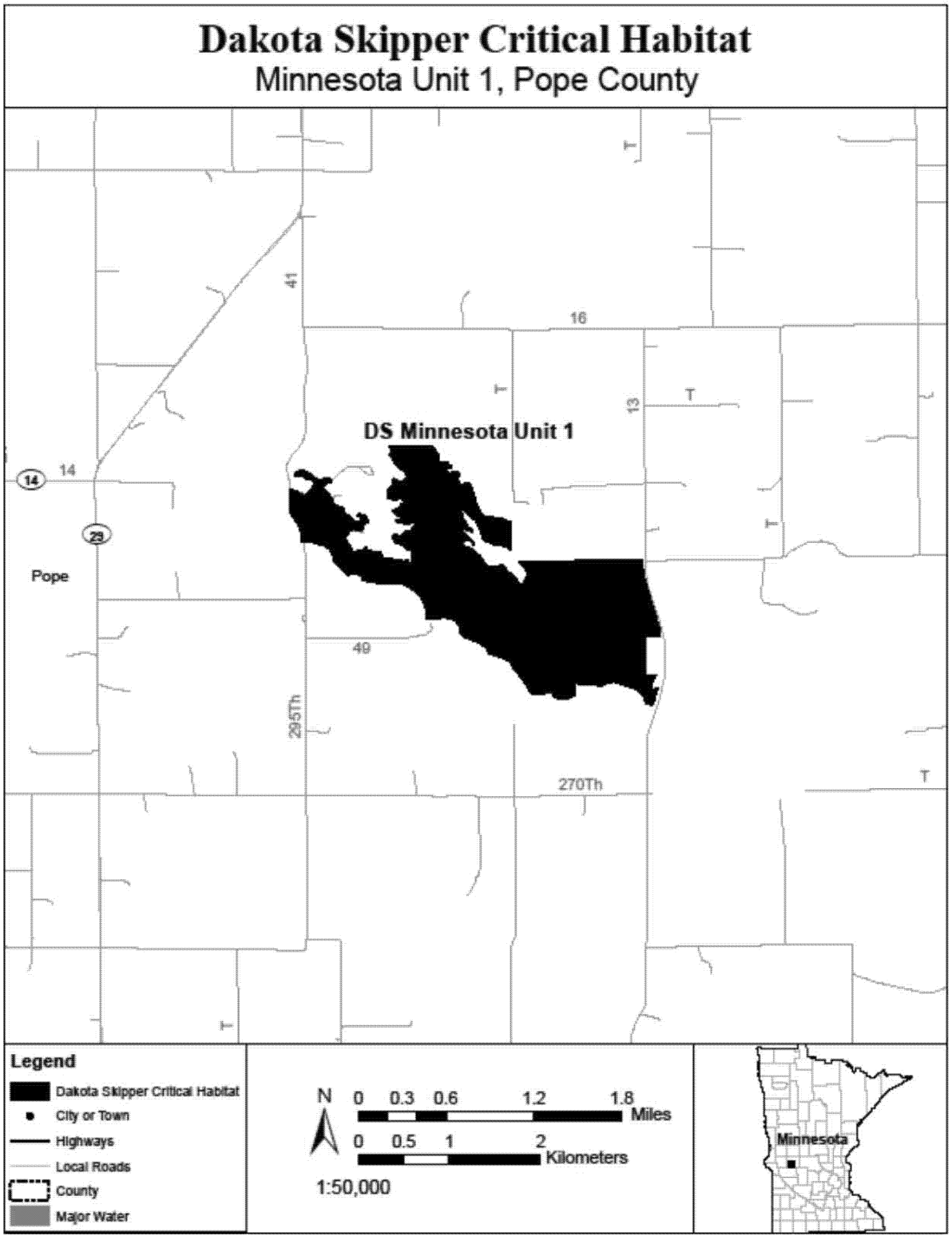
(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on November 2, 2015.

(4) *Critical habitat map units.* Data layers defining map units were created and digitized using ESRI's ArcMap (version 10.0) and comparing USGS NAIP/FSA high-resolution orthophotography from 2010 or later and previously mapped skipper habitat polygons submitted by contracted researchers or prairie habitat polygons made available from Minnesota Department of Natural Resources' County Biological Survey. Critical habitat units then were mapped in Geographic Coordinate System WGS84. 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 the Service's internet site (*http://www.fws.gov/midwest/Endangered*), at *http://www.regulations.gov* at Docket No. FWS–R3–ES–2013–0017, and at the field office responsible for this designation. 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.

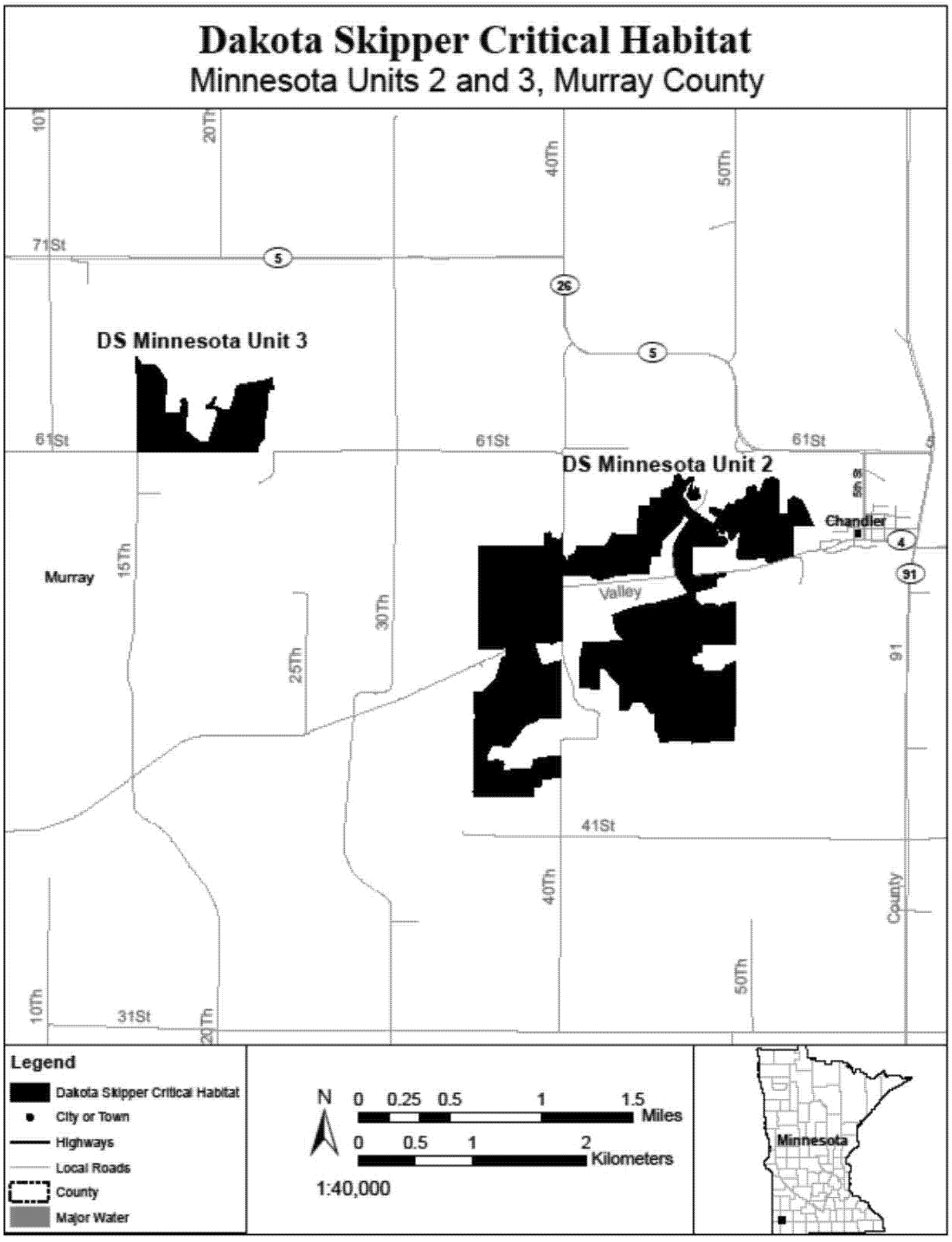
(5) Index map follows:

BILLING CODE 4310–55–P

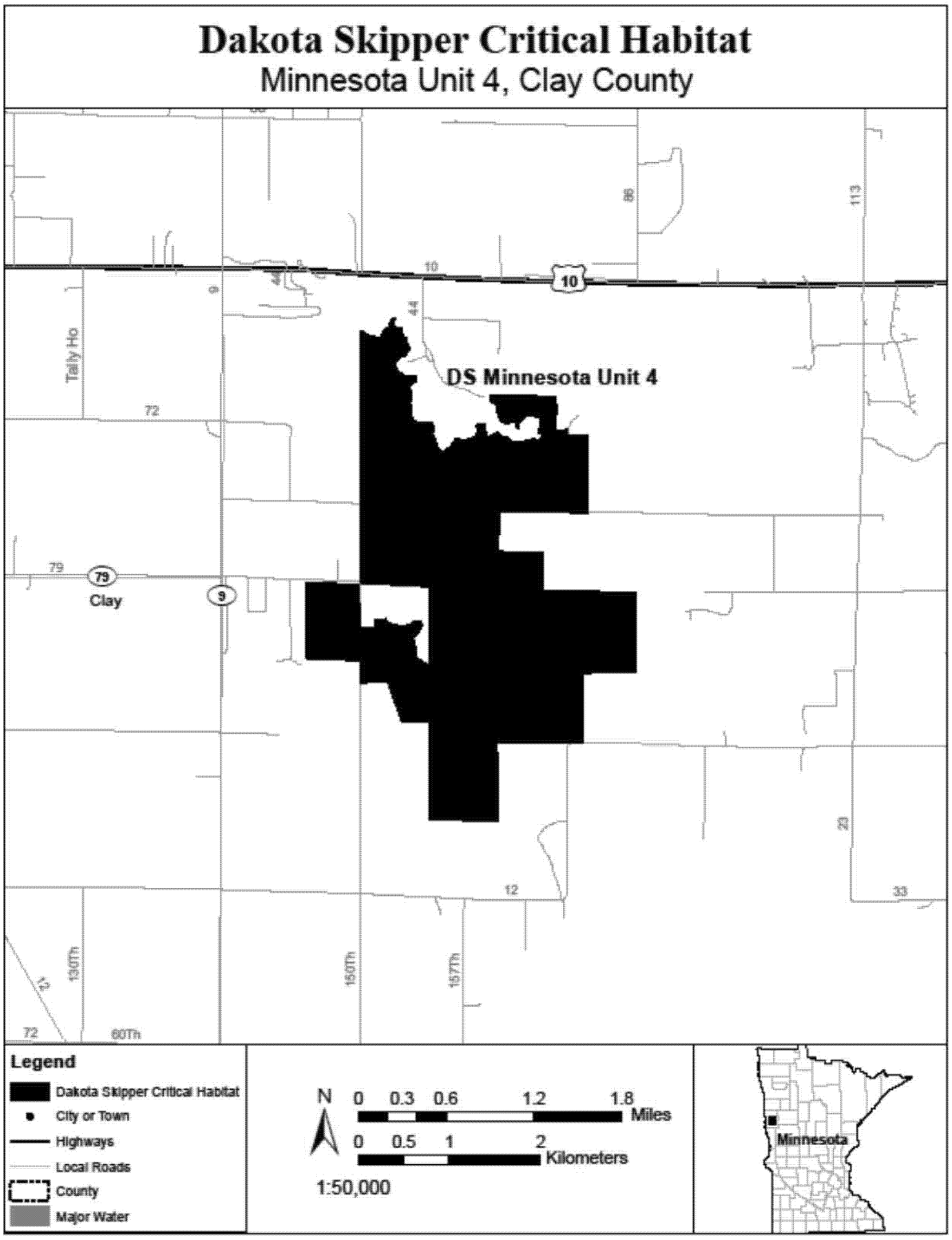
(6) DS Minnesota Unit 1, Pope County, Minnesota. Map of DS Minnesota Unit 1 follows:



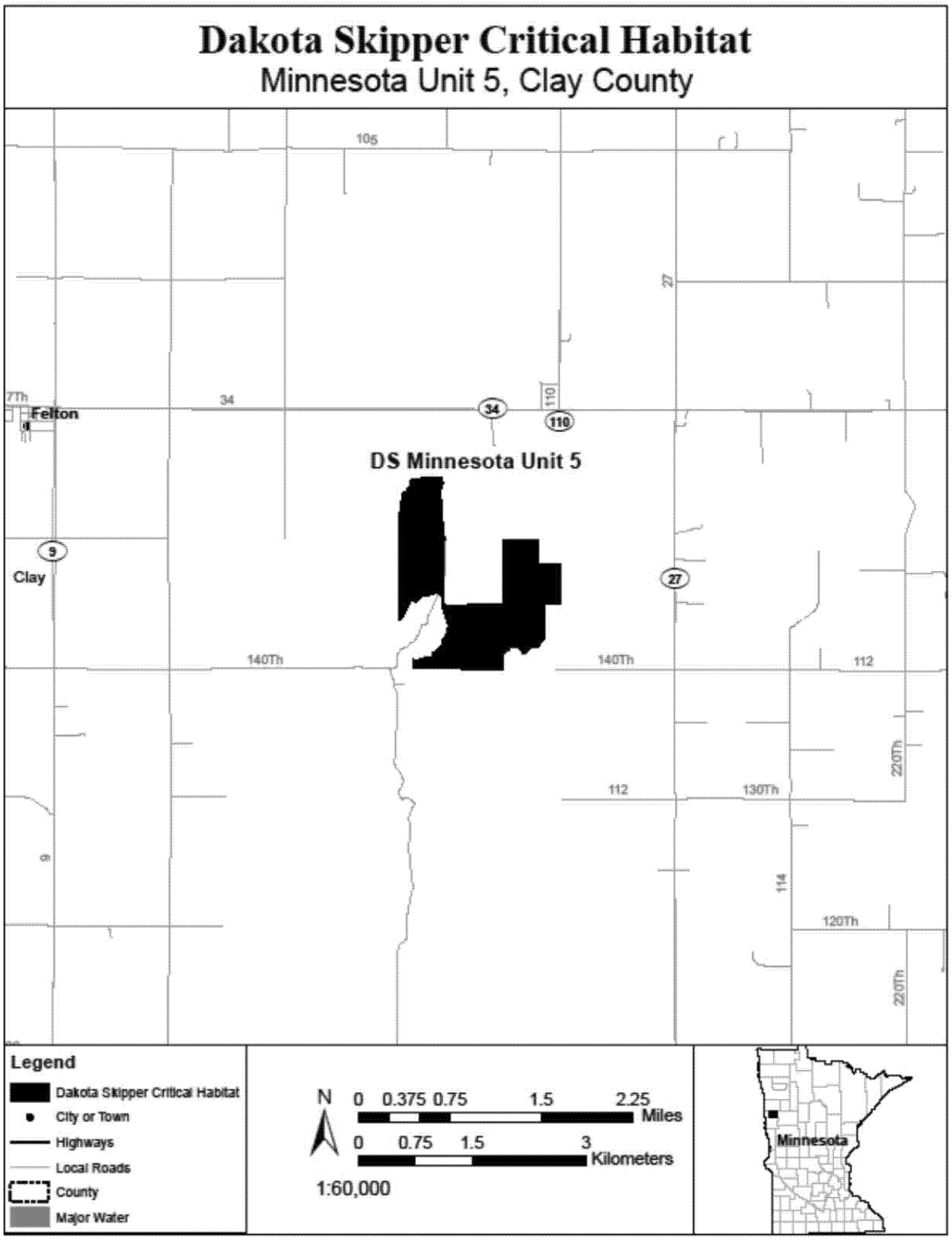
(7) DS Minnesota Units 2 and 3, Murray County, Minnesota. Map of DS Minnesota Units 2 and 3 follows:



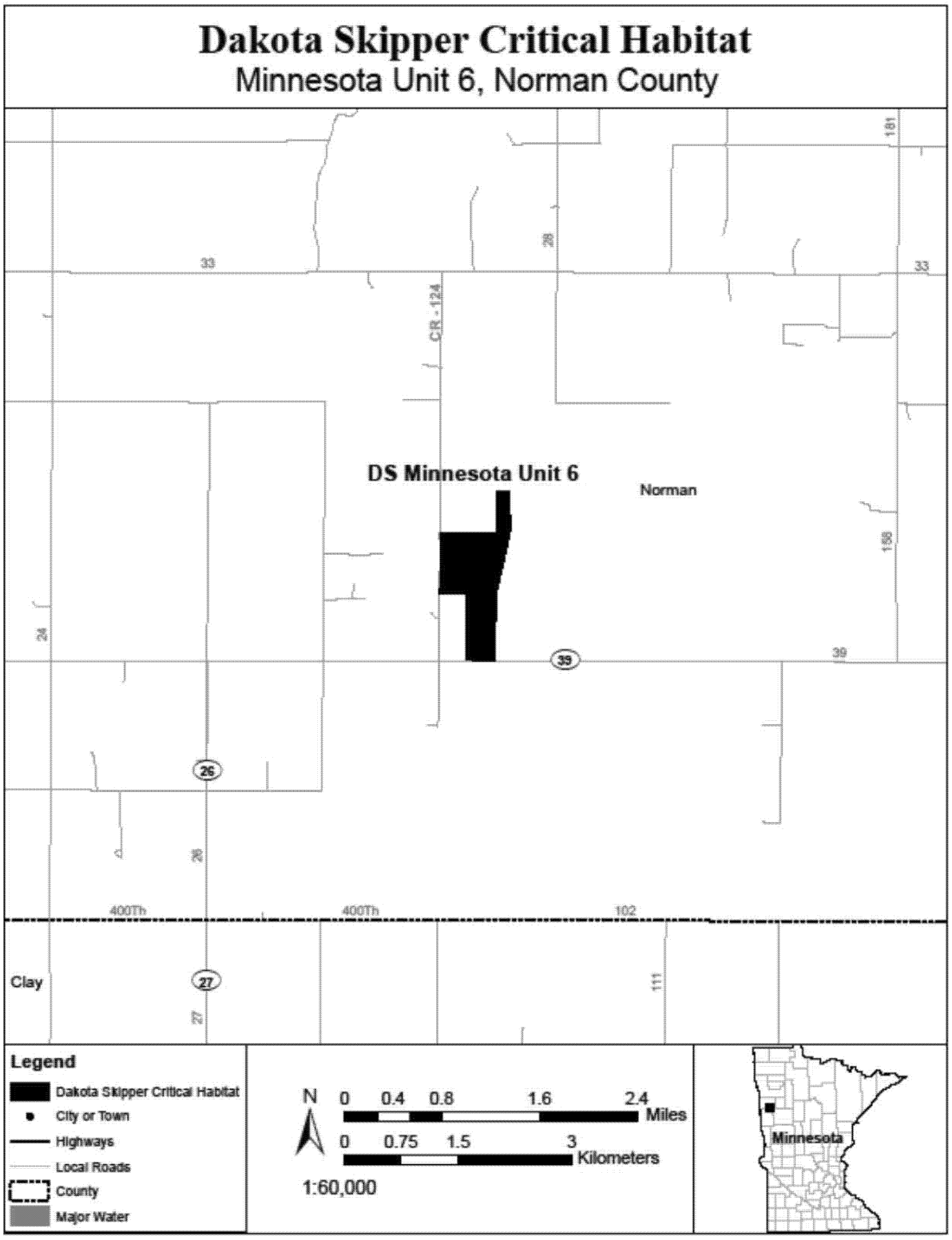
(8) DS Minnesota Unit 4, Clay County, Minnesota. Map of DS Minnesota Unit 4 follows:



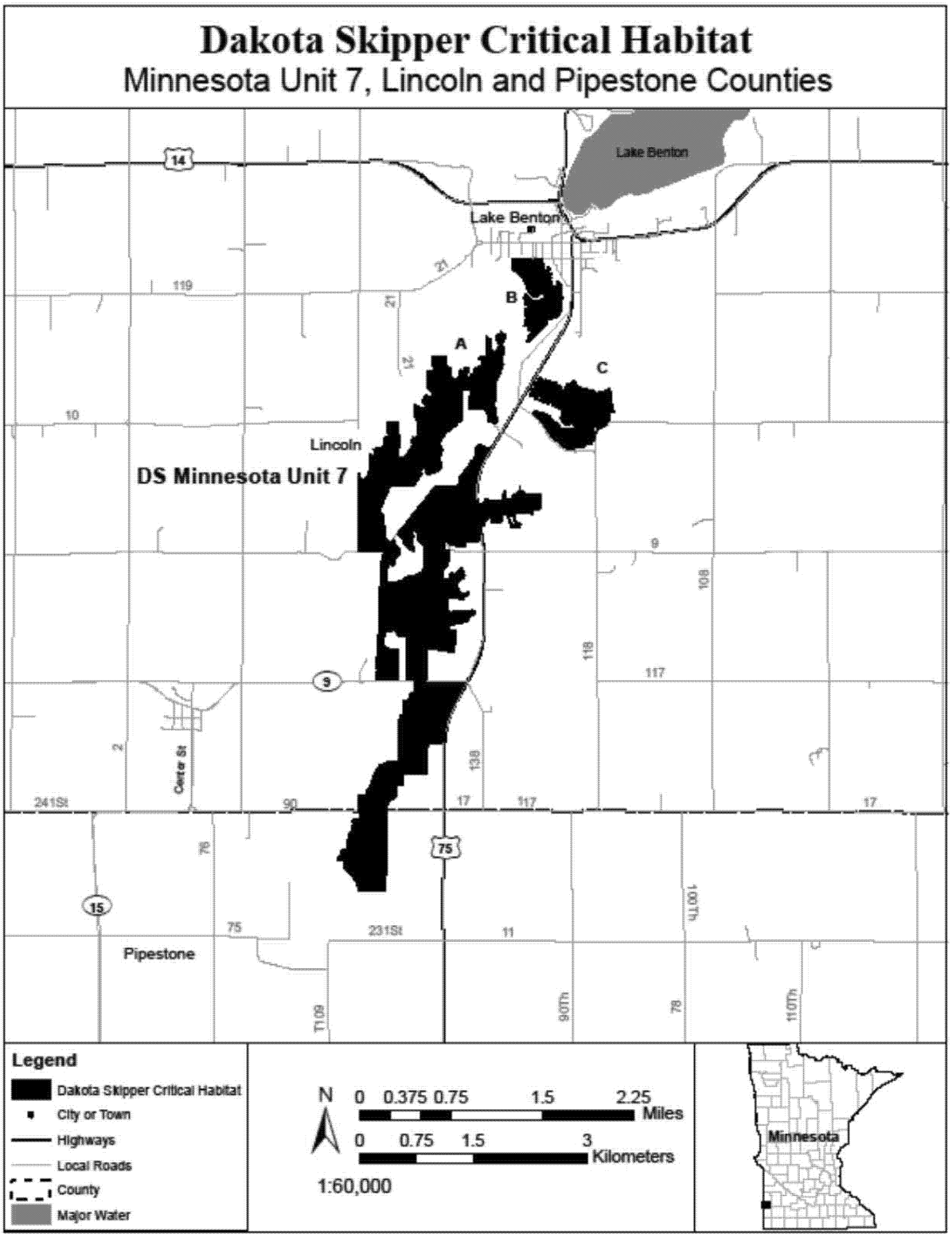
(9) DS Minnesota Unit 5, Clay County, Minnesota. Map of DS Minnesota Unit 5 follows:



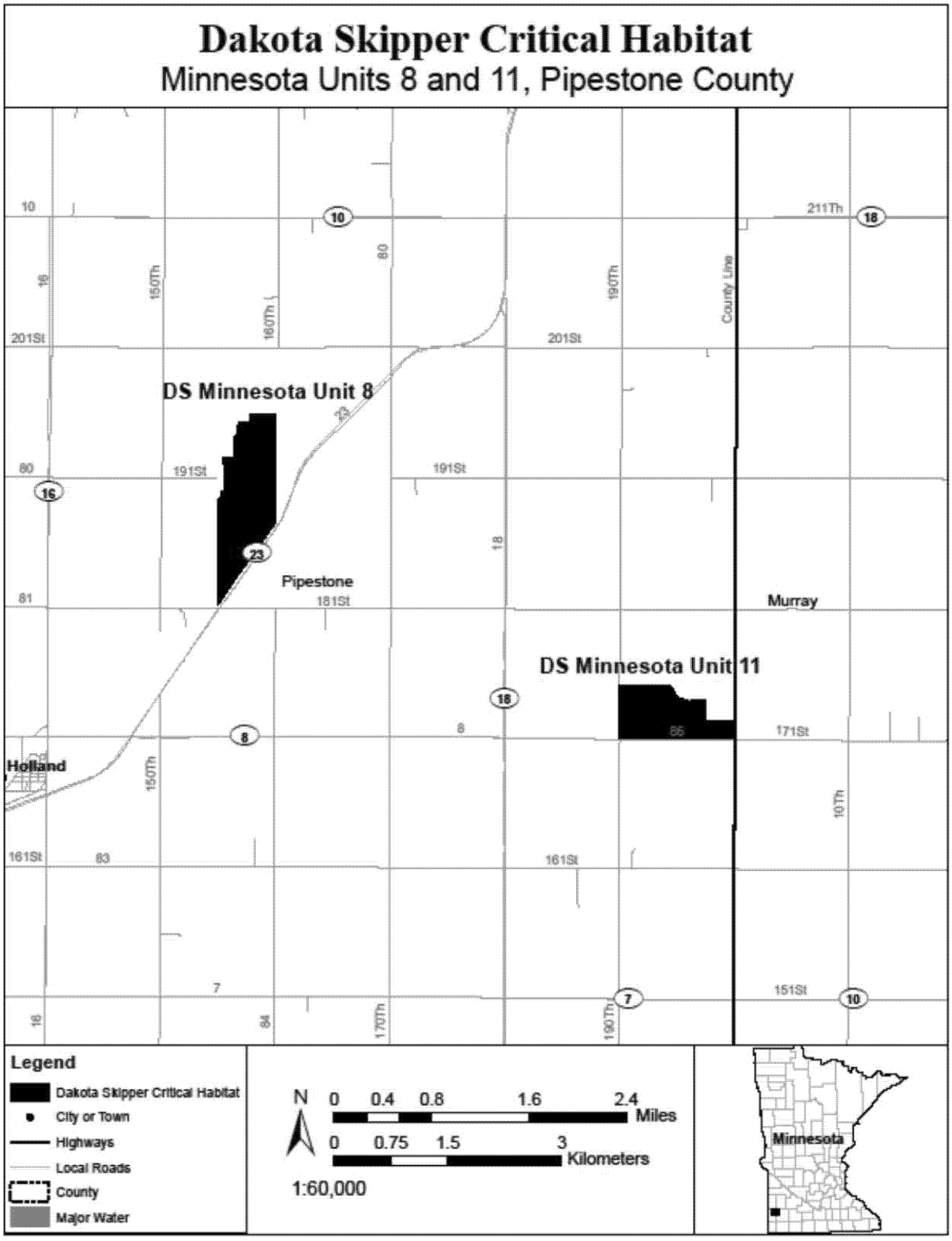
(10) DS Minnesota Unit 6, Norman County, Minnesota. Map of DS Minnesota Unit 6 follows:



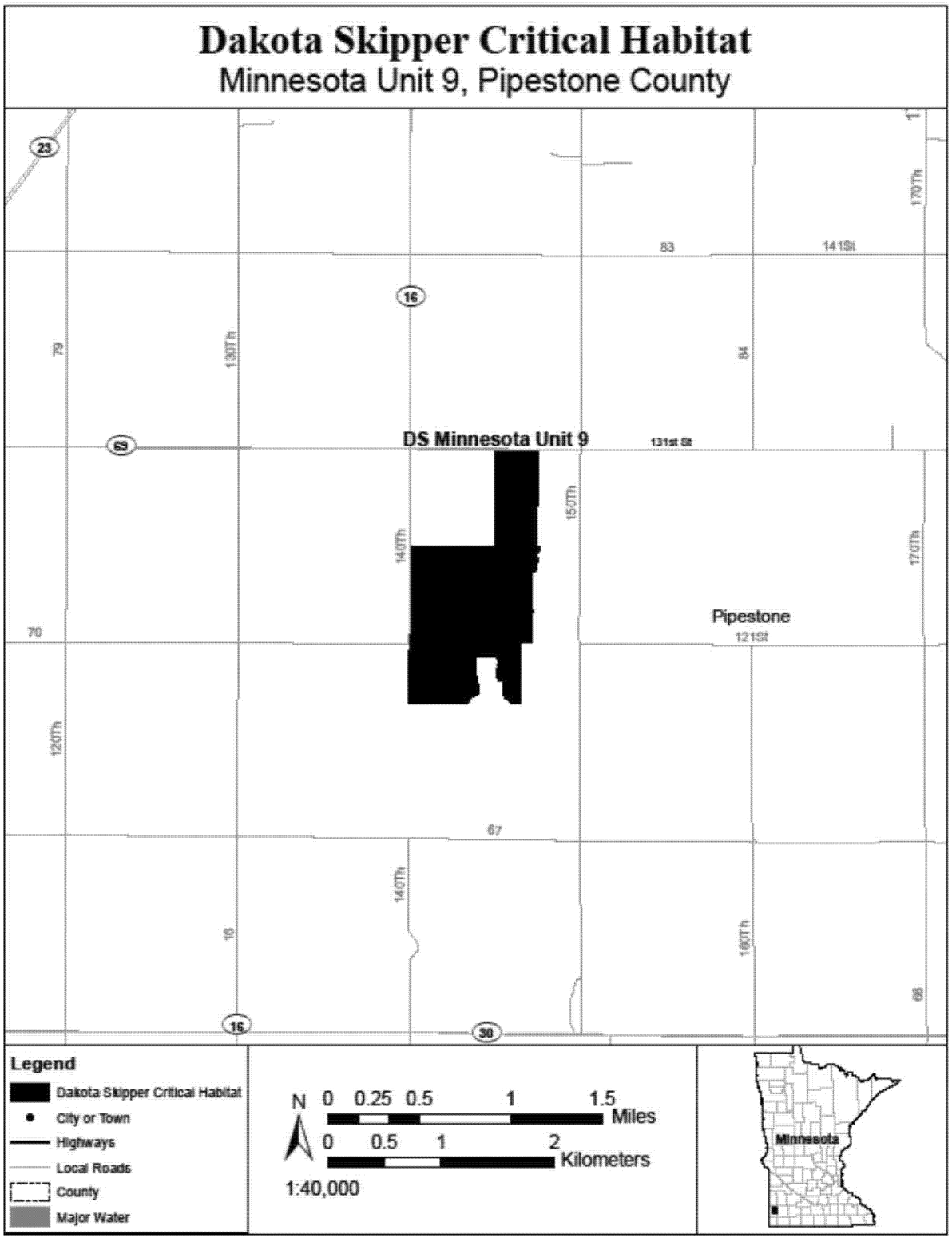
(11) DS Minnesota Unit 7, Lincoln and Pipestone Counties, Minnesota. Map of DS Minnesota Unit 7 follows:



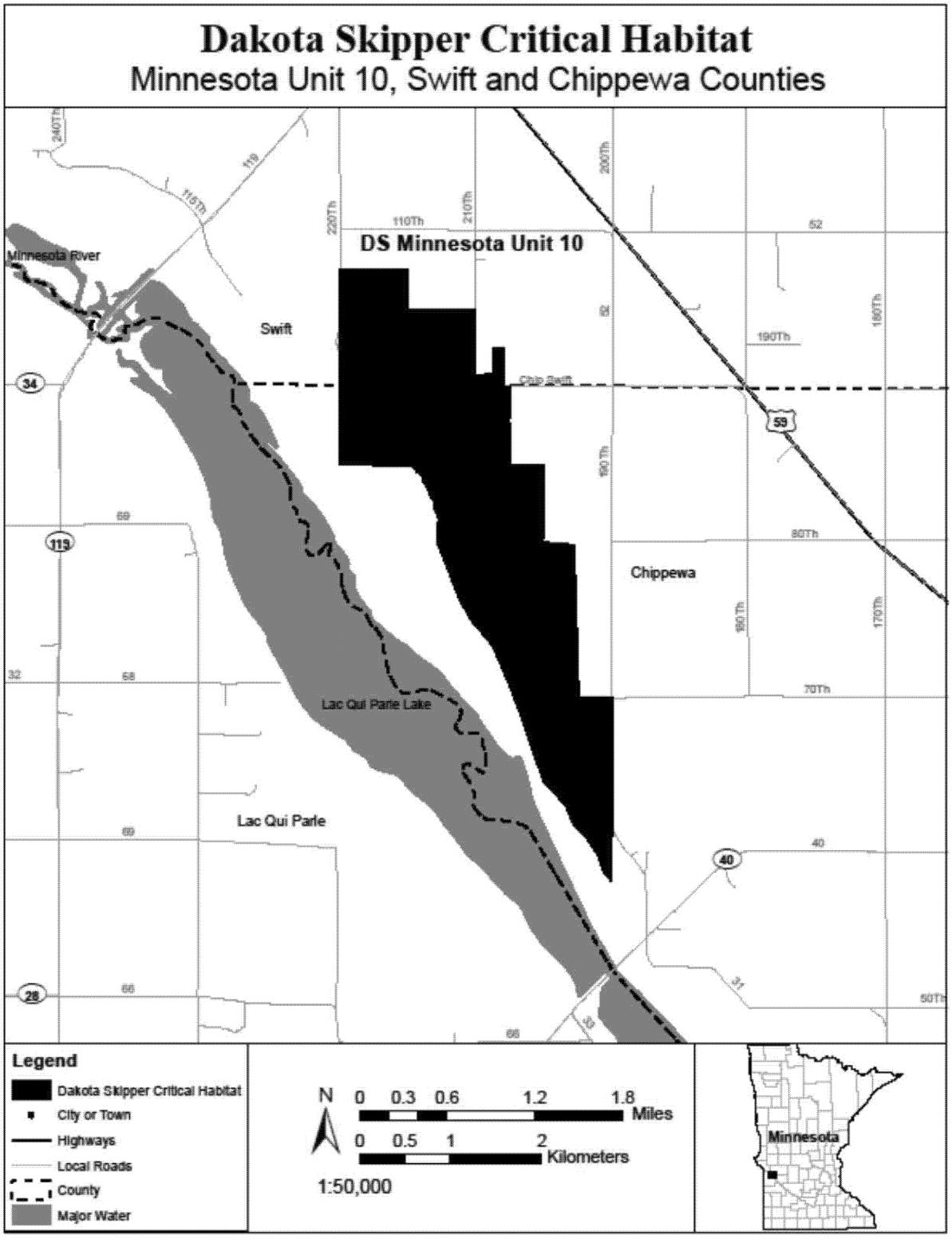
(12) DS Minnesota Units 8 and 11, Pipestone County, Minnesota. Map of DS Minnesota Units 8 and 11 follows:



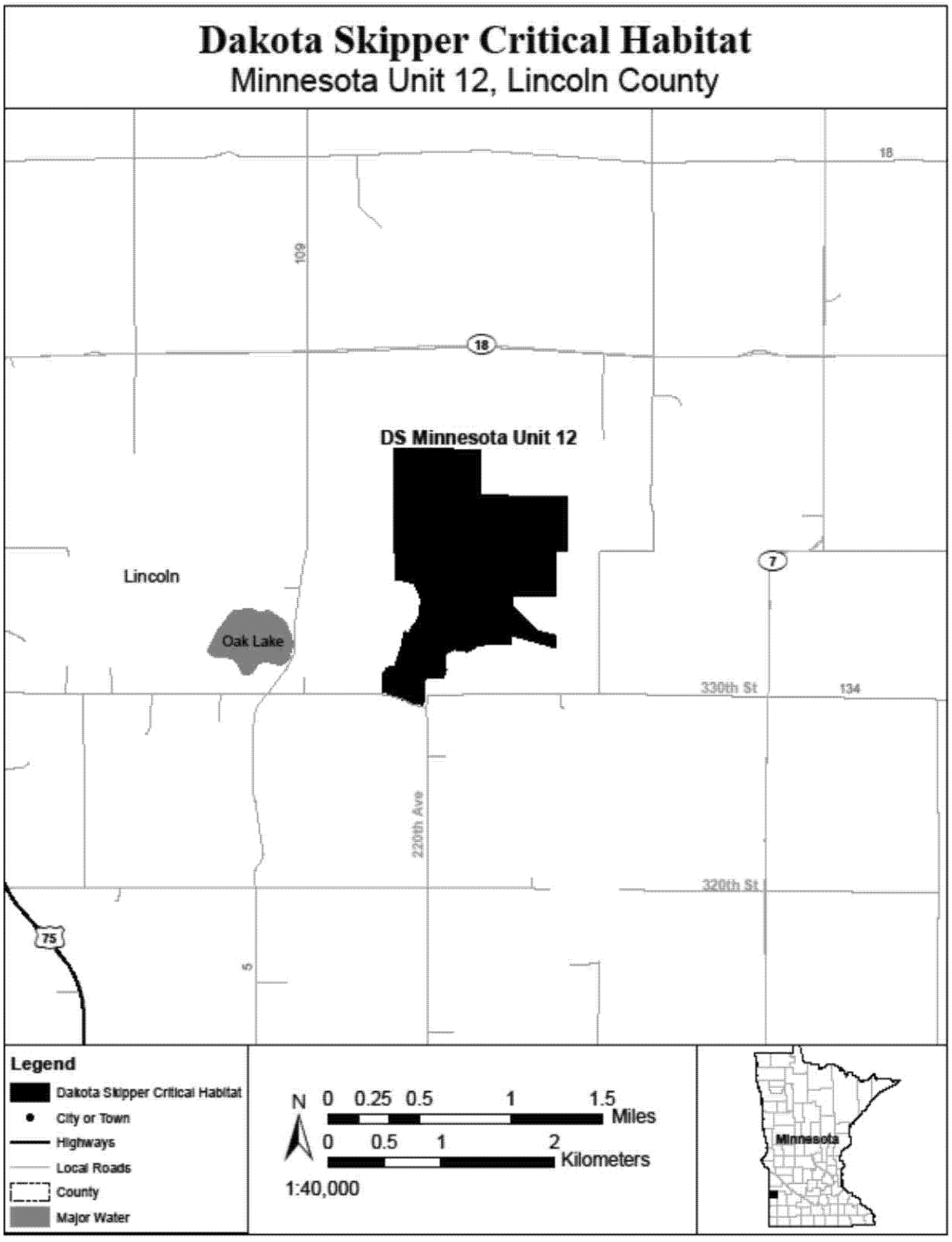
(13) DS Minnesota Unit 9, Pipestone County, Minnesota. Map of DS Minnesota Unit 9 follows:



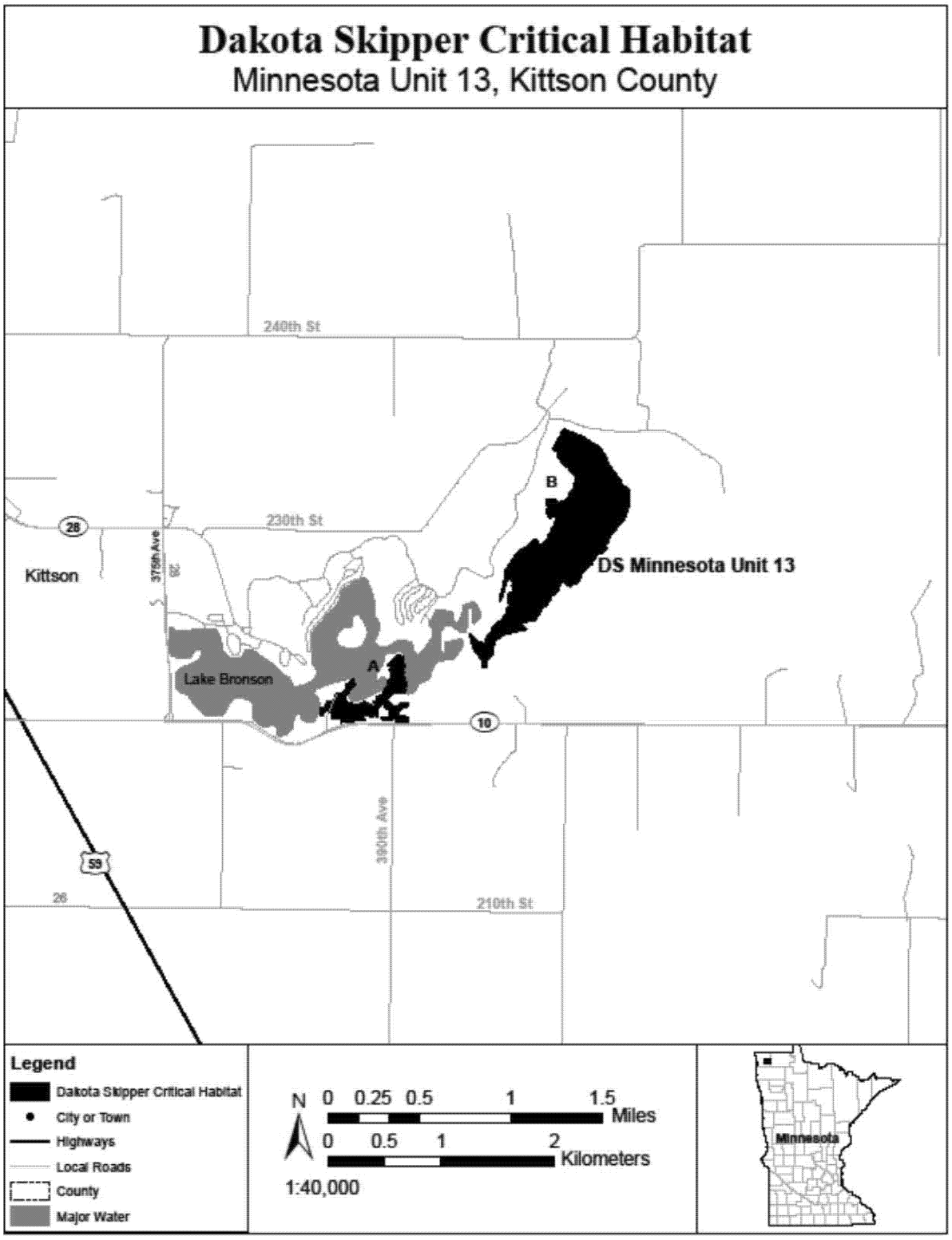
(14) DS Minnesota Unit 10, Swift and Chippewa Counties, Minnesota. Map of DS Minnesota Unit 10 follows:



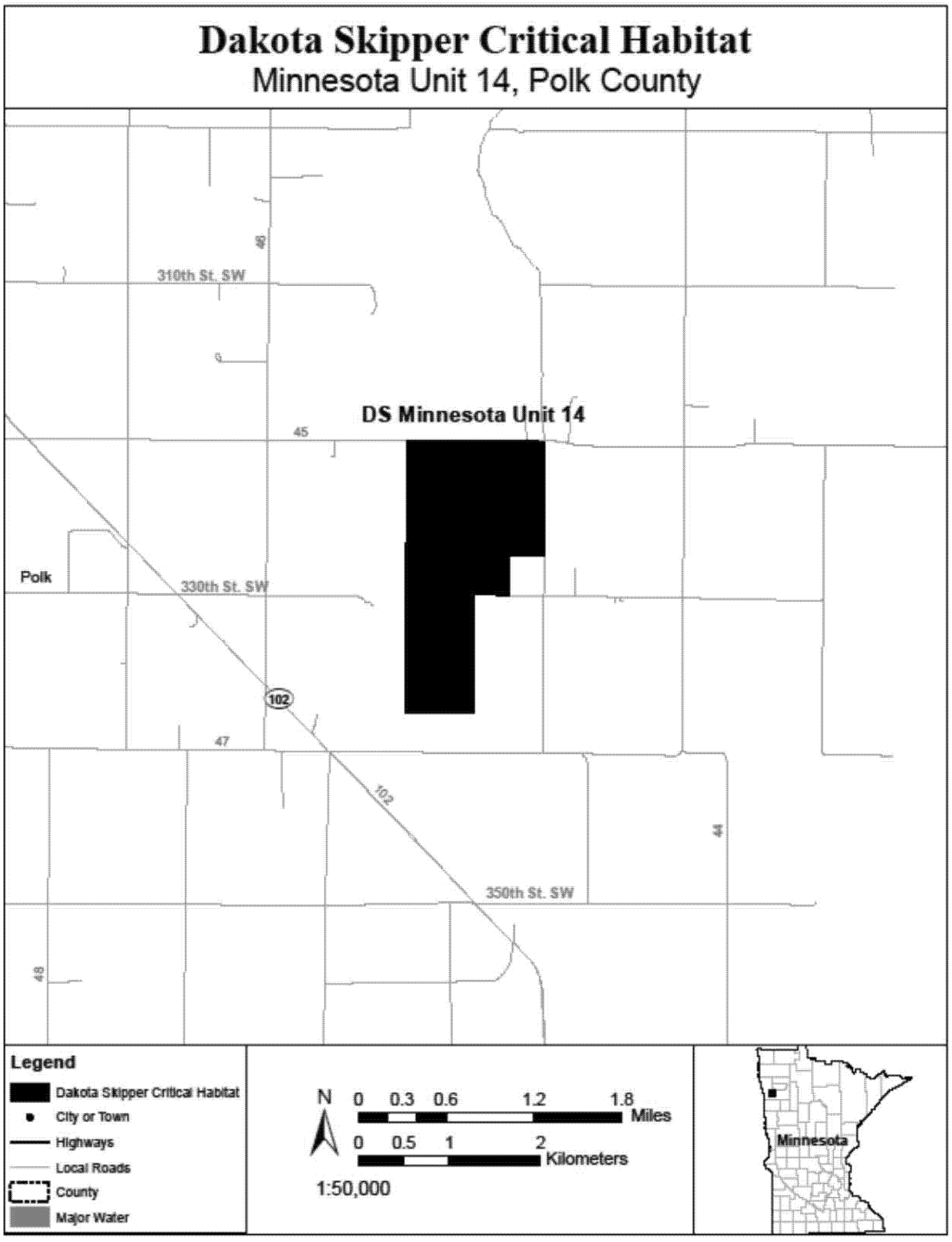
(15) DS Minnesota Unit 12, Lincoln County, Minnesota. Map of DS Minnesota Unit 12 follows:



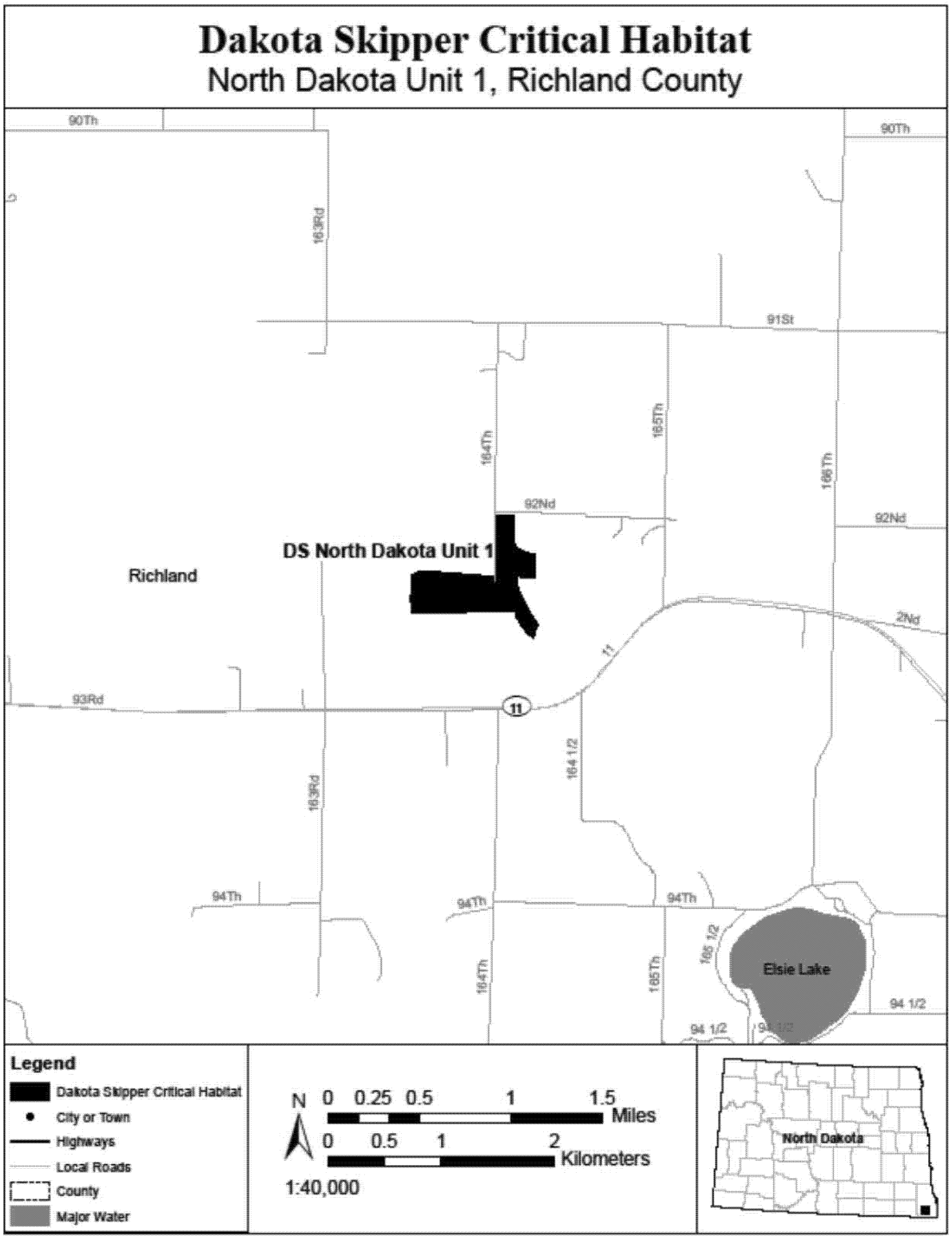
(16) DS Minnesota Unit 13, Kittson County, Minnesota. Map of DS Minnesota Unit 13 follows:



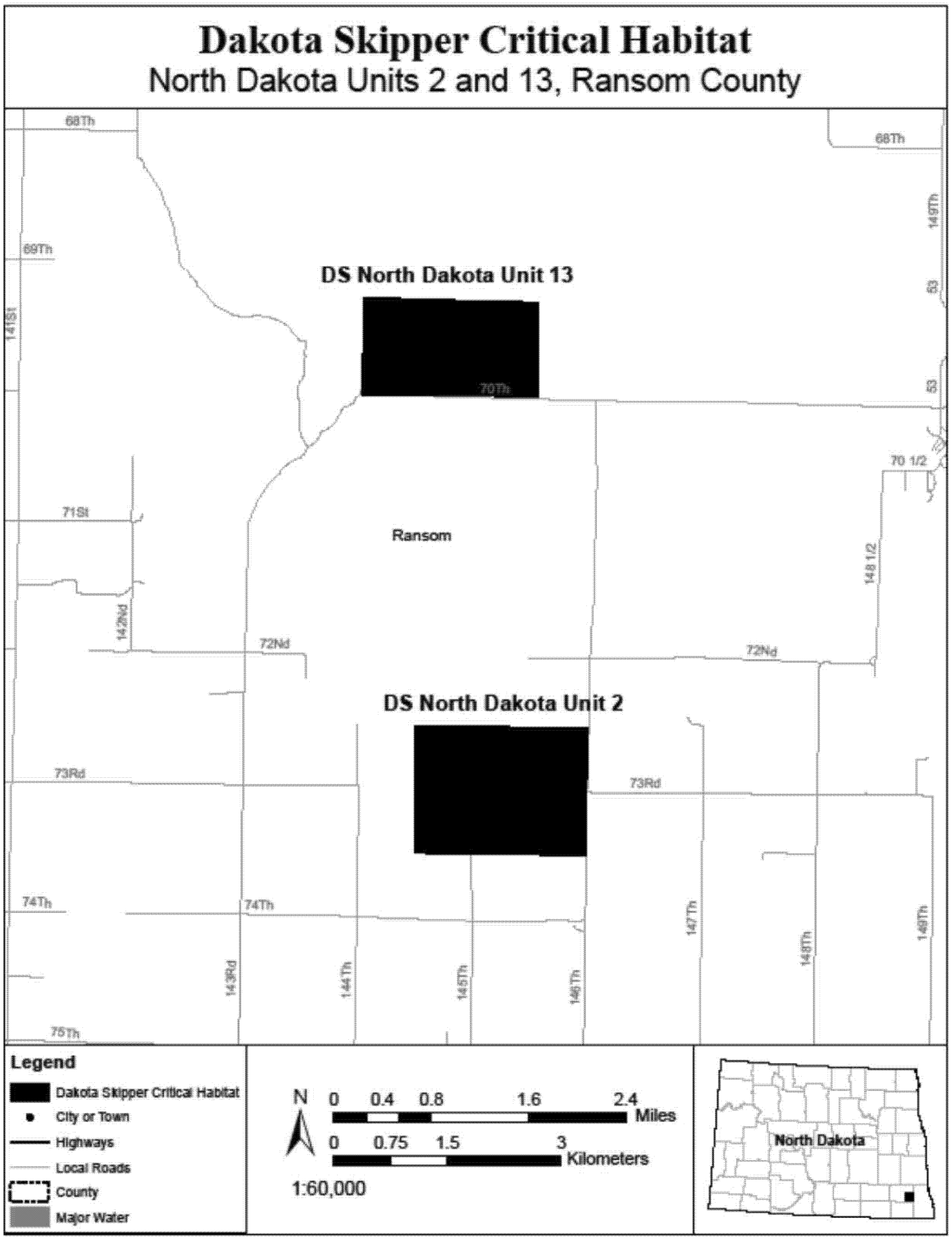
(17) DS Minnesota Unit 14, Polk County, Minnesota. Map of DS Minnesota Unit 14 follows:



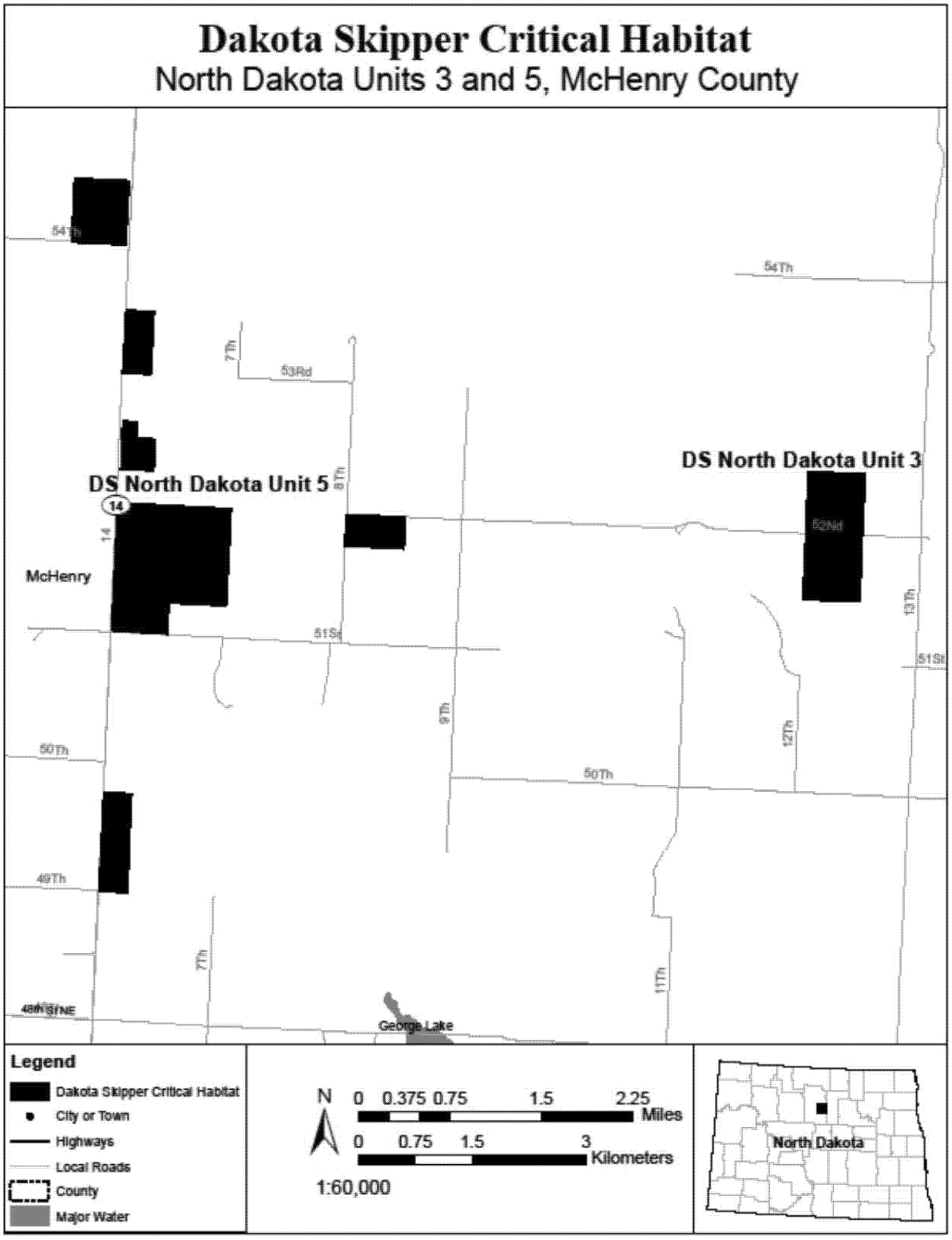
(18) DS North Dakota Unit 1, Richland County, North Dakota. Map of DS North Dakota Unit 1 follows:



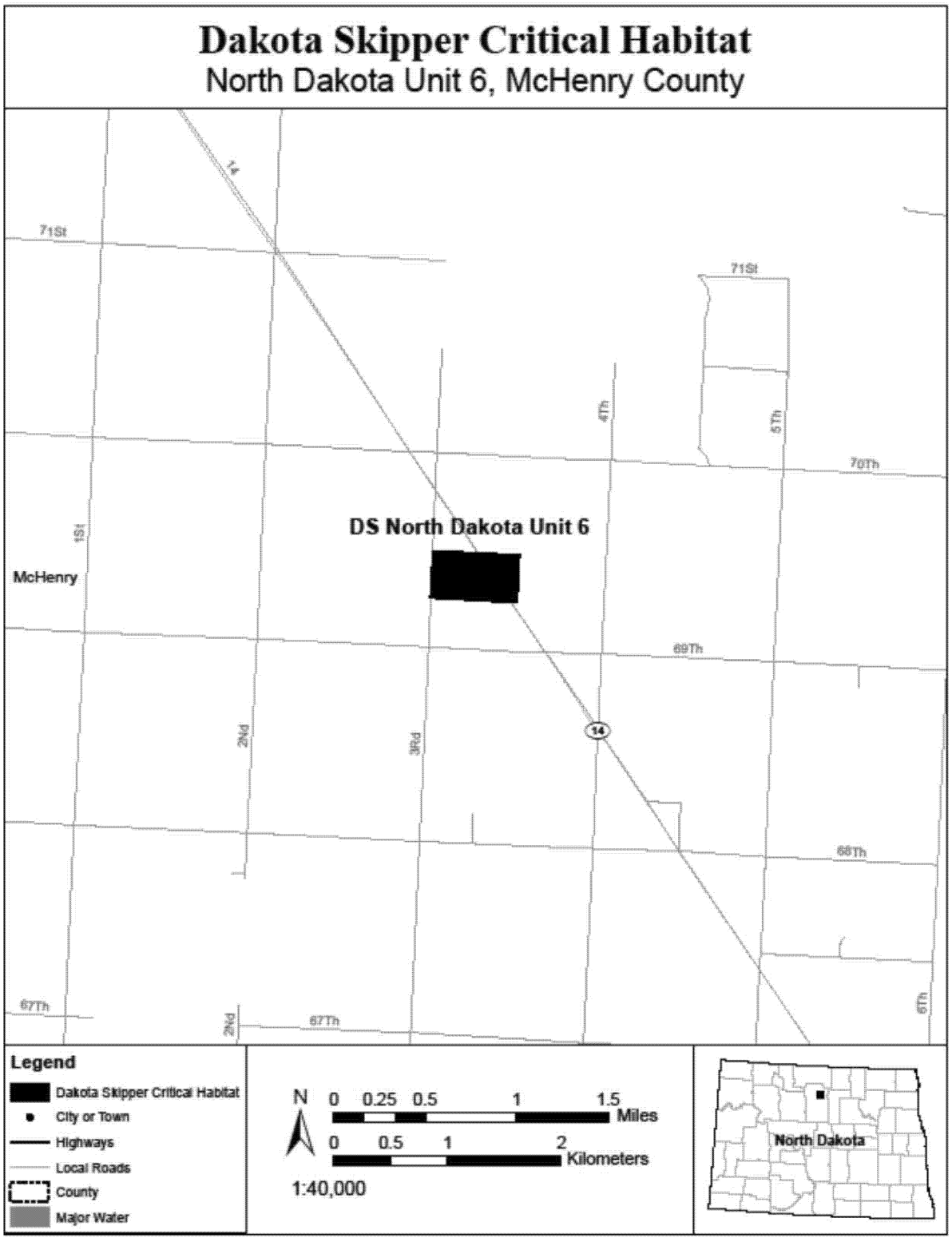
(19) DS North Dakota Units 2 and 13, Ransom County, North Dakota. Map of DS North Dakota Units 2 and 13 follows:



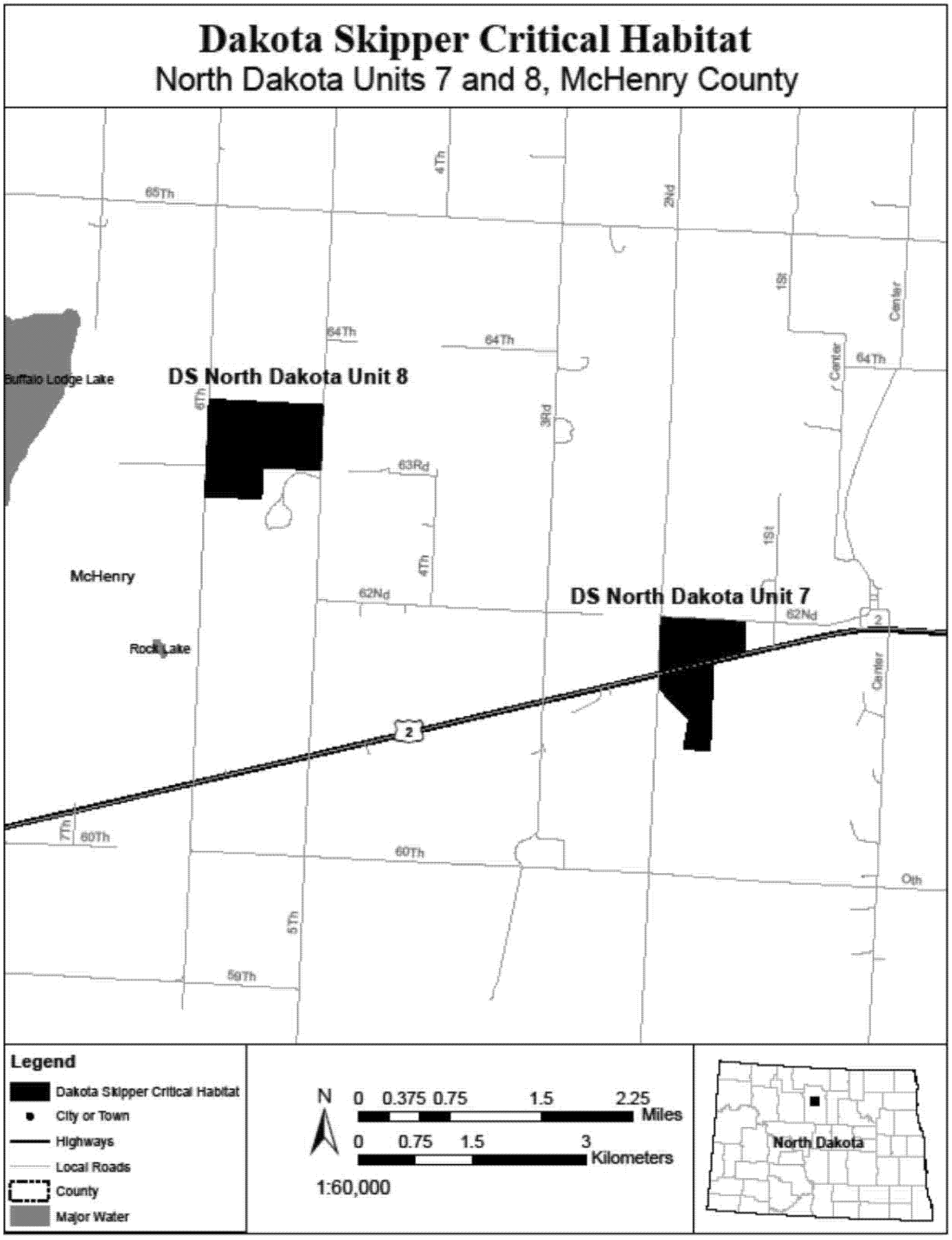
(20) DS North Dakota Units 3 and 5, McHenry County, North Dakota. Map of DS North Dakota Units 3 and 5 follows:



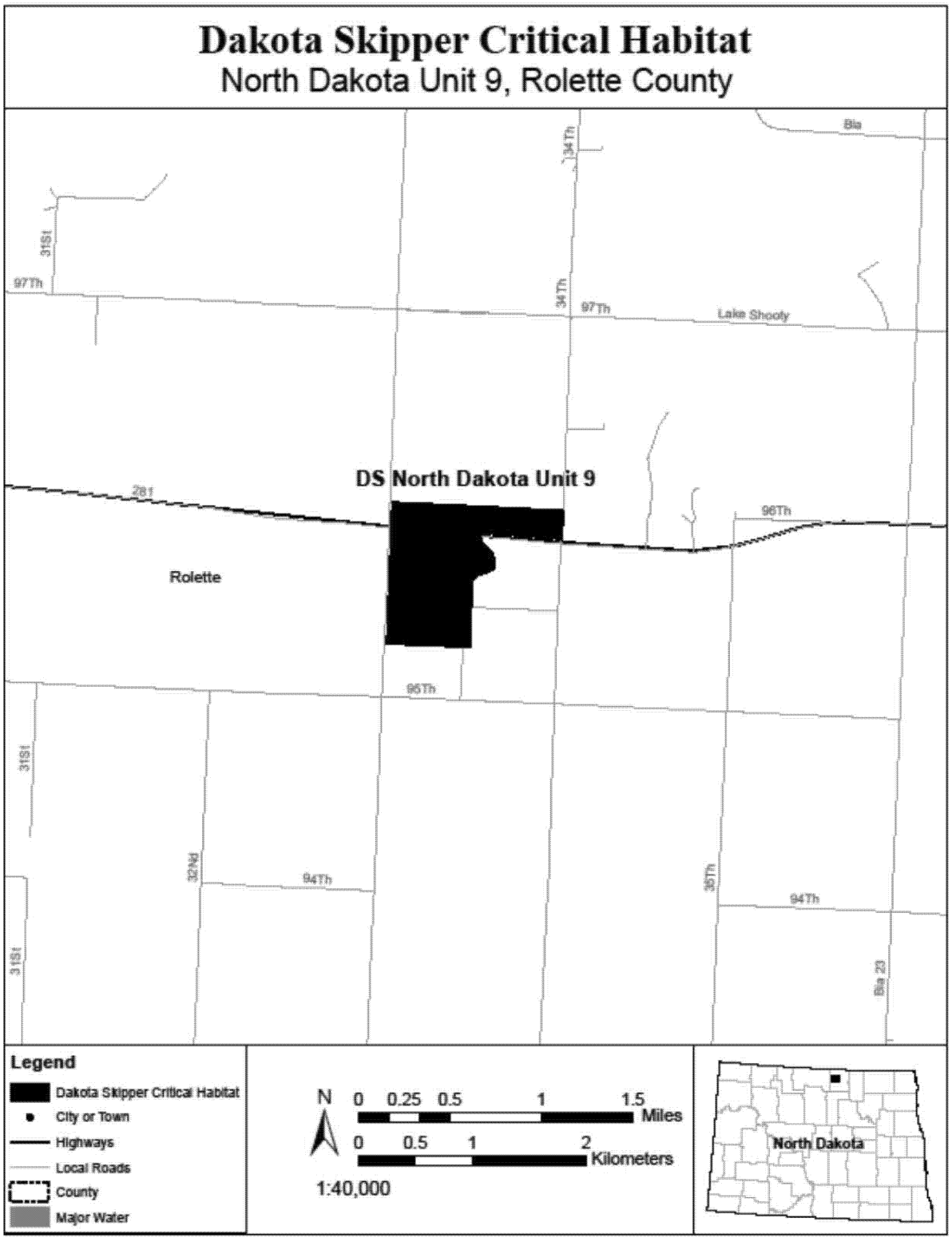
(21) DS North Dakota Unit 6, McHenry County, North Dakota. Map of DS North Dakota Unit 6 follows:



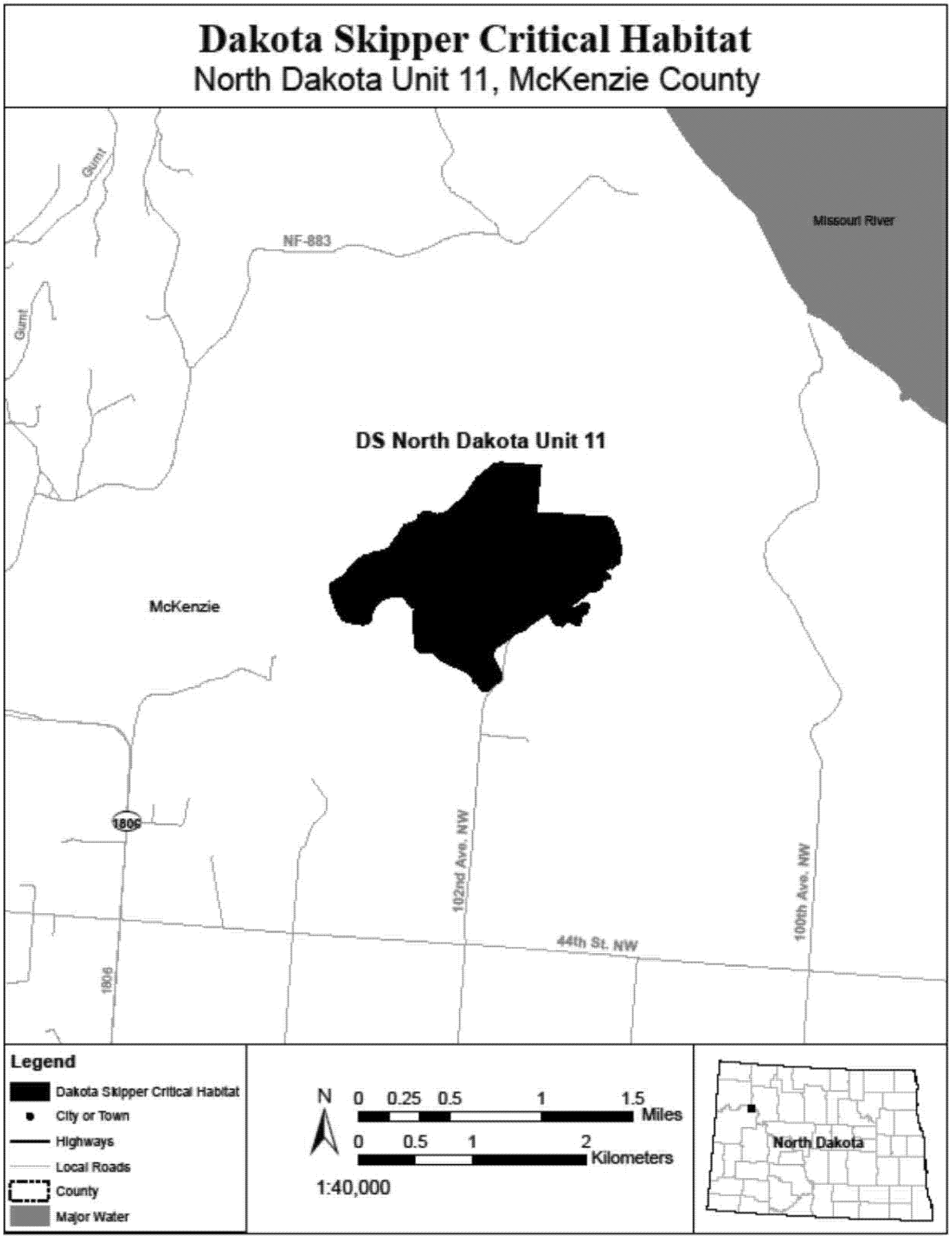
(22) DS North Dakota Units 7 and 8, McHenry County, North Dakota. Map of DS North Dakota Units 7 and 8 follows:



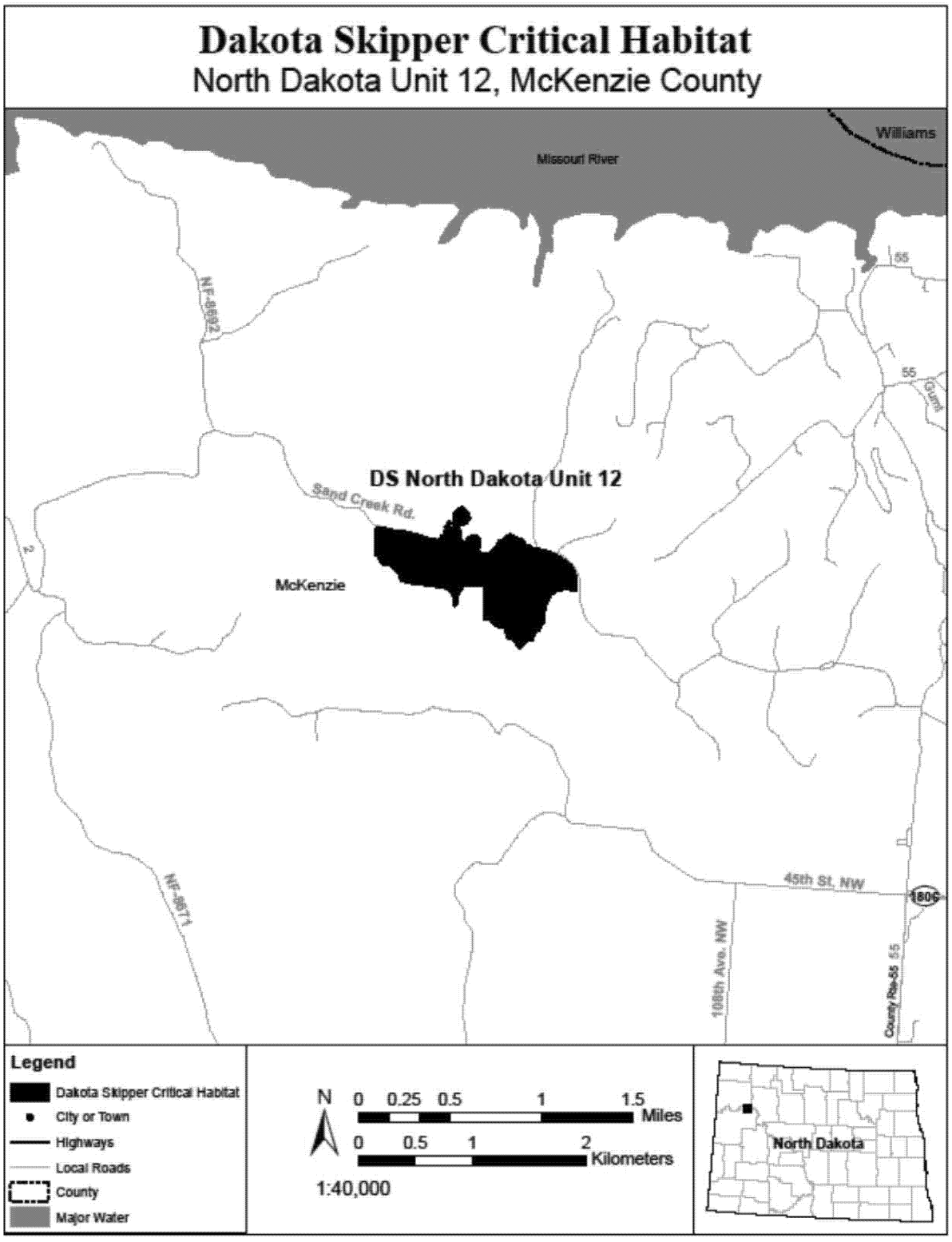
(23) DS North Dakota Unit 9, Rolette County, North Dakota. Map of DS North Dakota Unit 9 follows:



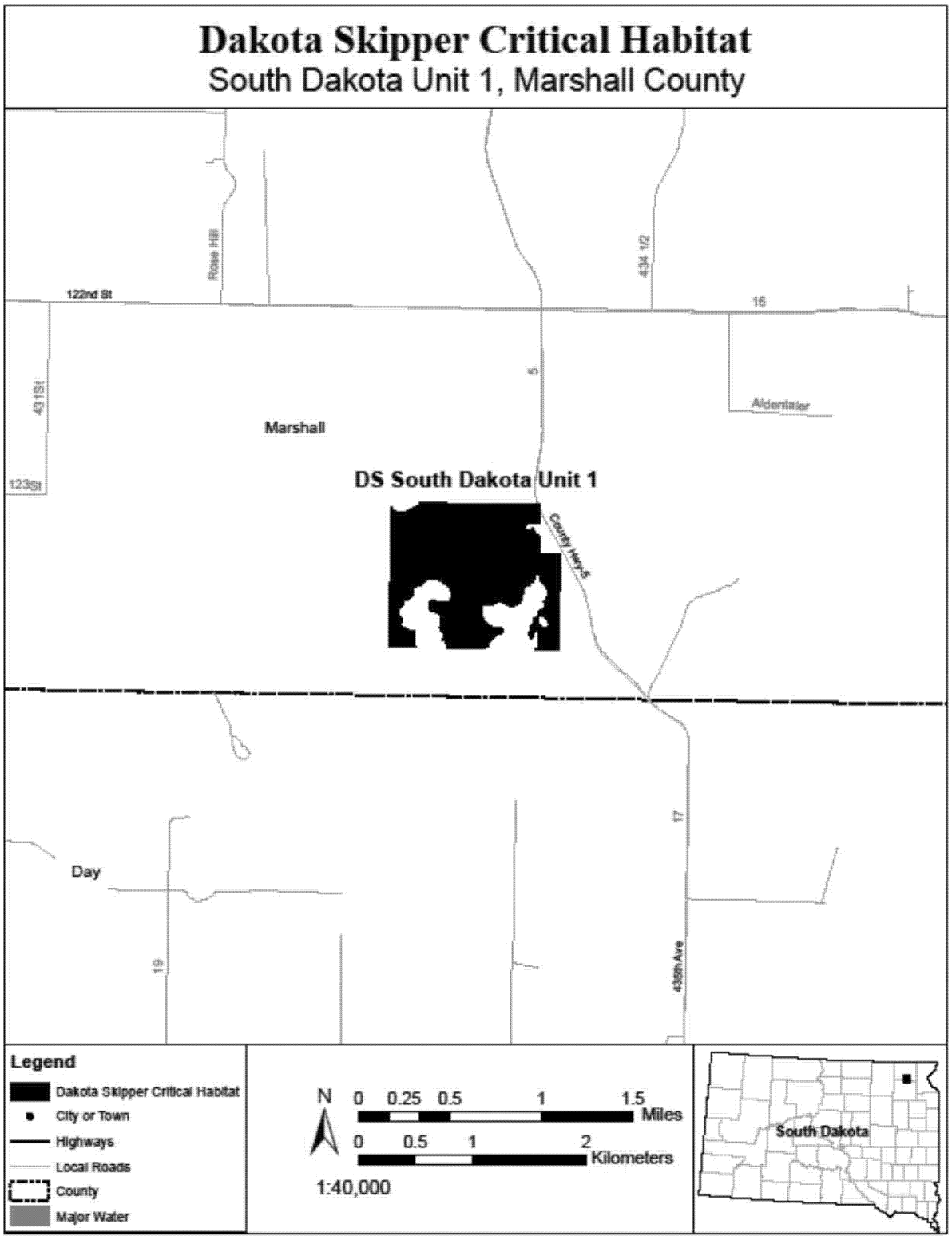
(24) DS North Dakota Unit 11, McKenzie County, North Dakota. Map of DS North Dakota Unit 11 follows:



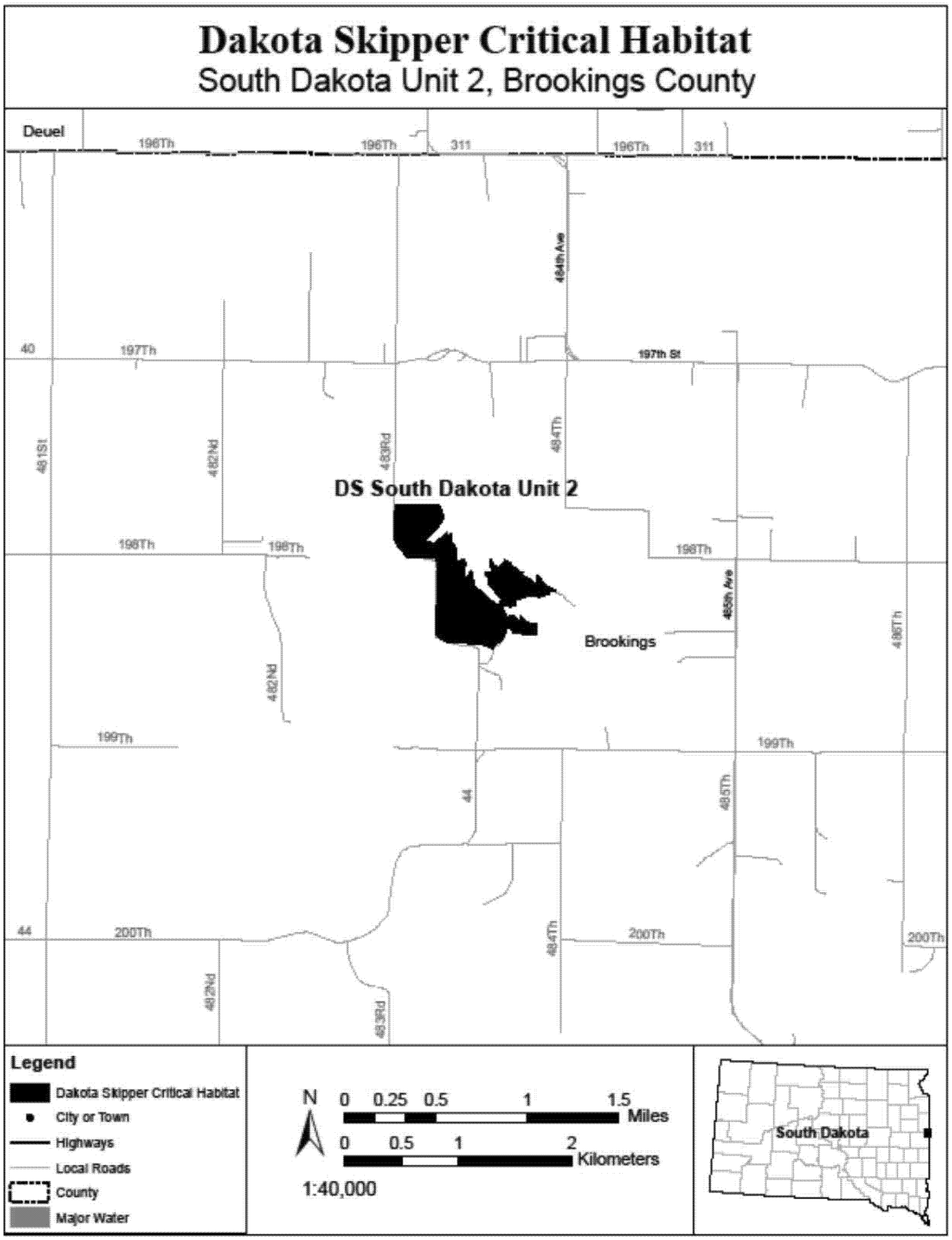
(25) DS North Dakota Unit 12, McKenzie County, North Dakota. Map of DS North Dakota Unit 12 follows:



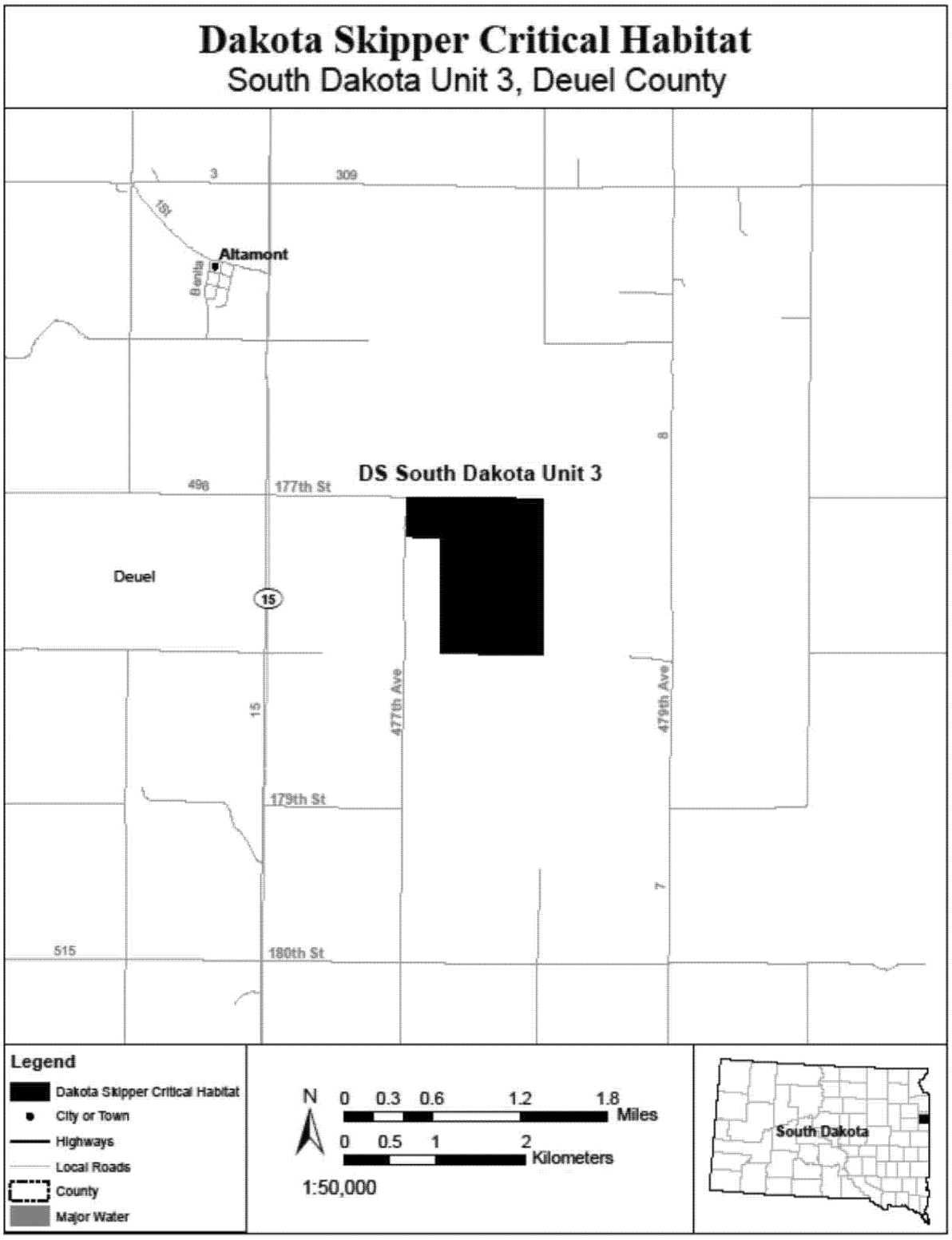
(26) DS South Dakota Unit 1, Marshall County, South Dakota. Map of DS South Dakota Unit 1 follows:



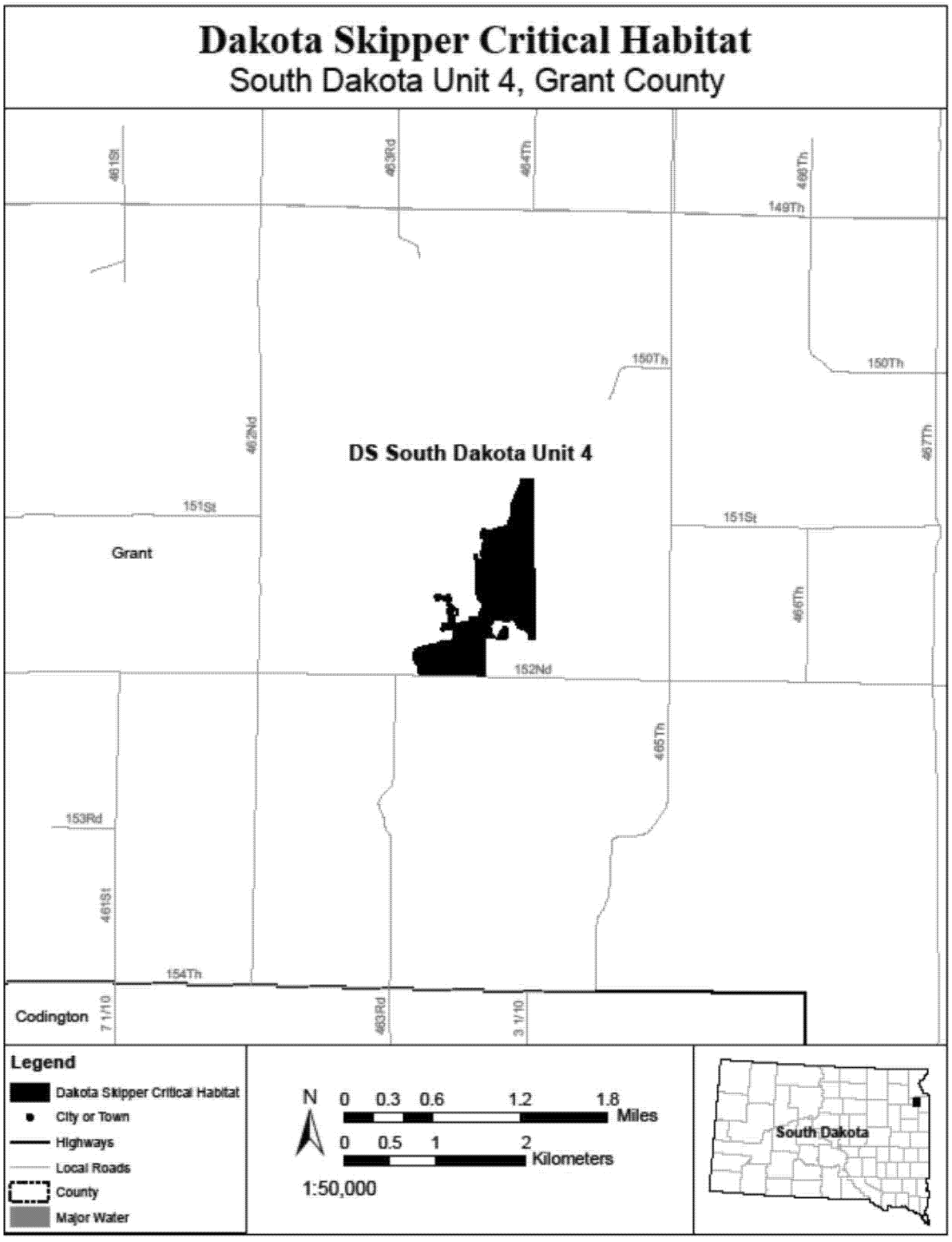
(27) DS South Dakota Unit 2, Brookings County, South Dakota. Map of DS South Dakota Unit 2 follows:



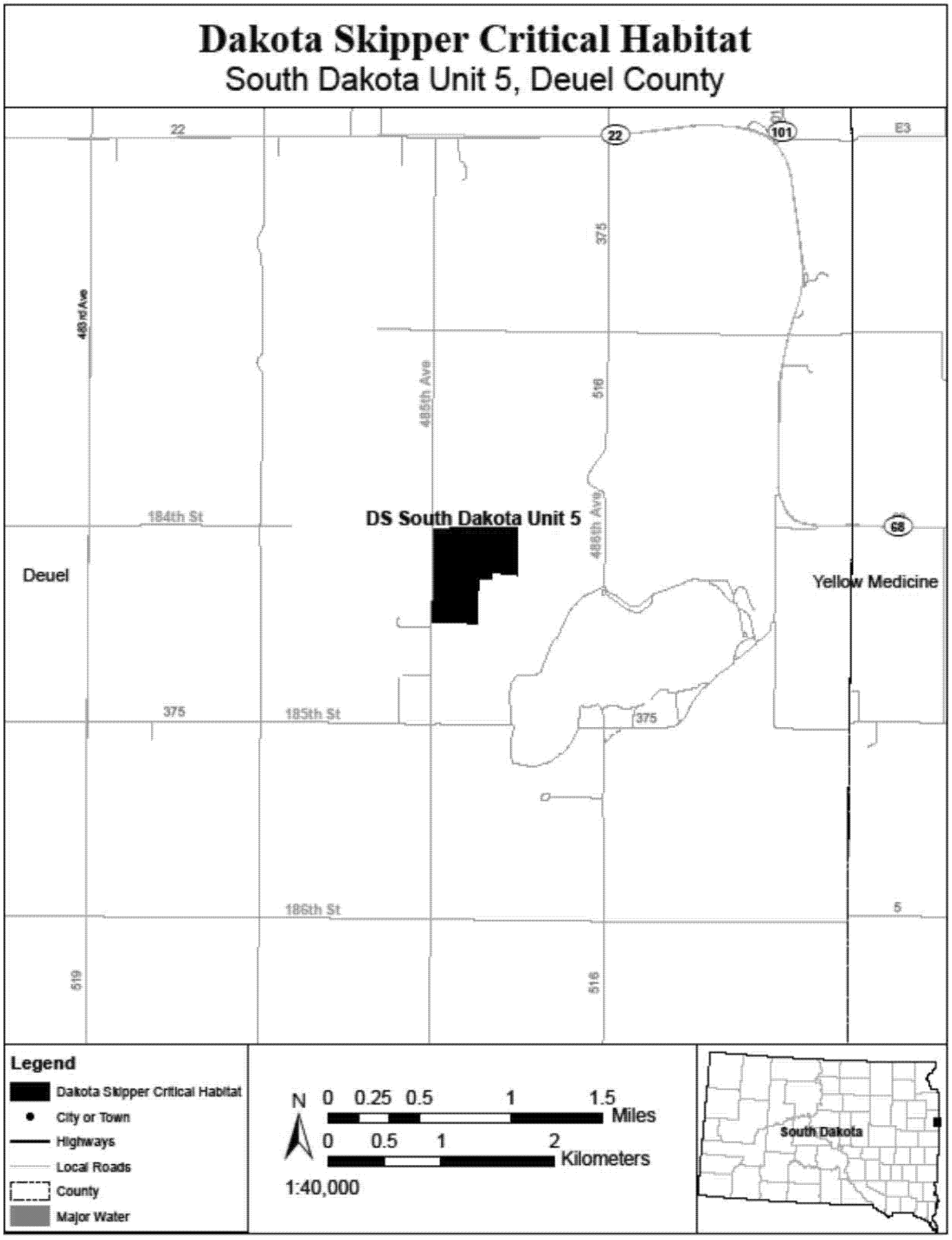
(28) DS South Dakota Unit 3, Deuel County, South Dakota. Map of DS South Dakota Unit 3 follows:



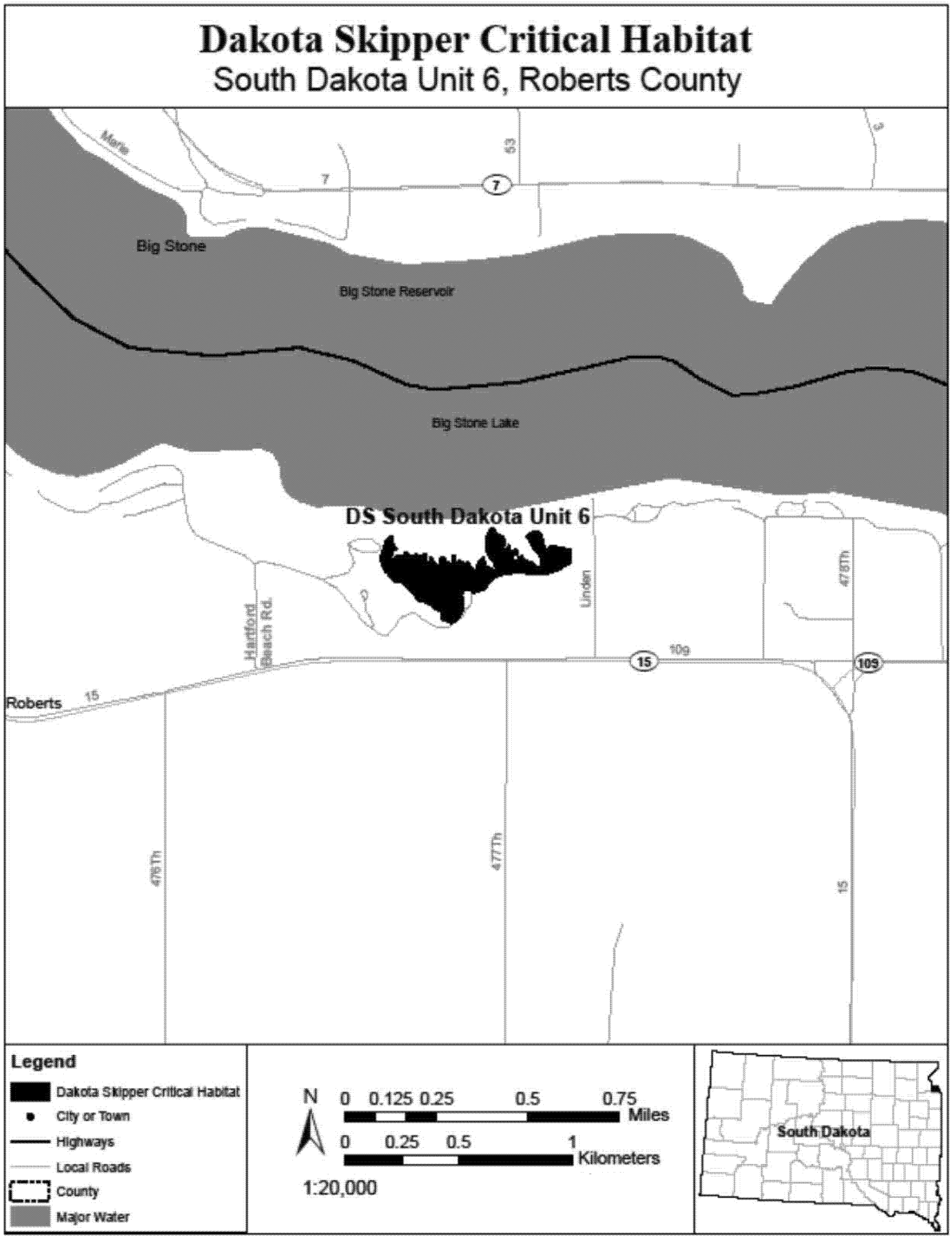
(29) DS South Dakota Unit 4, Grant County, South Dakota. Map of DS South Dakota Unit 4 follows:



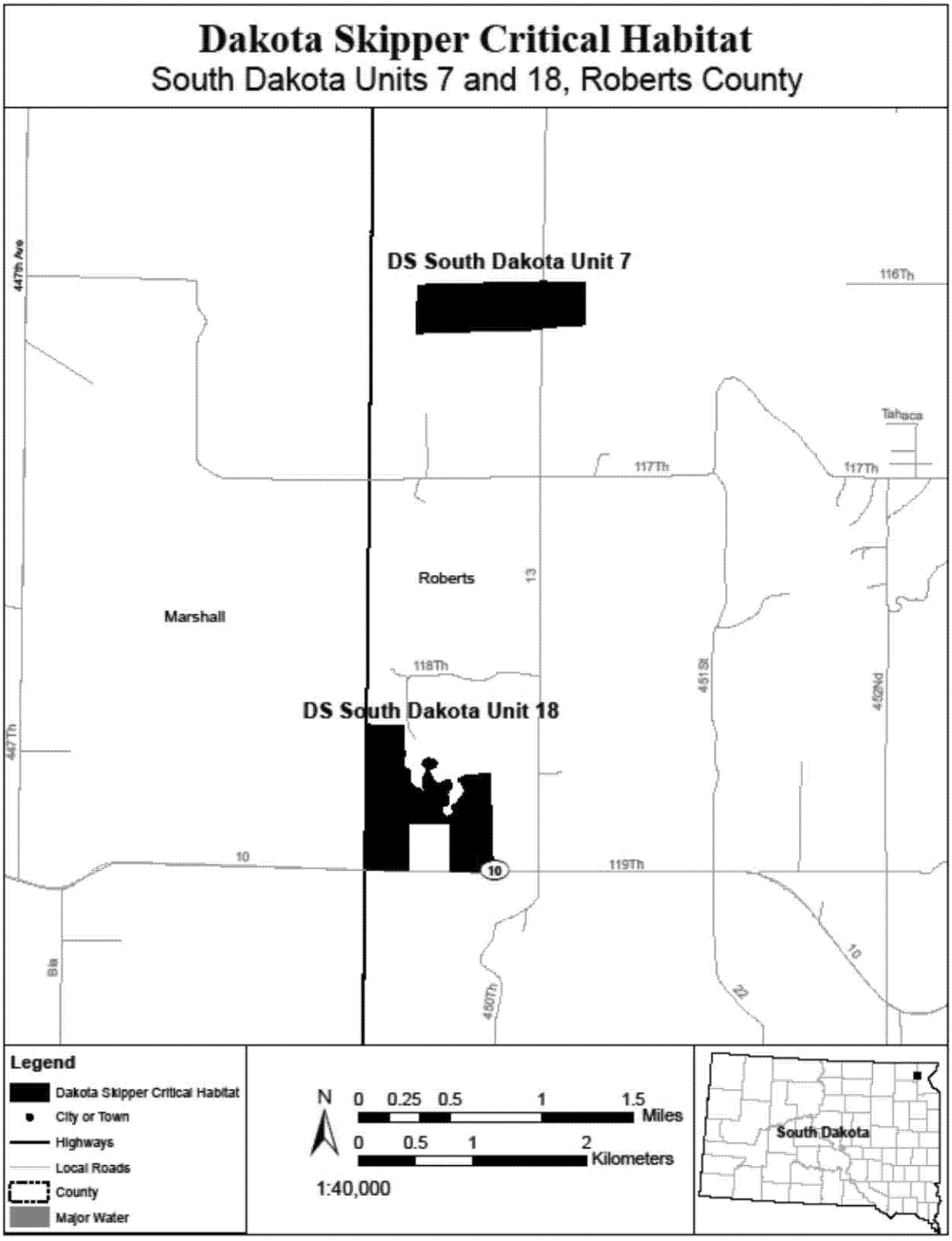
(30) DS South Dakota Unit 5, Deuel County, South Dakota. Map of DS South Dakota Unit 5 follows:



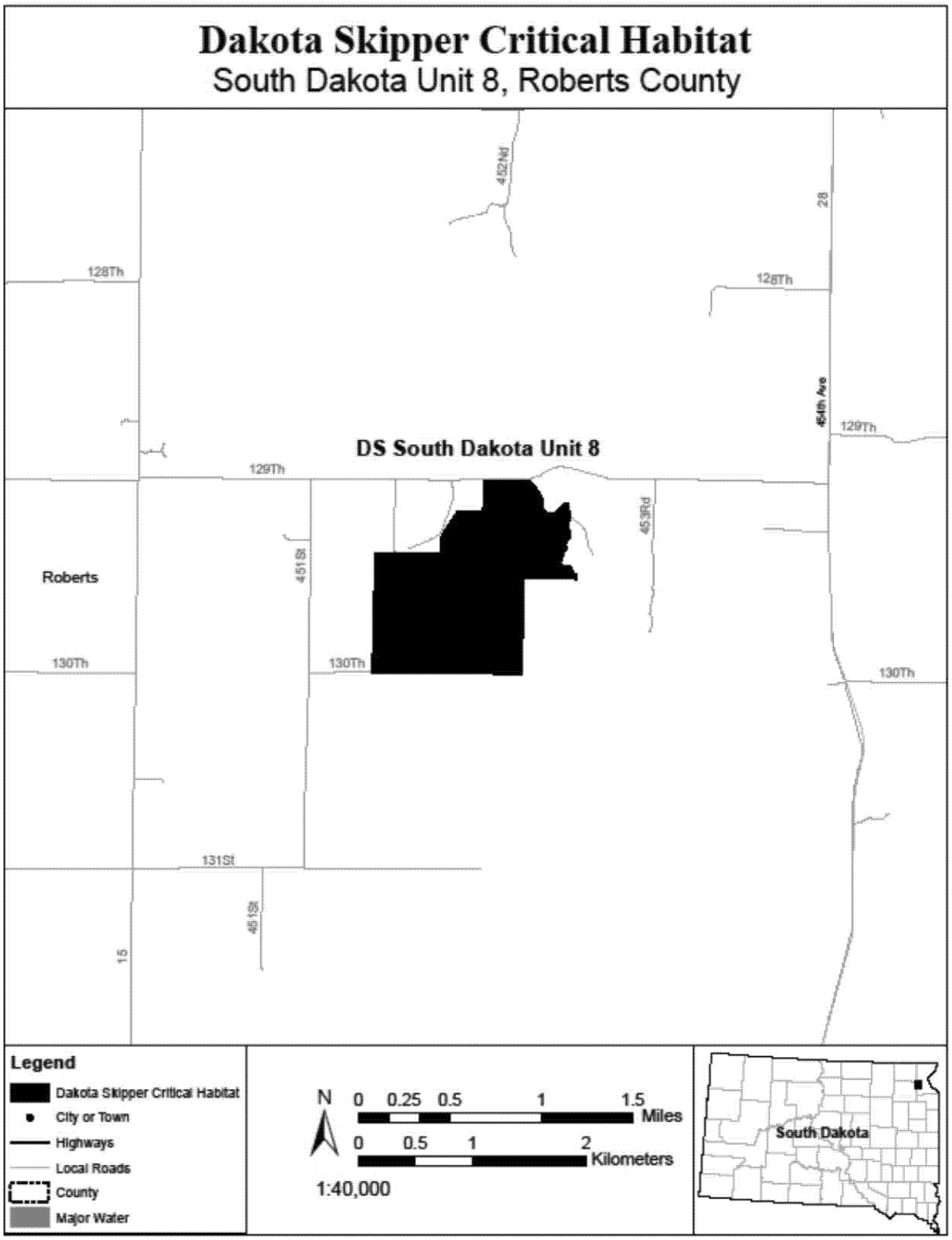
(31) DS South Dakota Unit 6, Roberts County, South Dakota. Map of DS South Dakota Unit 6 follows:



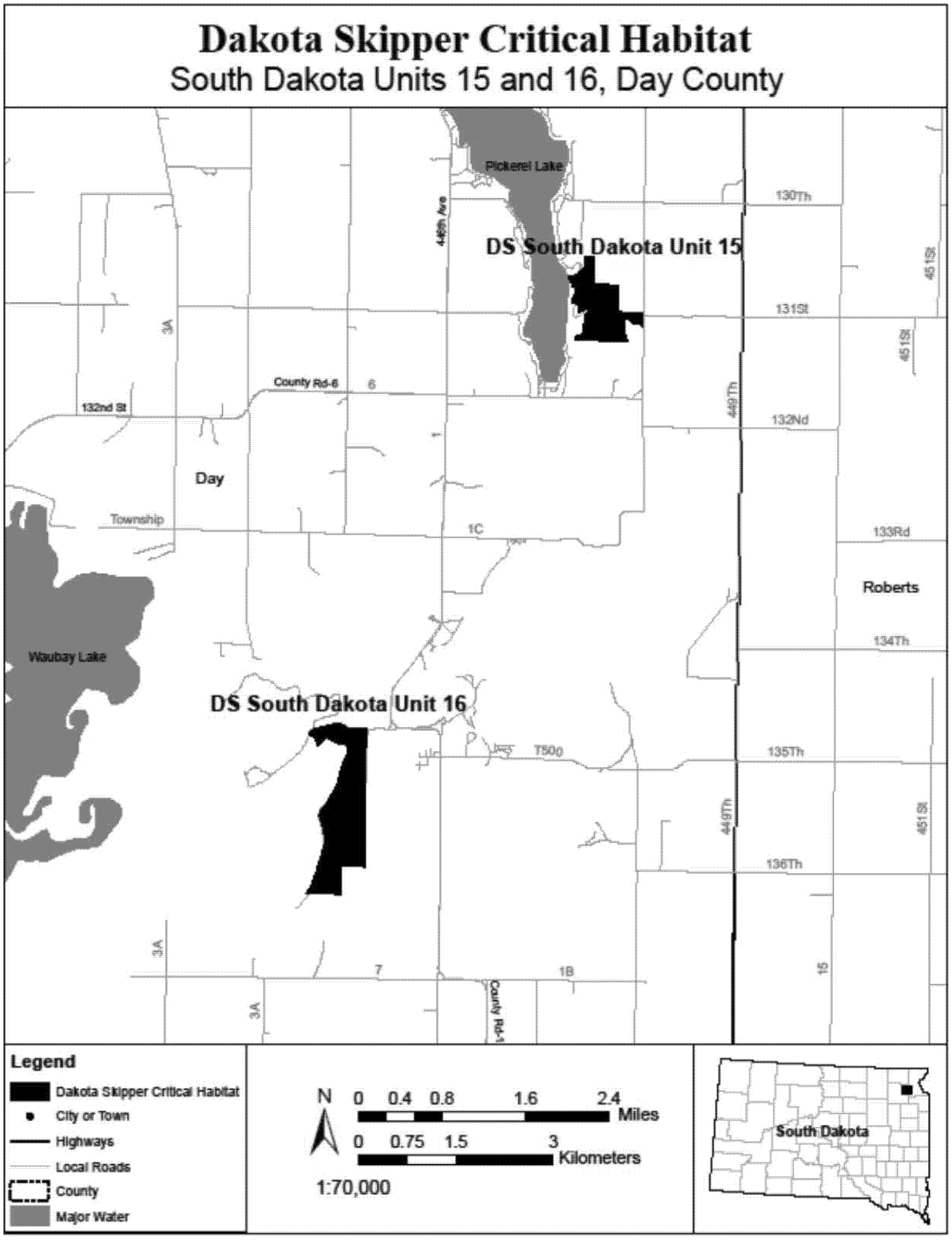
(32) DS South Dakota Units 7 and 18, Roberts County, South Dakota. Map of DS South Dakota Units 7 and 18 follows:



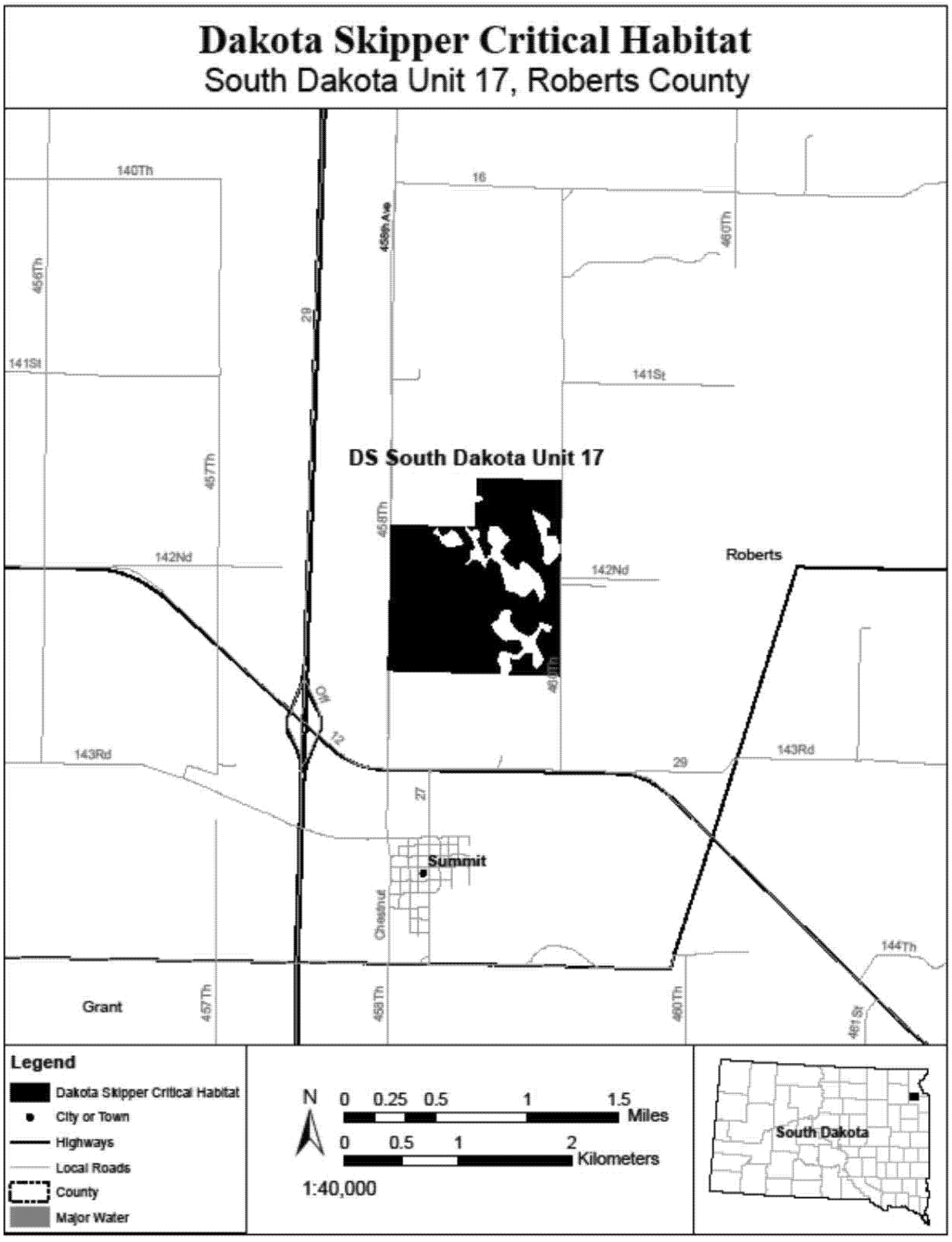
(33) DS South Dakota Unit 8, Roberts County, South Dakota. Map of DS South Dakota Unit 8 follows:



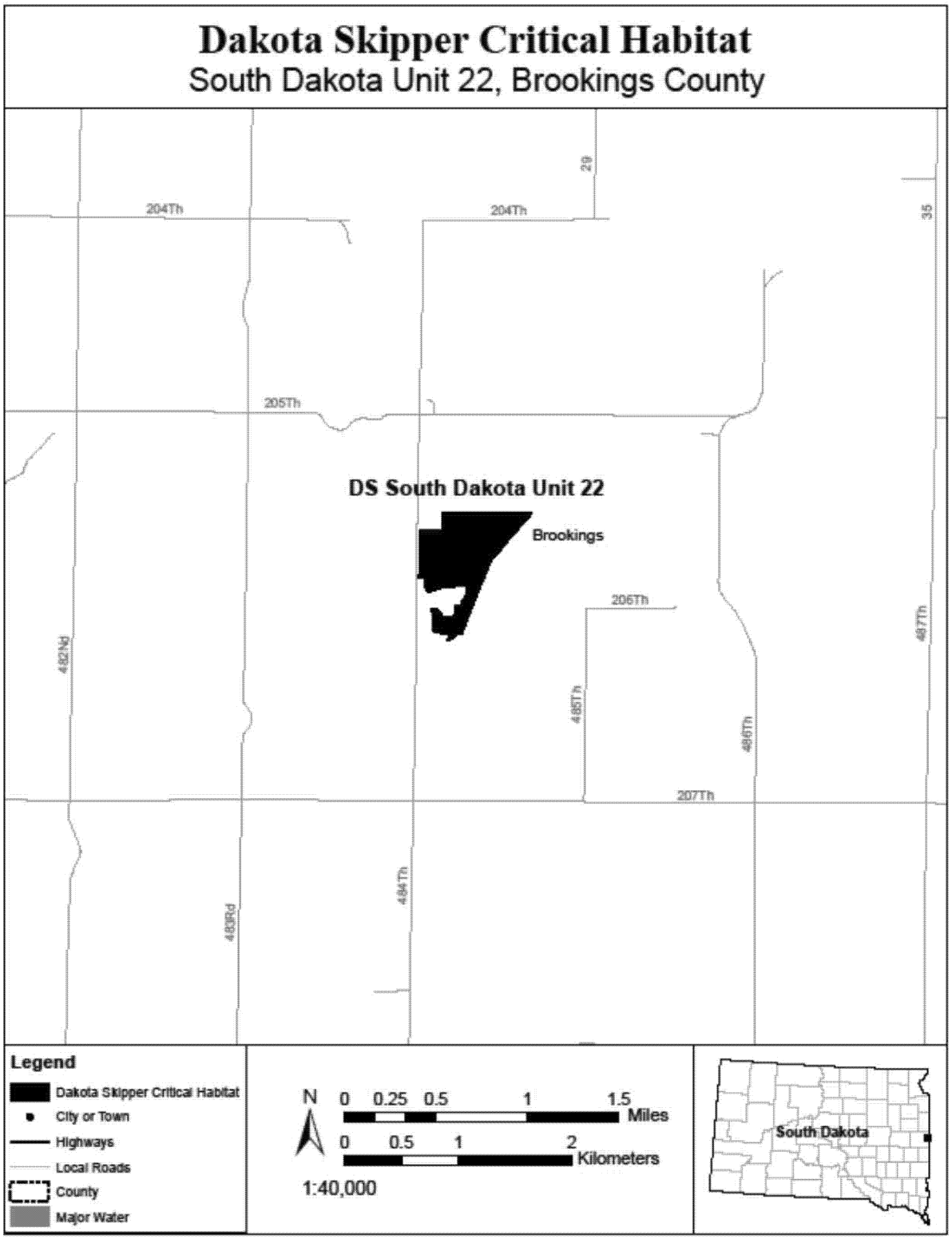
(34) DS South Dakota Units 15 and 16, Day County, South Dakota. Map of DS South Dakota Units 15 and 16 follows:



(35) DS South Dakota Unit 17, Roberts County, South Dakota. Map of DS South Dakota Unit 17 follows:



(36) DS South Dakota Unit 22, Brookings County, South Dakota. Map of DS South Dakota Unit 22 follows:



* * * * *

Poweshiek Skipperling *(Oarisma Poweshiek)*

(1) Critical habitat units are designated for Cerro Gordo, Dickinson, Emmet, Howard, Kossuth, and Osceola Counties in Iowa; in Hilsdale, Jackson, Lenawee, Livingston, Oakland, and Washtenaw Counties in Michigan; Chippewa, Clay, Cottonwood, Douglas, Kittson, Lac Qui Parle, Lincoln, Lyon, Mahnomen, Murray, Norman, Pipestone, Polk, Pope, Swift, and Wilkin Counties in Minnesota; Richland County in North Dakota; Brookings, Day, Deuel, Grant, Marshall, Moody, and Roberts Counties in South Dakota; and Green Lake and Waukesha Counties in Wisconsin, on the maps below.

(2) Within these areas, the primary constituent elements of the physical or biological features essential to the

conservation of Poweshiek skipperling consist of four components:

(i) Primary Constituent Element 1—Wet-mesic to dry tallgrass remnant untilled prairies or remnant moist meadows containing:

(A) A predominance of native grasses and native flowering forbs;

(B) Undisturbed (untilled) glacial soil types including, but not limited to, loam, sandy loam, loamy sand, gravel, organic soils (peat), or marl that provide the edaphic features conducive to Poweshiek skipperling larval survival and native-prairie vegetation;

(C) If present, depressional wetlands or low wet areas, within or adjacent to prairies that provide shelter from high summer temperatures and fire;

(D) If present, trees or large shrub cover less than 5 percent of area in dry prairies and less than 25 percent in wet-mesic prairies and prairie fens; and

(E) If present, nonnative invasive plant species occurring in less than 5 percent of area.

(ii) Primary Constituent Element 2—Prairie fen habitats containing:

(A) A predominance of native grasses and native flowering forbs;

(B) Undisturbed (untilled) glacial soil types including, but not limited to, organic soils (peat), or marl that provide the edaphic features conducive to Poweshiek skipperling larval survival and native-prairie vegetation;

(C) Depressional wetlands or low wet areas, within or adjacent to prairies that provide shelter from high summer temperatures and fire;

(D) Hydraulic features necessary to maintain prairie fen groundwater flow and prairie fen plant communities;

(E) If present, trees or large shrub cover less than 25 percent of the unit; and

(F) If present, nonnative invasive plant species occurring in less than 5 percent of area.

(iii) Primary Constituent Element 3—Native grasses and native flowering forbs for larval and adult food and shelter, specifically:

(A) At least one of the following native grasses available to provide larval food and shelter sources during Poweshiek skipperling larval stages: Prairie dropseed *(Sporobolus heterolepis),* little bluestem *(Schizachyrium scoparium),* sideoats grama *(Bouteloua curtipendula),* or mat muhly *(Muhlenbergia richardsonis);* and

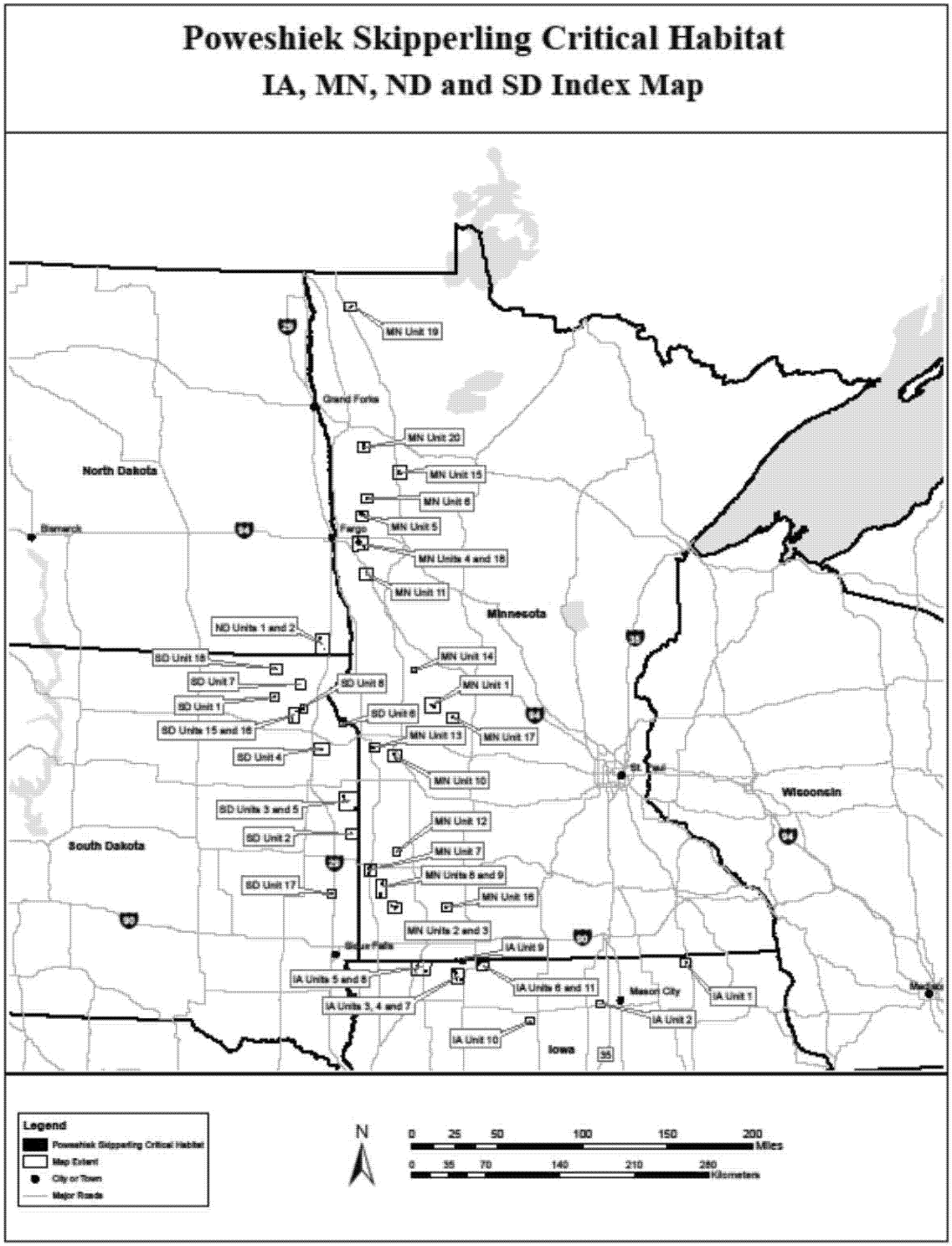
(B) At least one of the following forbs in bloom to provide nectar and water sources during the Poweshiek skipperling flight period: Purple coneflower *(Echinacea angustifolia),* black-eyed Susan *(Rudbeckia hirta),* smooth ox-eye *(Heliopsis helianthoides),* stiff tickseed *(Coreopsis palmata),* palespike lobelia *(Lobelia spicata),* sticky tofieldia *(Triantha glutinosa),* or shrubby cinquefoil *(Dasiphora fruticosa* ssp. *floribunda).*

(iv) Primary Constituent Element 4—Dispersal grassland habitat that is within 1 km (0.6 mi) of native high-quality remnant prairie (as defined in Primary Constituent Element 1) that connects high-quality wet-mesic to dry tallgrass prairies, moist meadows, or prairie fen habitats. Dispersal grassland habitat consists of the following physical characteristics appropriate for supporting Poweshiek skipperling dispersal: Undeveloped open areas dominated by perennial grassland with limited or no barriers to dispersal including tree or shrub cover less than 25 percent of the area and no row crops such as corn, beans, potatoes, or sunflowers.

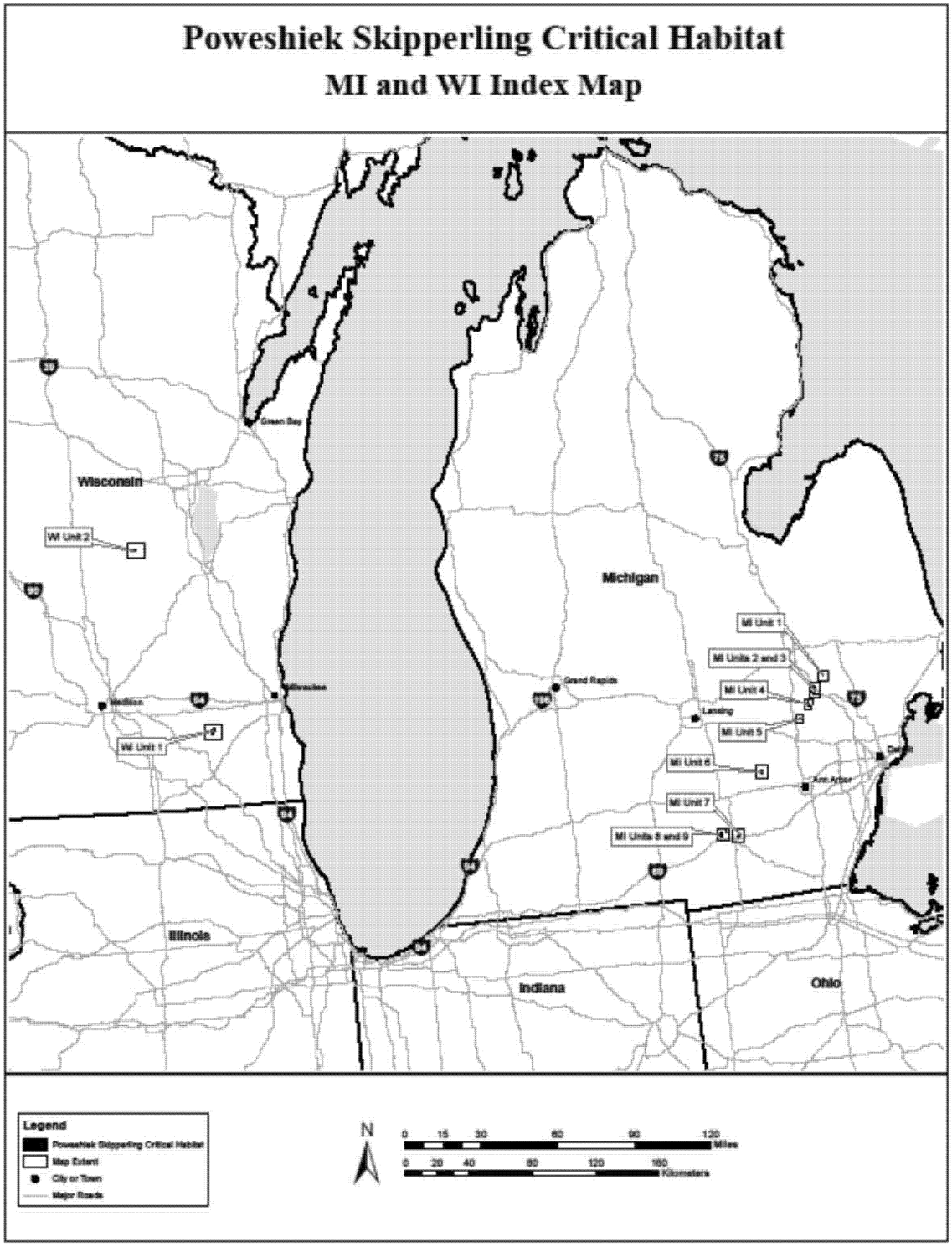
(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on November 2, 2015.

(4) *Critical habitat map units.* Data layers defining map units were created and digitized using ESRI's ArcMap (version 10.0) and comparing USGS NAIP/FSA high-resolution orthophotography from 2010 or later and previously mapped skipper habitat polygons submitted by contracted researchers or prairie habitat polygons made available from Minnesota Department of Natural Resources' County Biological Survey. Critical habitat units then were mapped in Geographic Coordinate System WGS84. 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 the Service's internet site (*http://www.fws.gov/midwest/Endangered/*), at *http://www.regulations.gov* at Docket No. FWS–R3–ES–2013–0017, and at the field office responsible for this designation. 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.

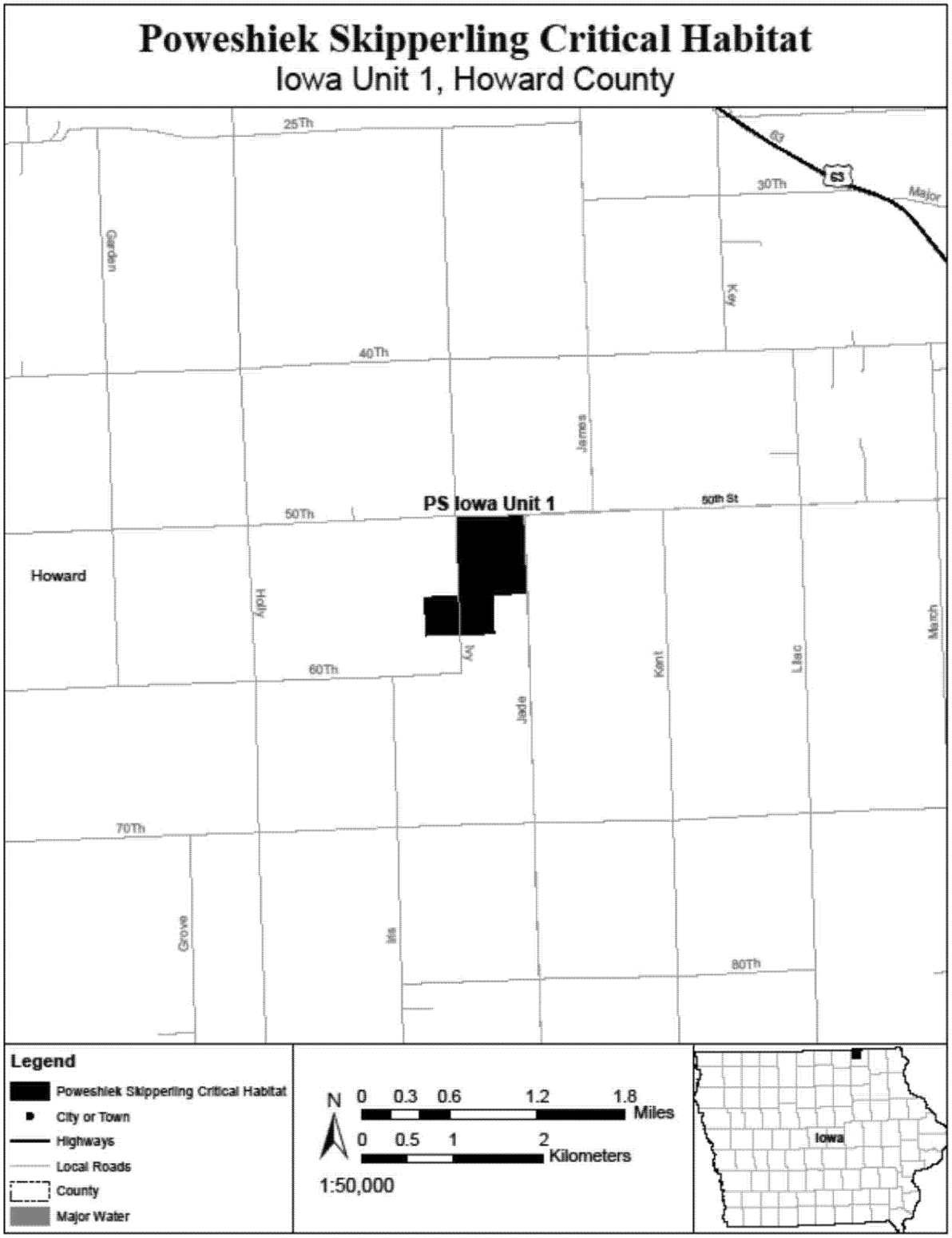
(5) Iowa, Minnesota, North Dakota, and South Dakota index map follows:



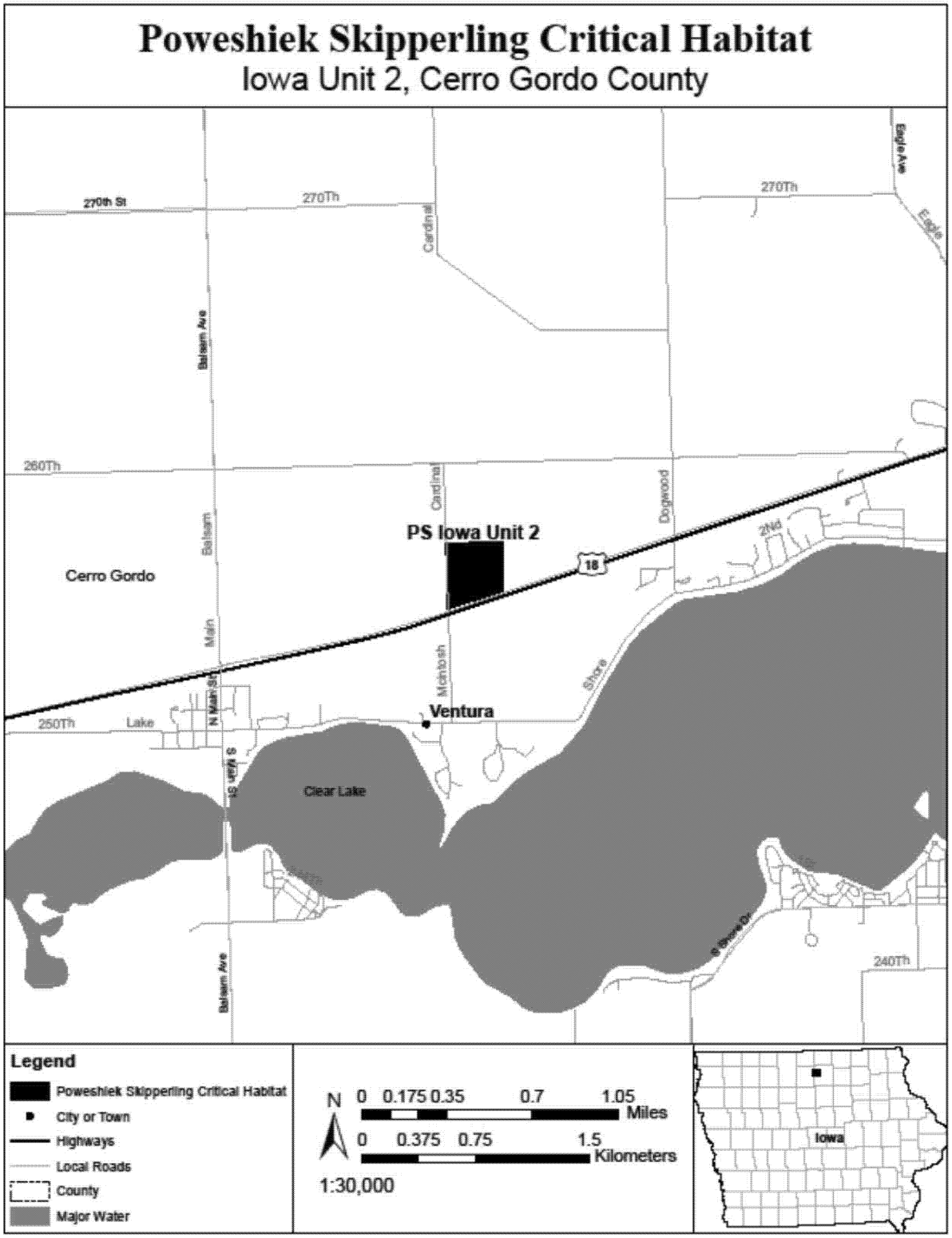
(6) Michigan and Wisconsin index map follows:



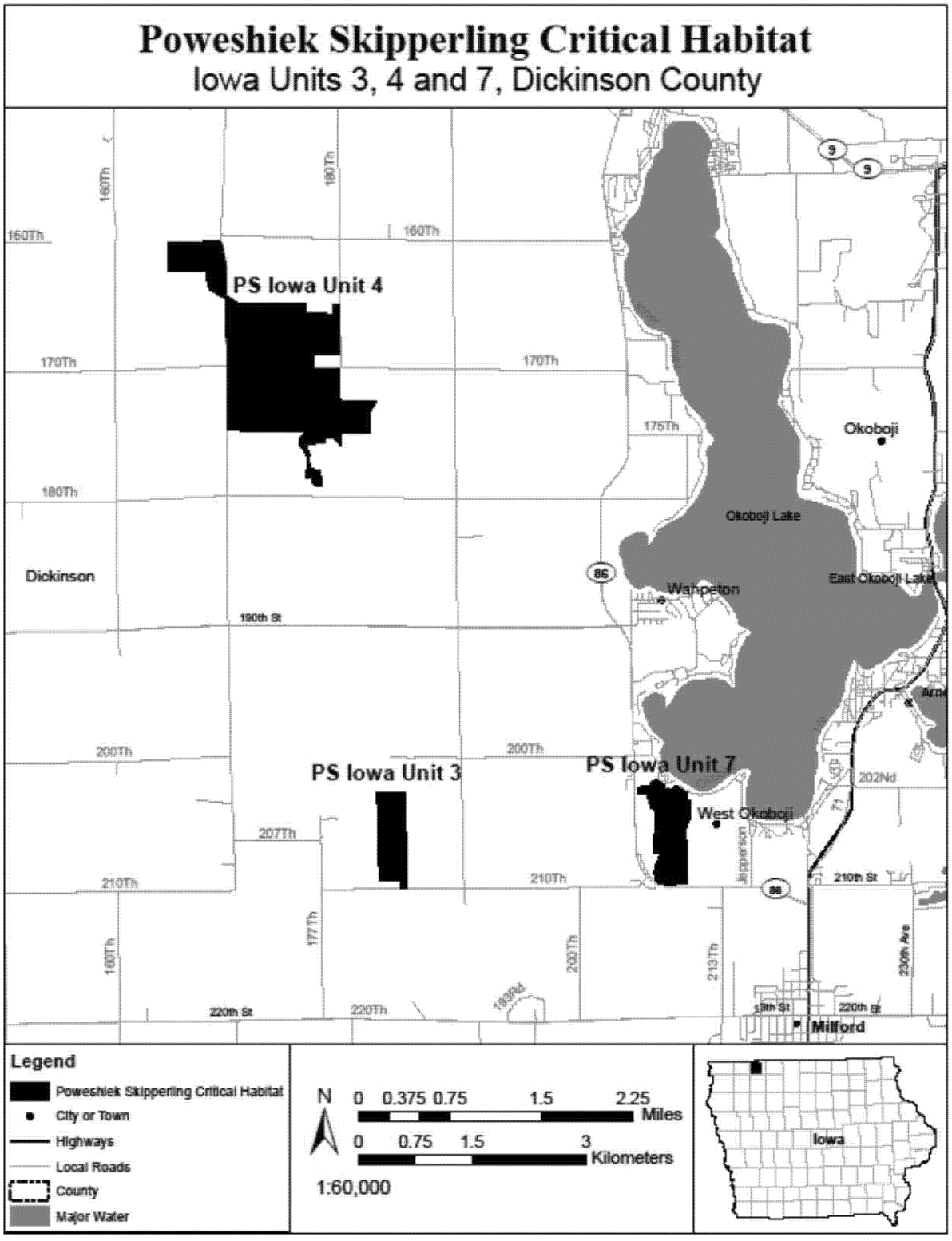
(7) PS Iowa Unit 1, Howard County, Iowa. Map of PS Iowa Unit 1 follows:



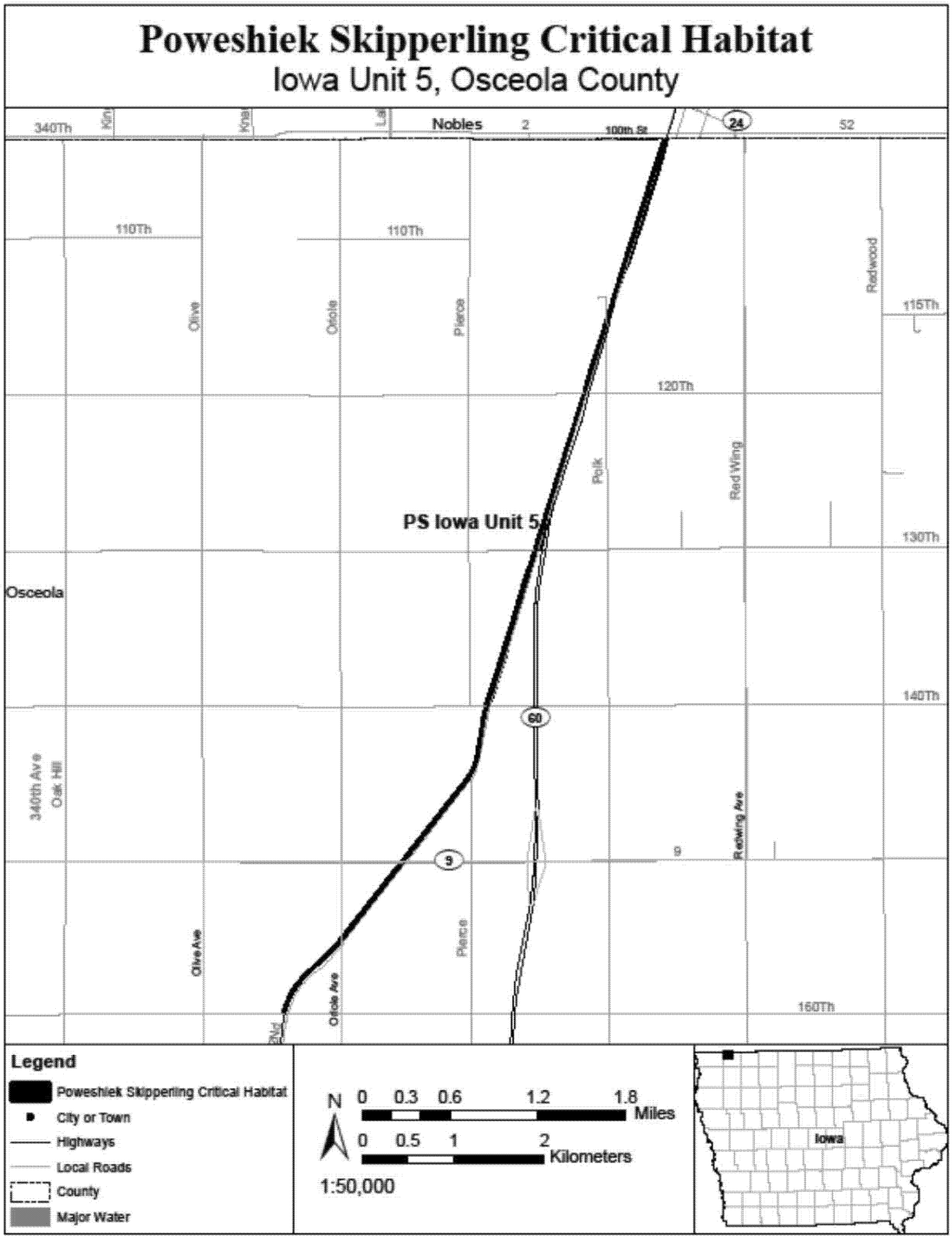
(8) PS Iowa Unit 2, Cerro Gordo County, Iowa. Map of PS Iowa Unit 2 follows:



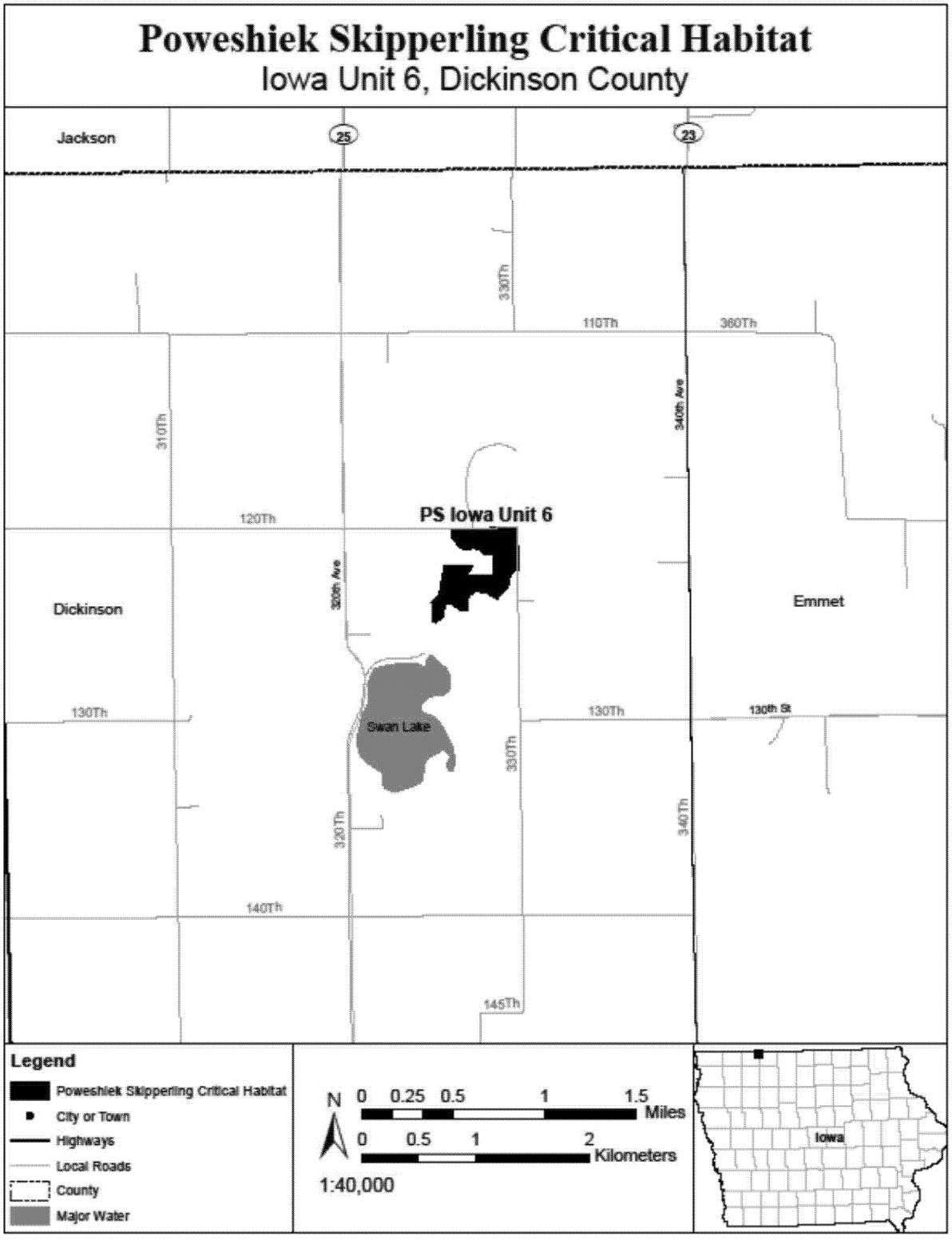
(9) PS Iowa Units 3, 4, and 7, Dickinson County, Iowa. Map of PS Iowa Units 3, 4, and 7 follows:



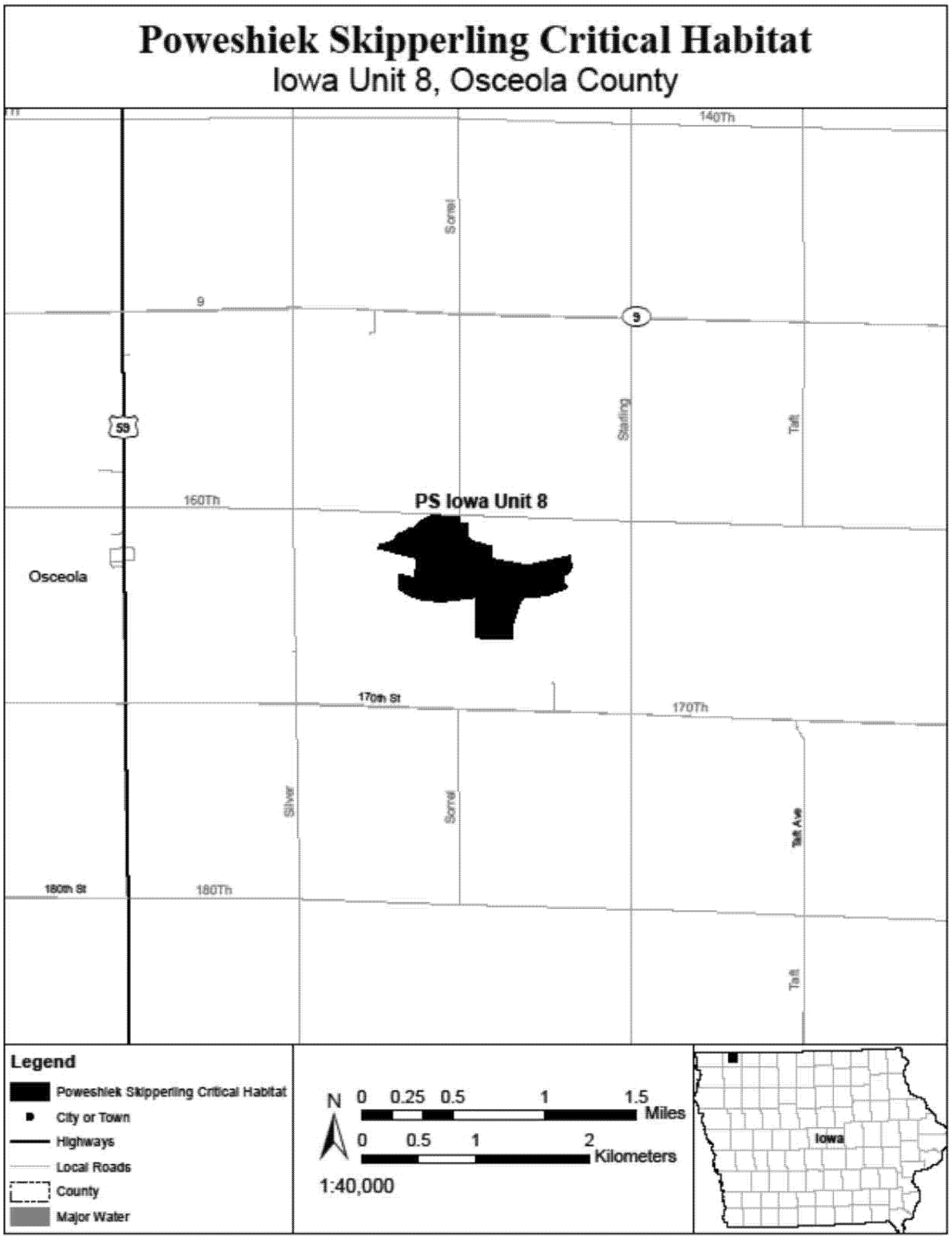
(10) PS Iowa Unit 5, Osceola County, Iowa. Map of PS Iowa Unit 5 follows:



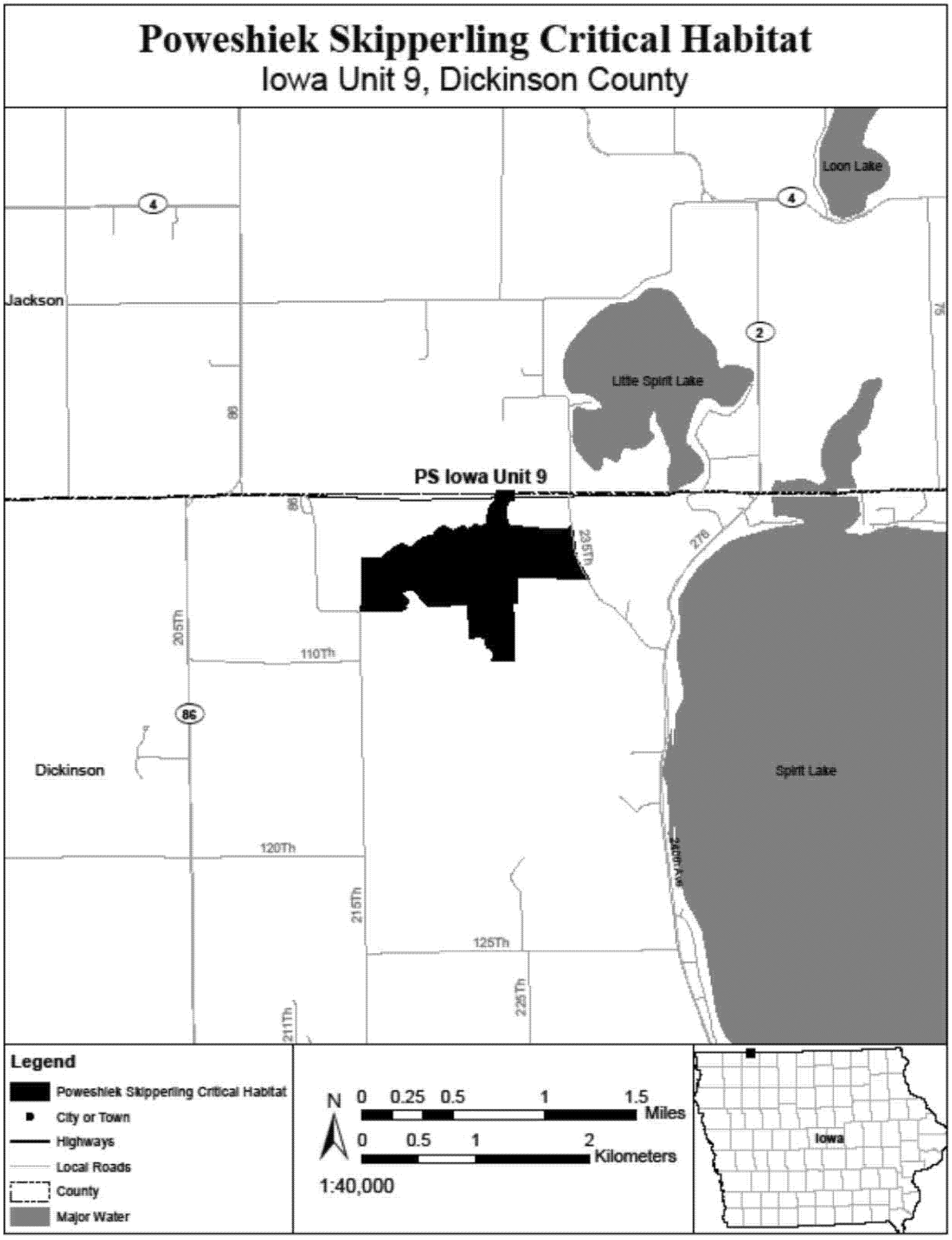
(11) PS Iowa Unit 6, Dickinson County, Iowa. Map of PS Iowa Unit 6 follows:



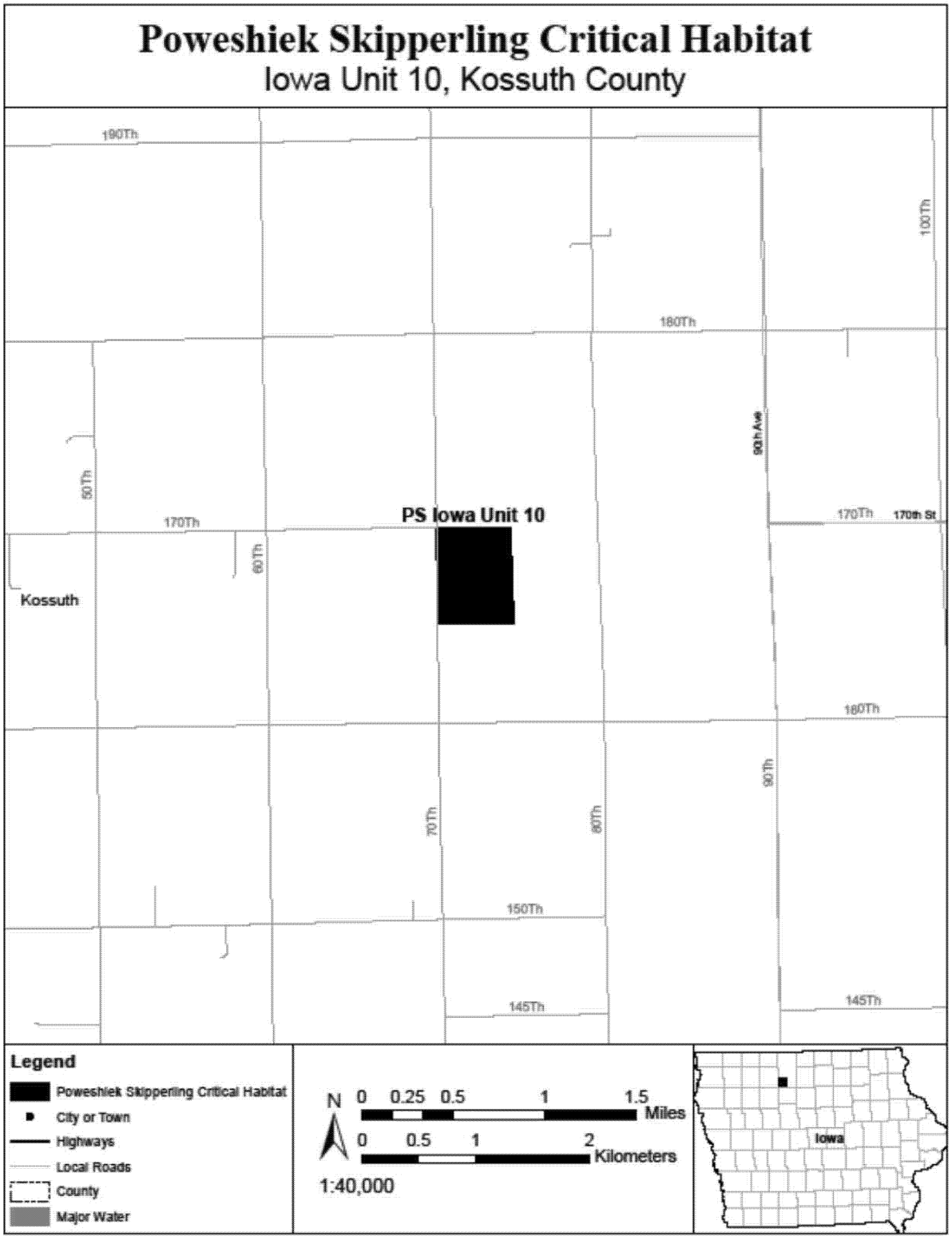
(12) PS Iowa Unit 8, Osceola County, Iowa. Map of PS Iowa Unit 8 follows:



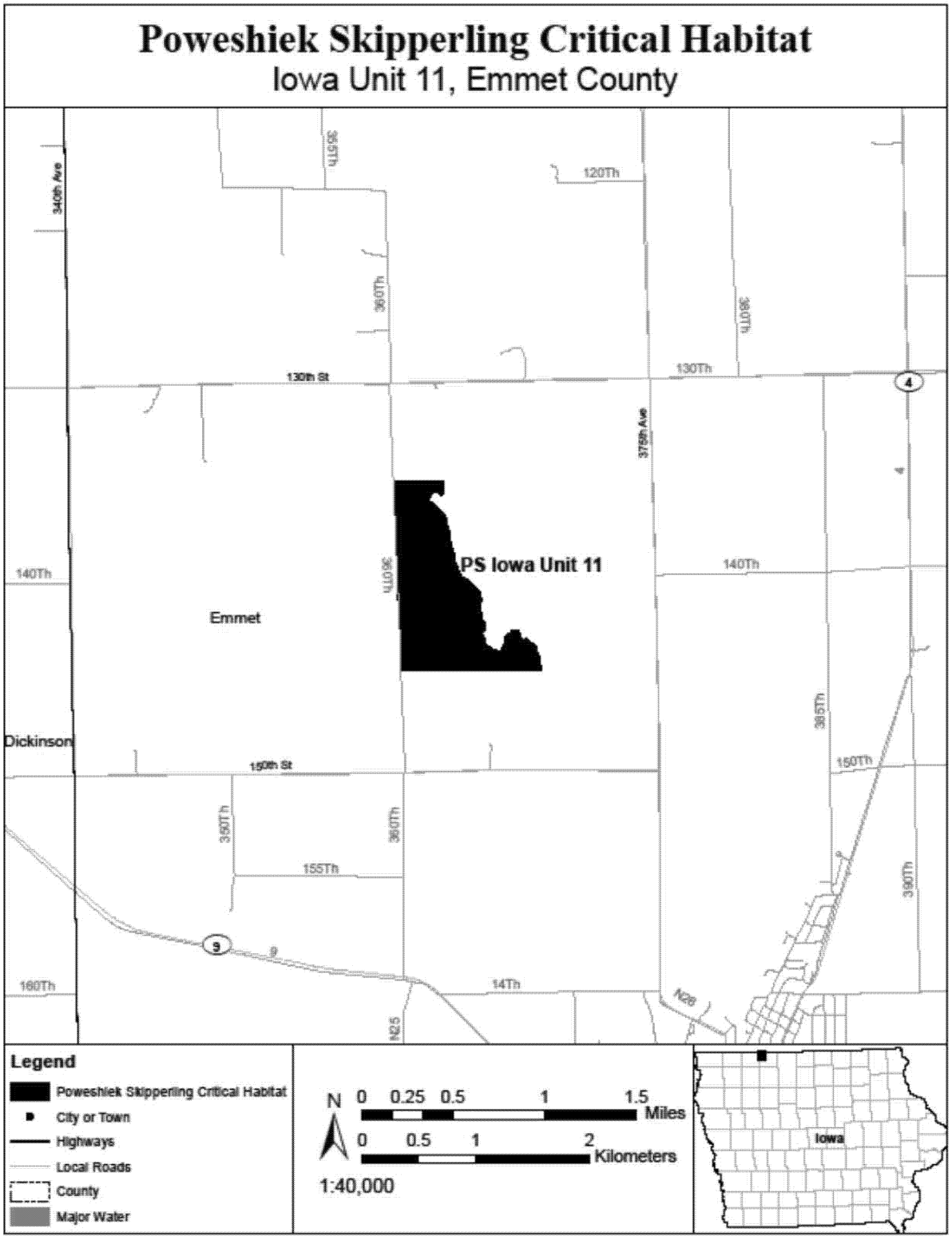
(13) PS Iowa Unit 9, Dickinson County, Iowa. Map of PS Iowa Unit 9 follows:



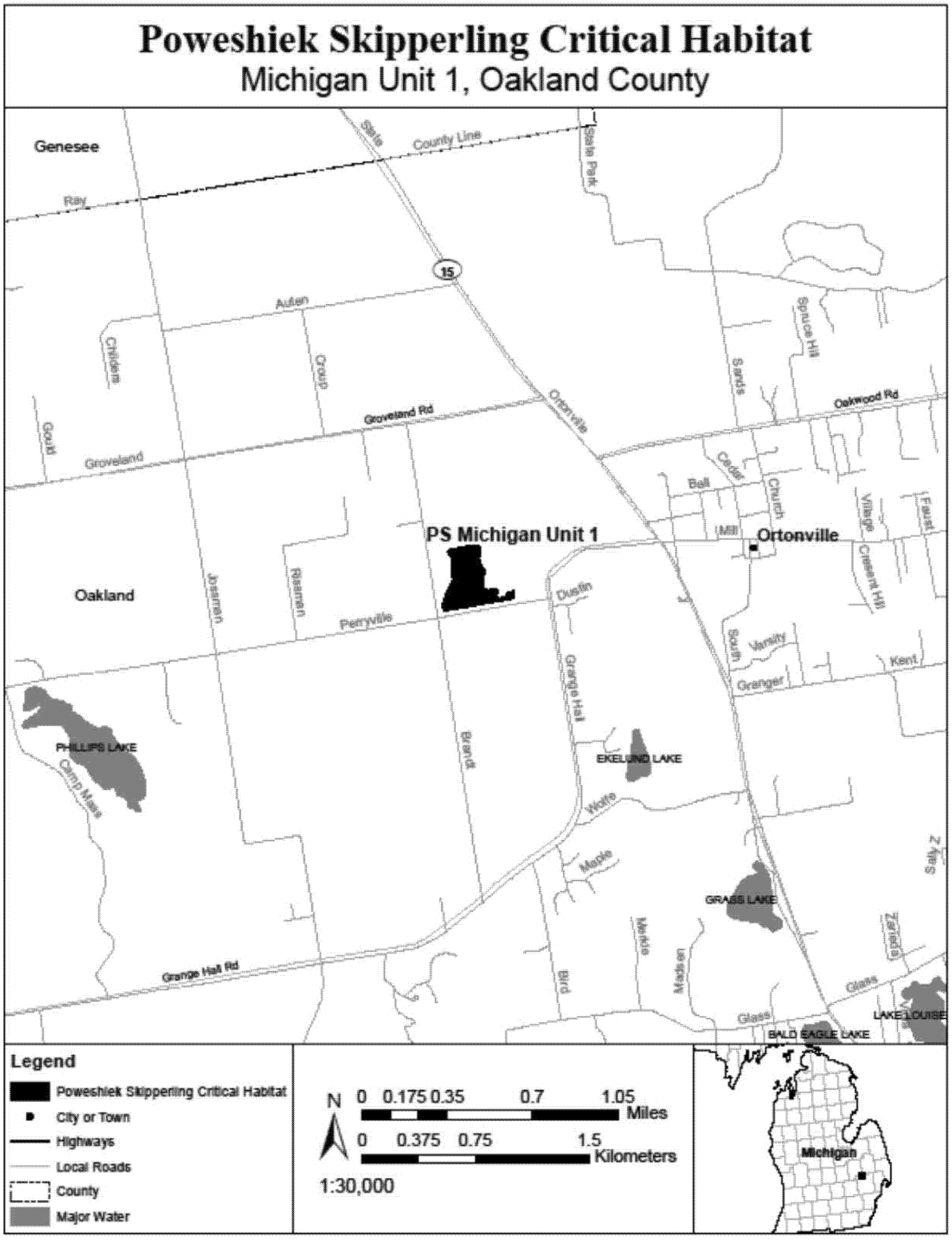
(14) PS Iowa Unit 10, Kossuth County, Iowa. Map of PS Iowa Unit 10 follows:



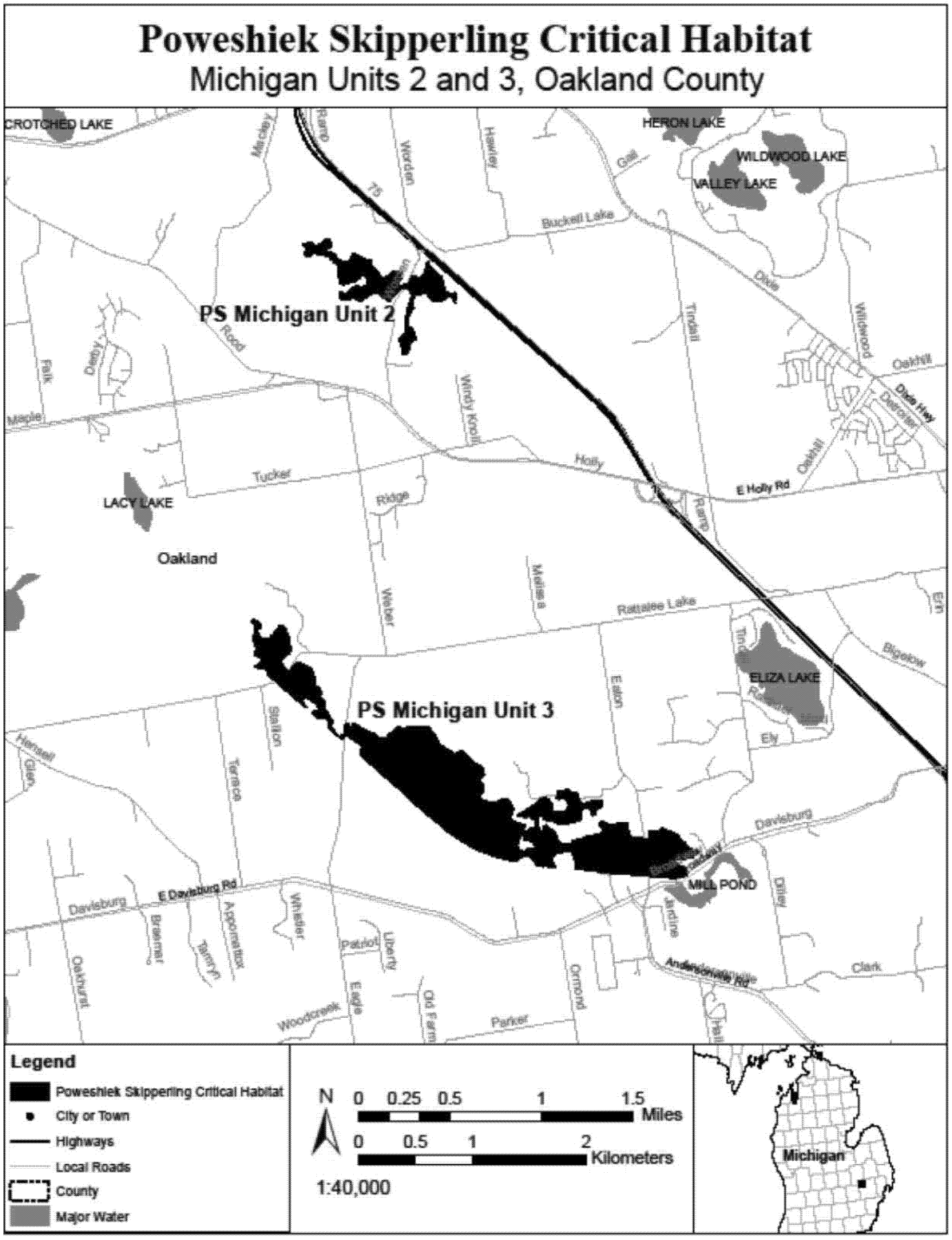
(15) PS Iowa Unit 11, Emmet County, Iowa. Map of PS Iowa Unit 11 follows:



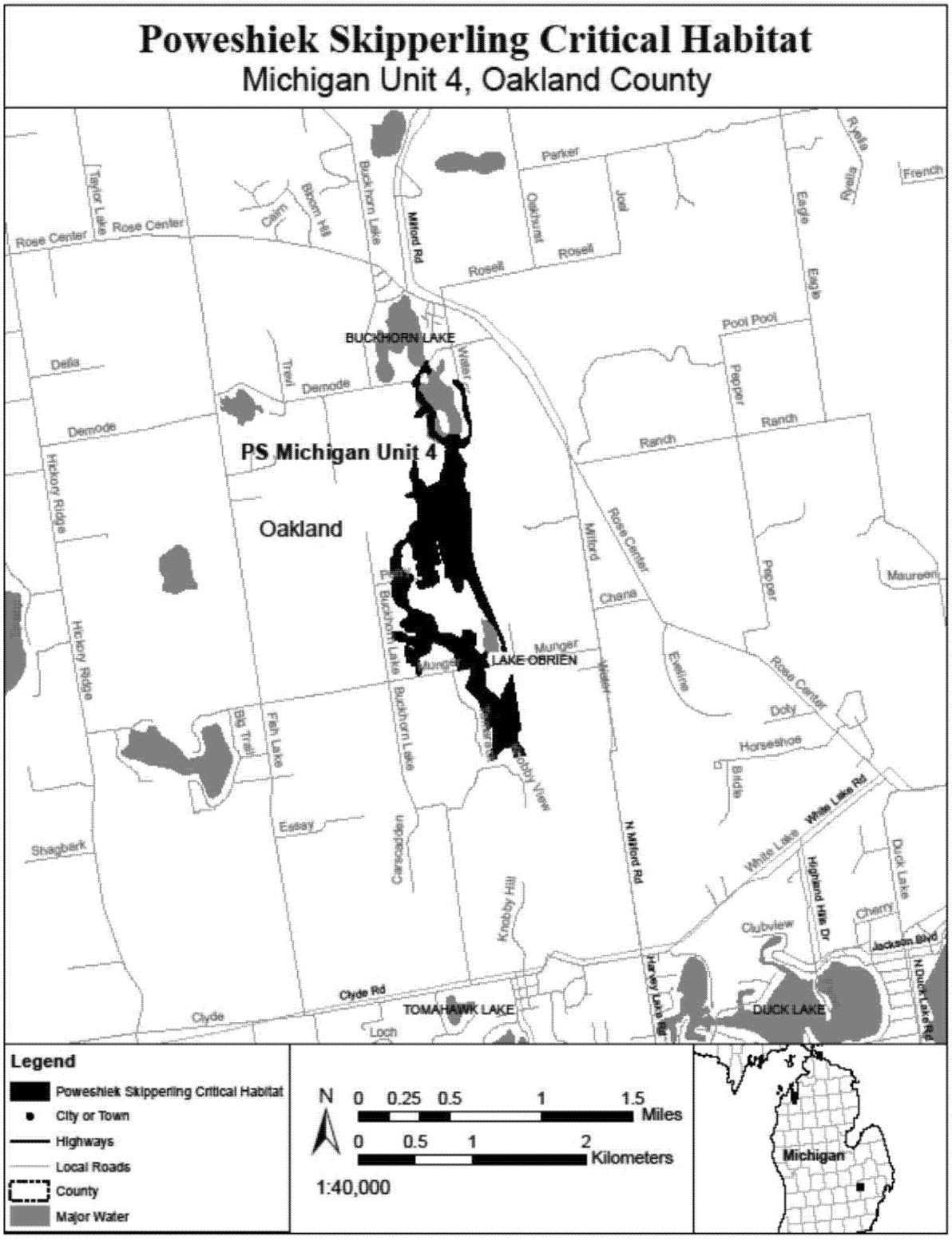
(16) PS Michigan Unit 1, Oakland County, Michigan. Map of PS Michigan Unit 1 follows:



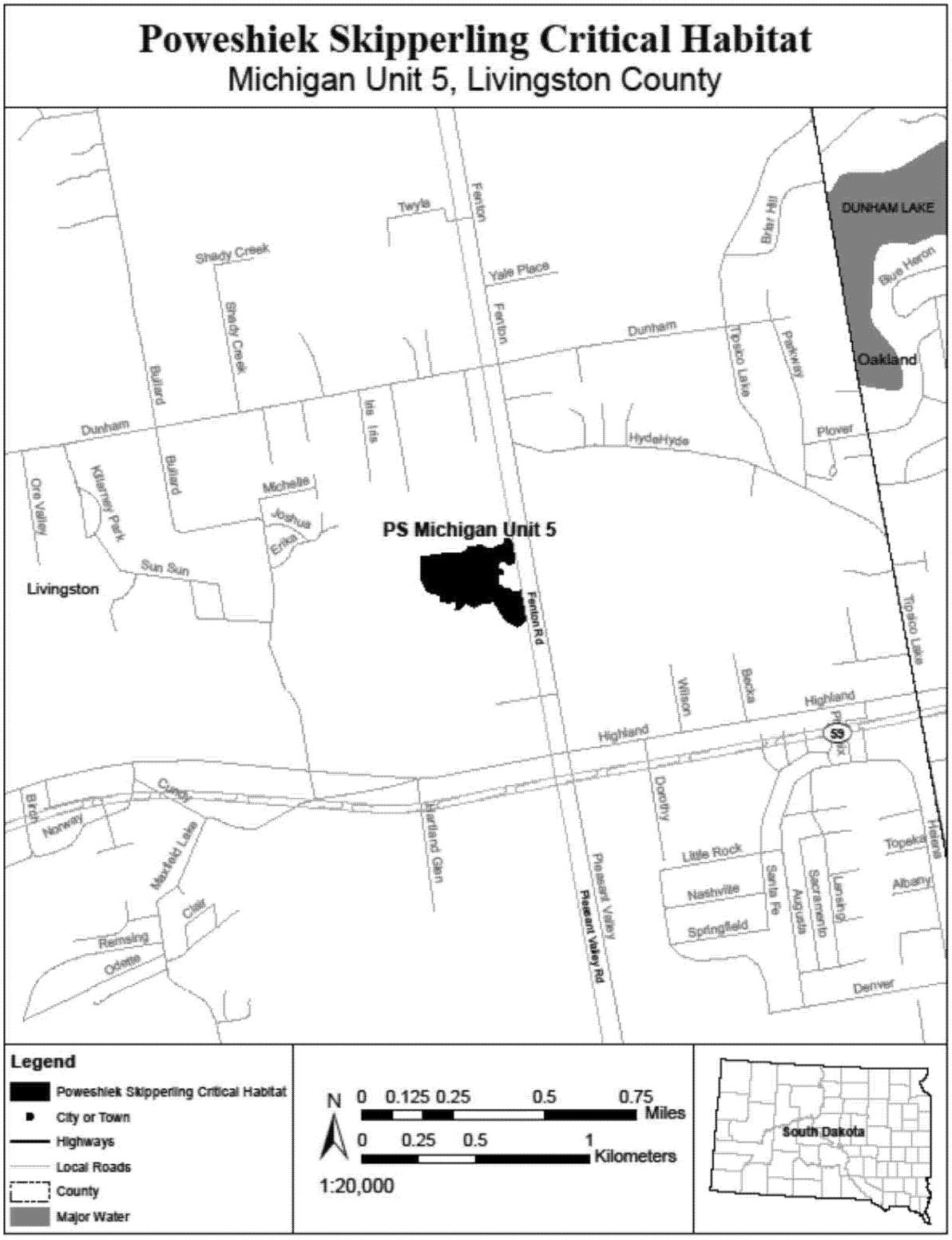
(17) PS Michigan Units 2 and 3, Oakland County, Michigan. Map of PS Michigan Units 2 and 3 follows:



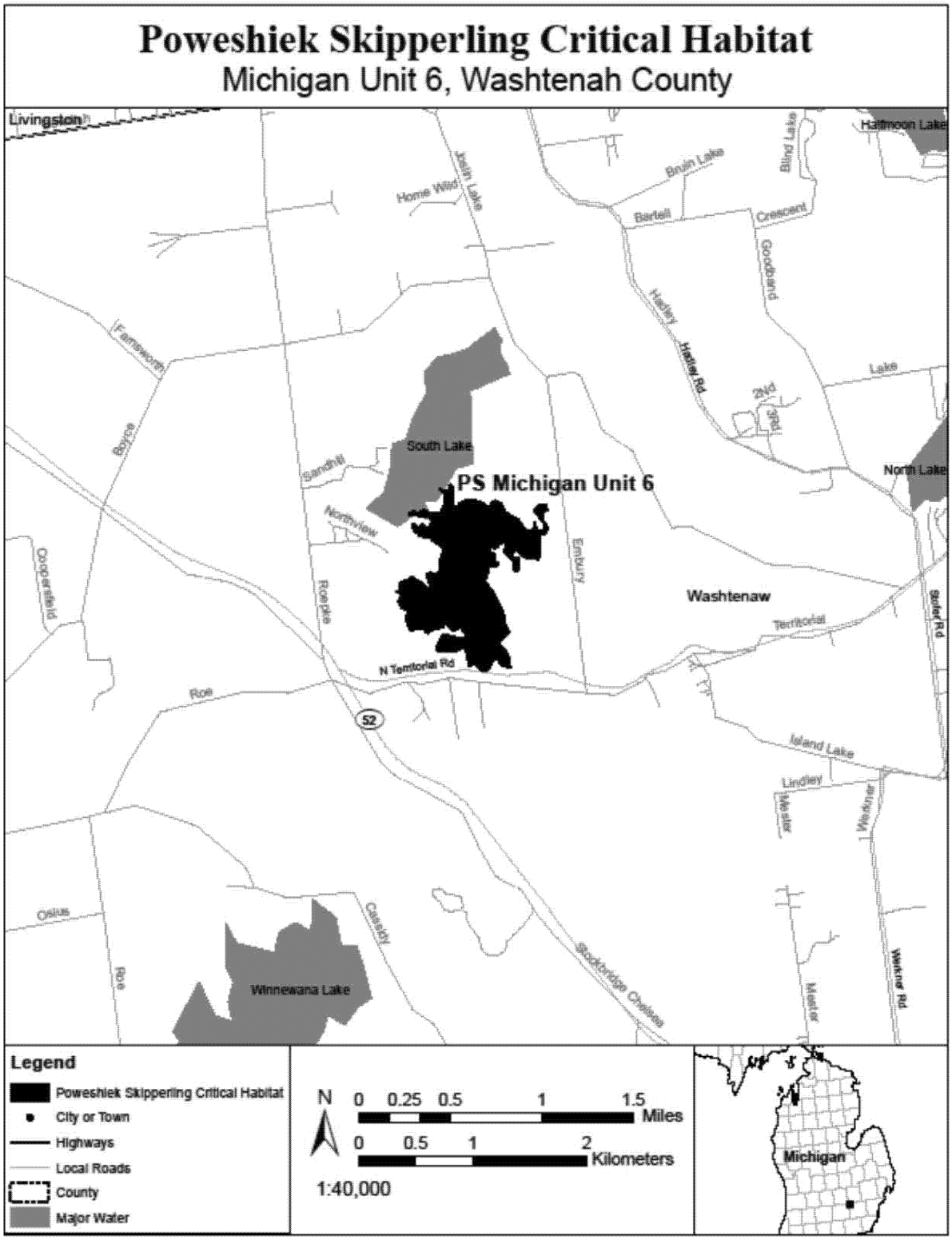
(18) PS Michigan Unit 4, Oakland County, Michigan. Map of PS Michigan Unit 4 follows:



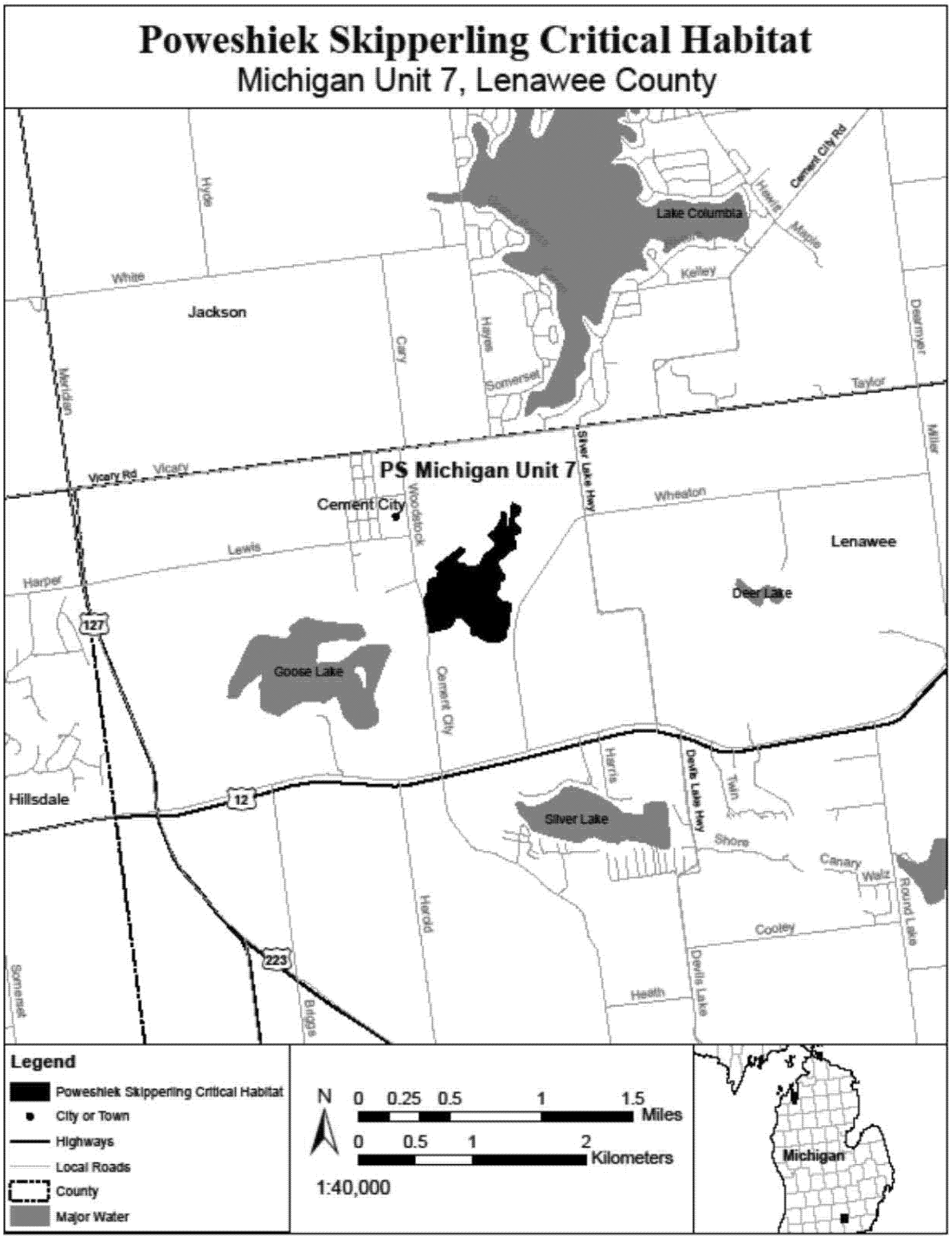
(19) PS Michigan Unit 5, Livingston County, Michigan. Map of PS Michigan Unit 5 follows:



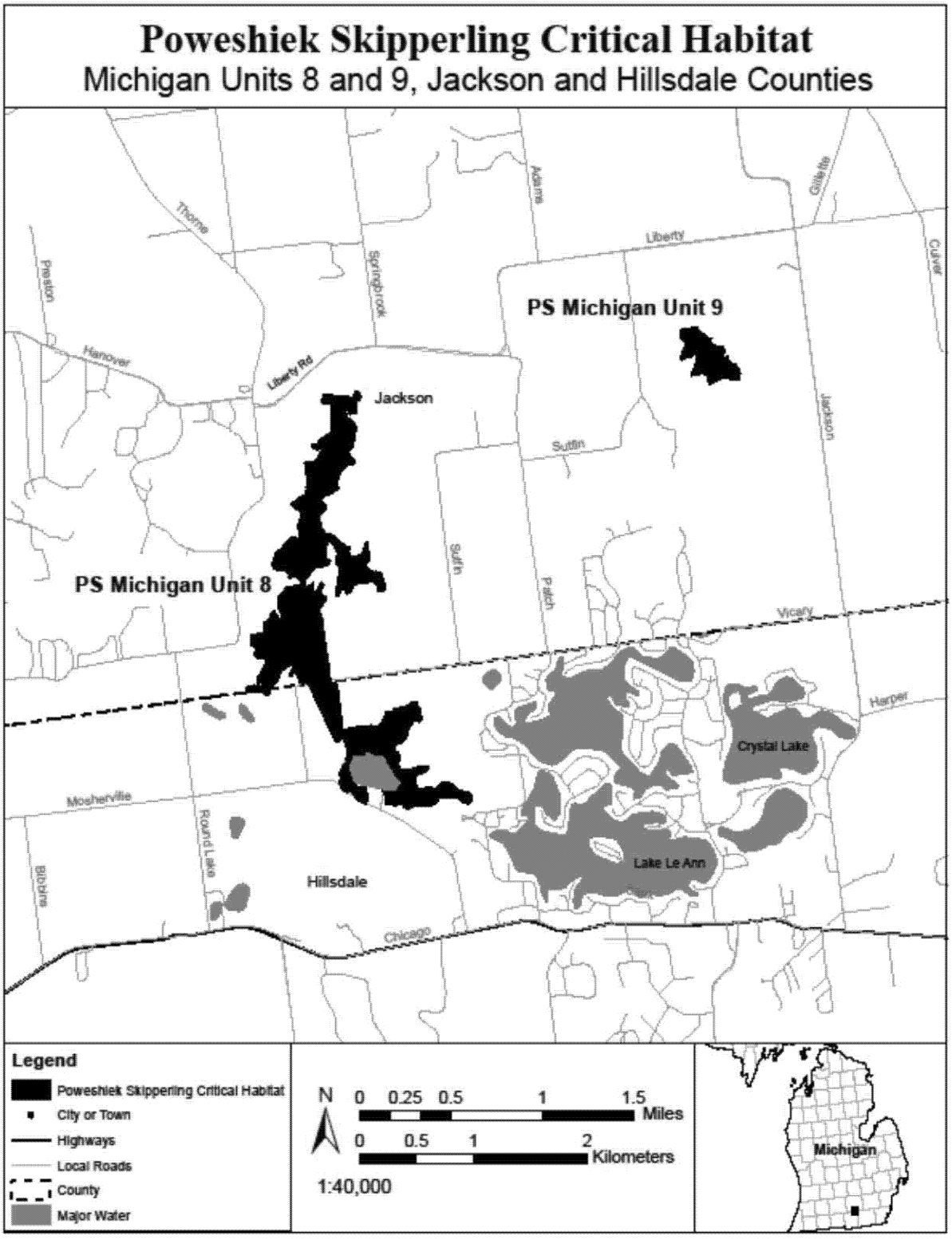
(20) PS Michigan Unit 6, Washtenah County, Michigan. Map of PS Michigan Unit 6 follows:



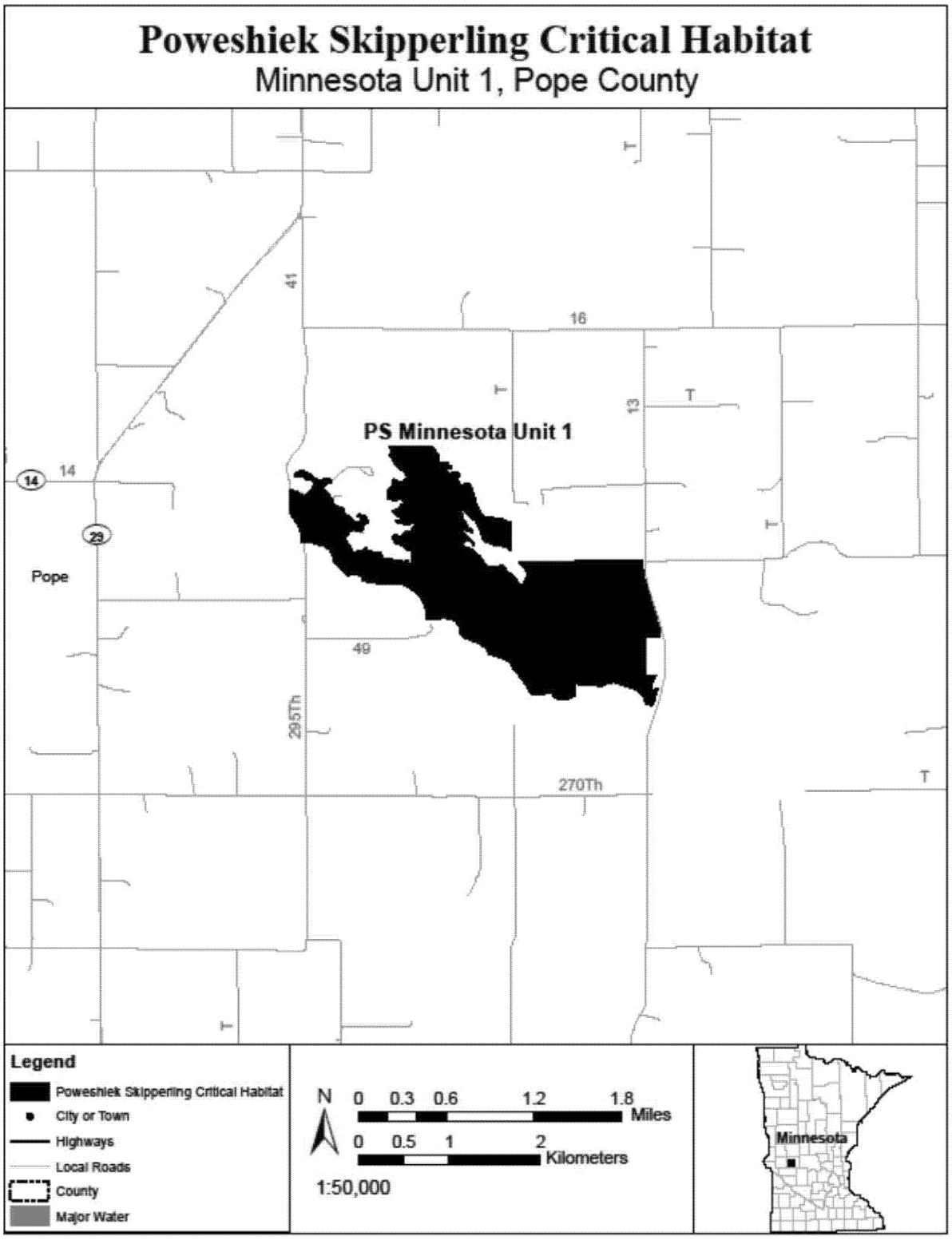
(21) PS Michigan Unit 7, Lenawee County, Michigan. Map of PS Michigan Unit 7 follows:



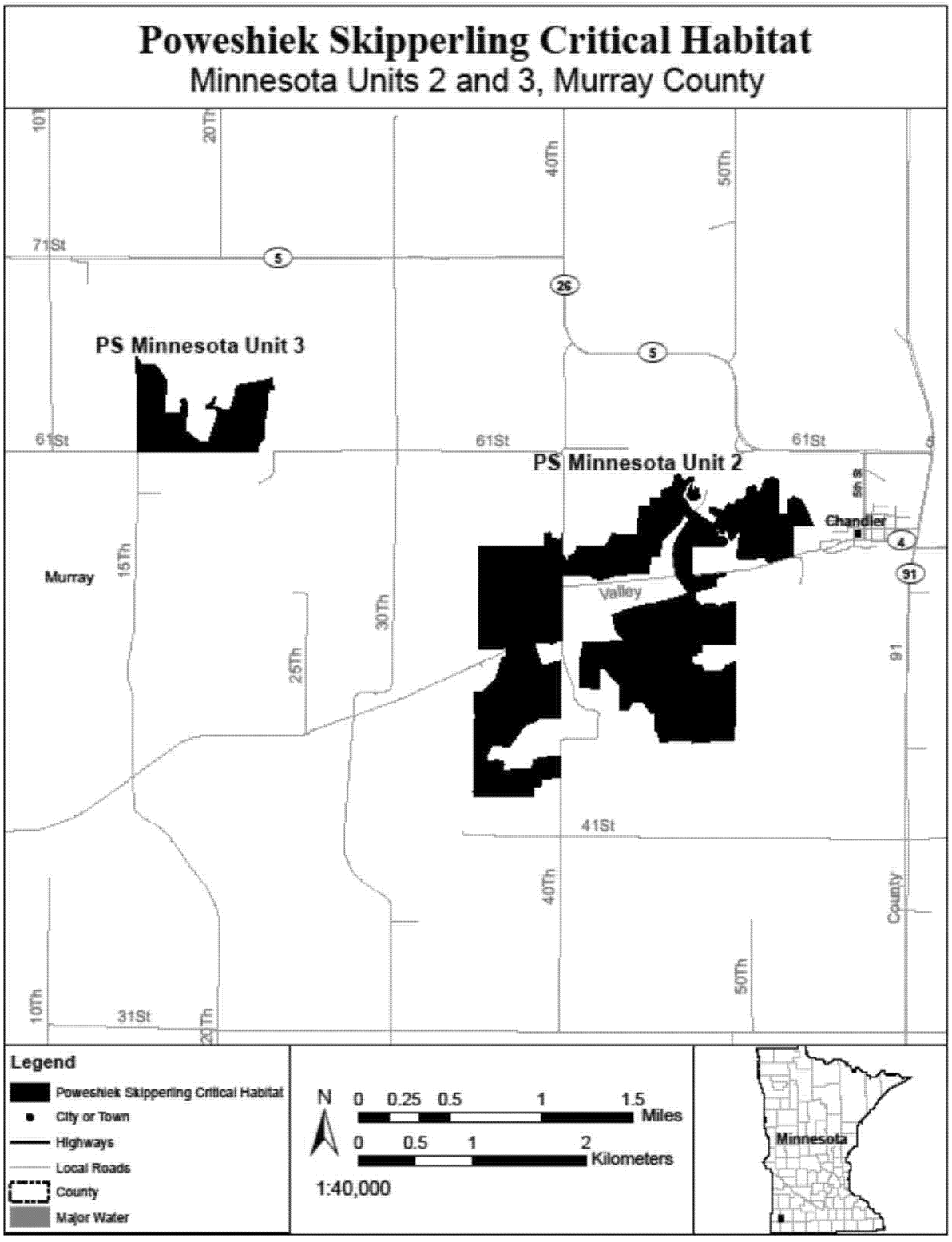
(22) PS Michigan Units 8 and 9, Jackson and Hillsdale Counties, Michigan. Map of PS Michigan Units 8 and 9 follows:



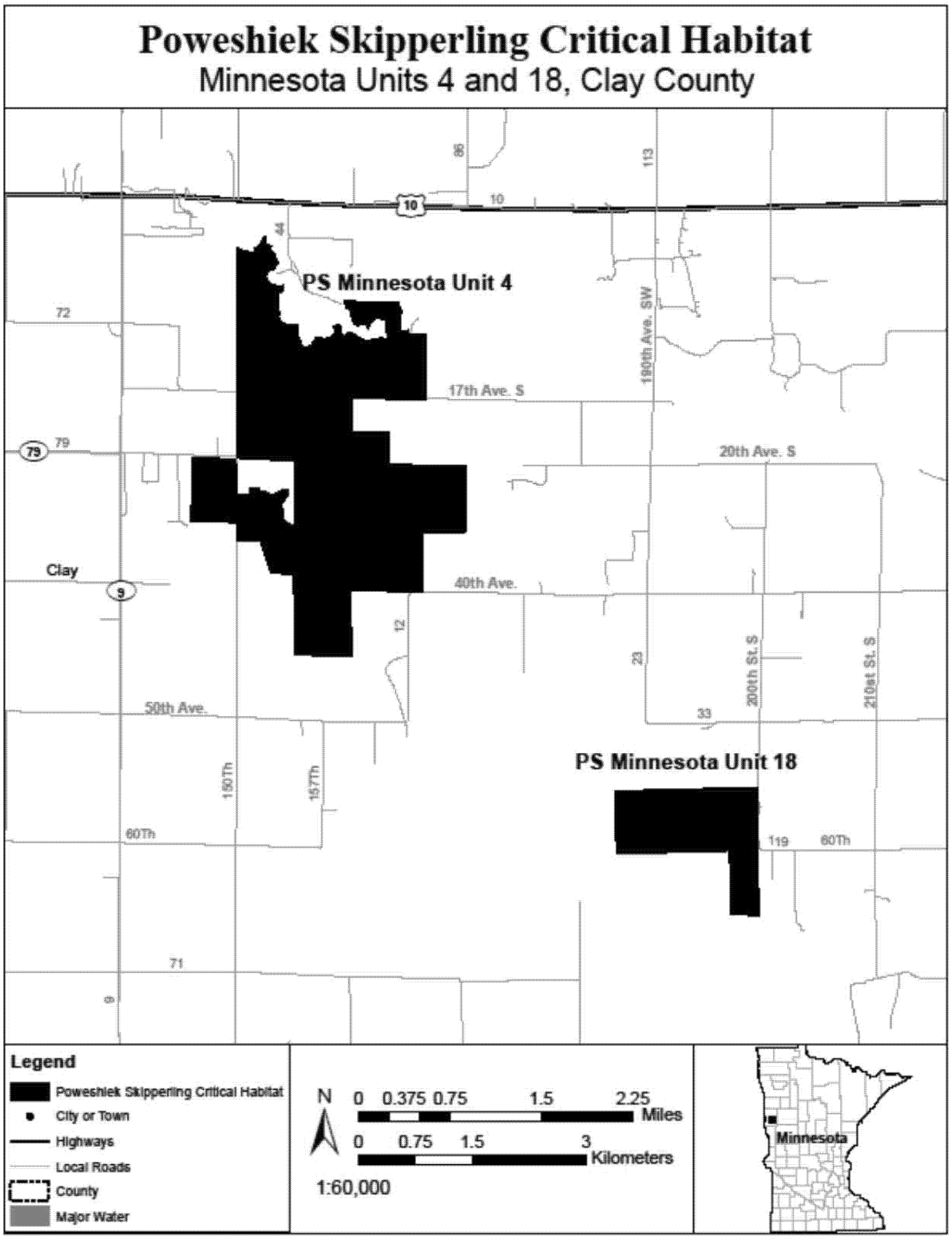
(23) PS Minnesota Unit 1, Pope County, Minnesota. Map of PS Minnesota Unit 1 follows:



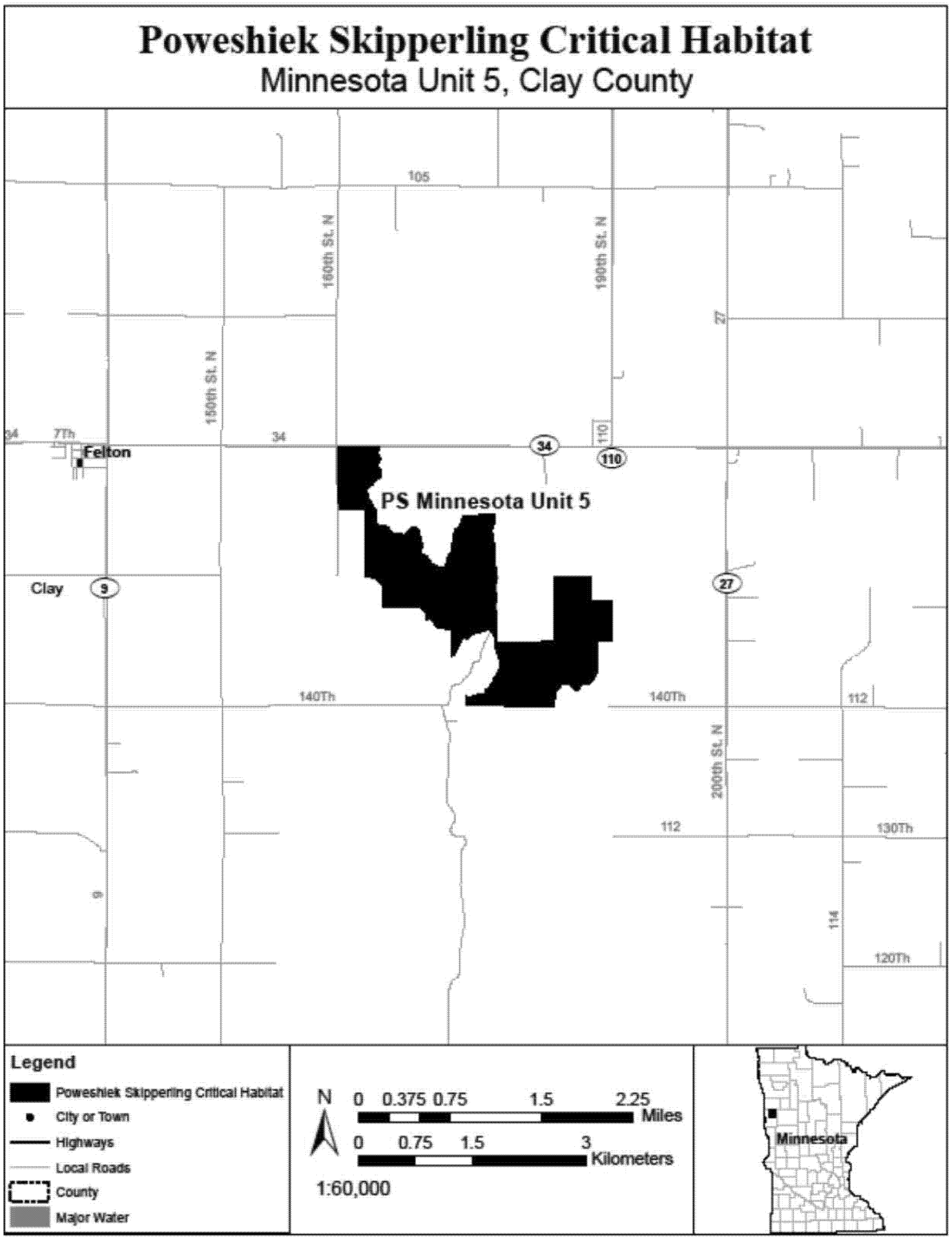
(24) PS Minnesota Units 2 and 3, Murray County, Minnesota. Map of PS Minnesota Units 2 and 3 follows:



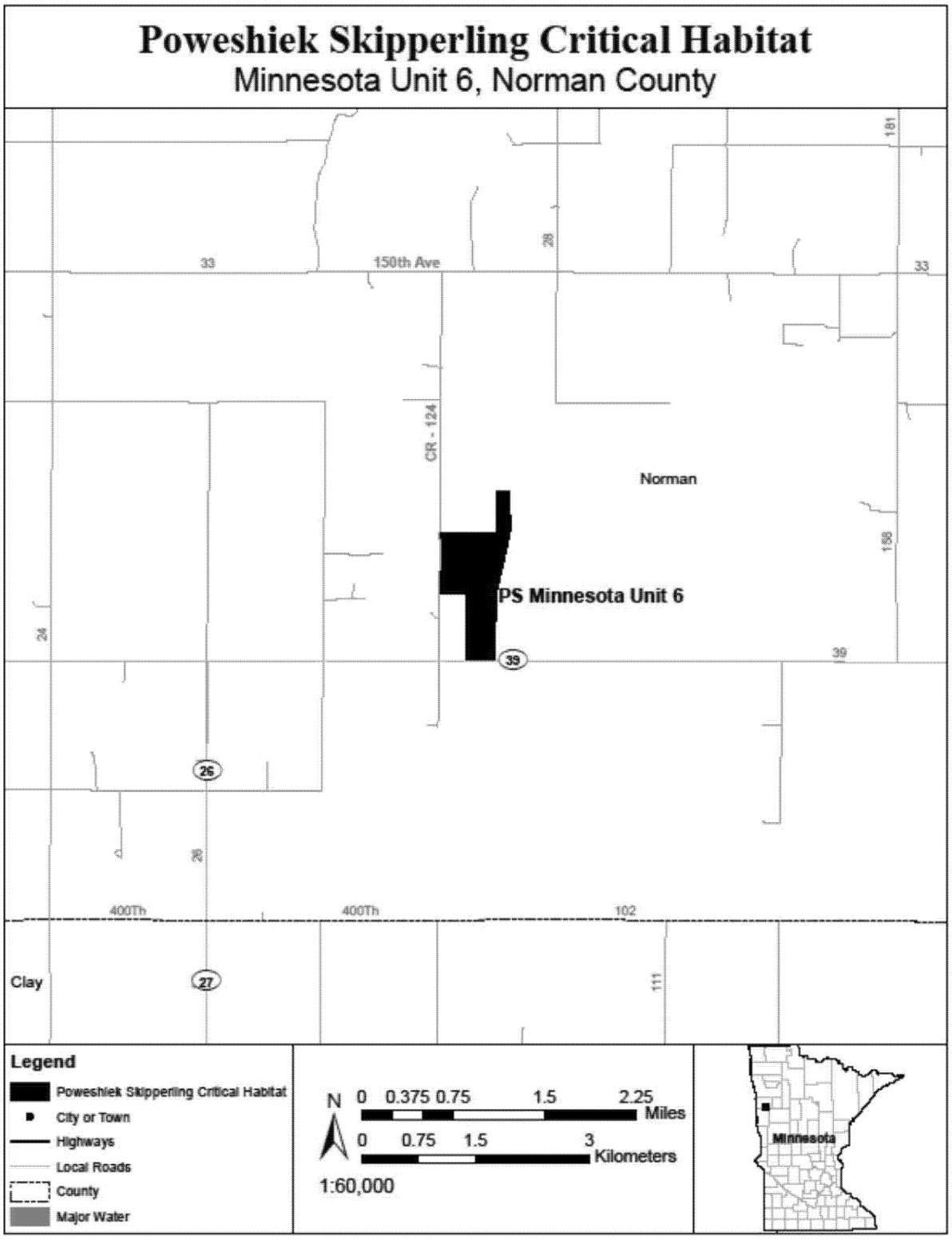
(25) PS Minnesota Units 4 and 18, Clay County, Minnesota. Map of PS Minnesota Units 4 and 18 follows:



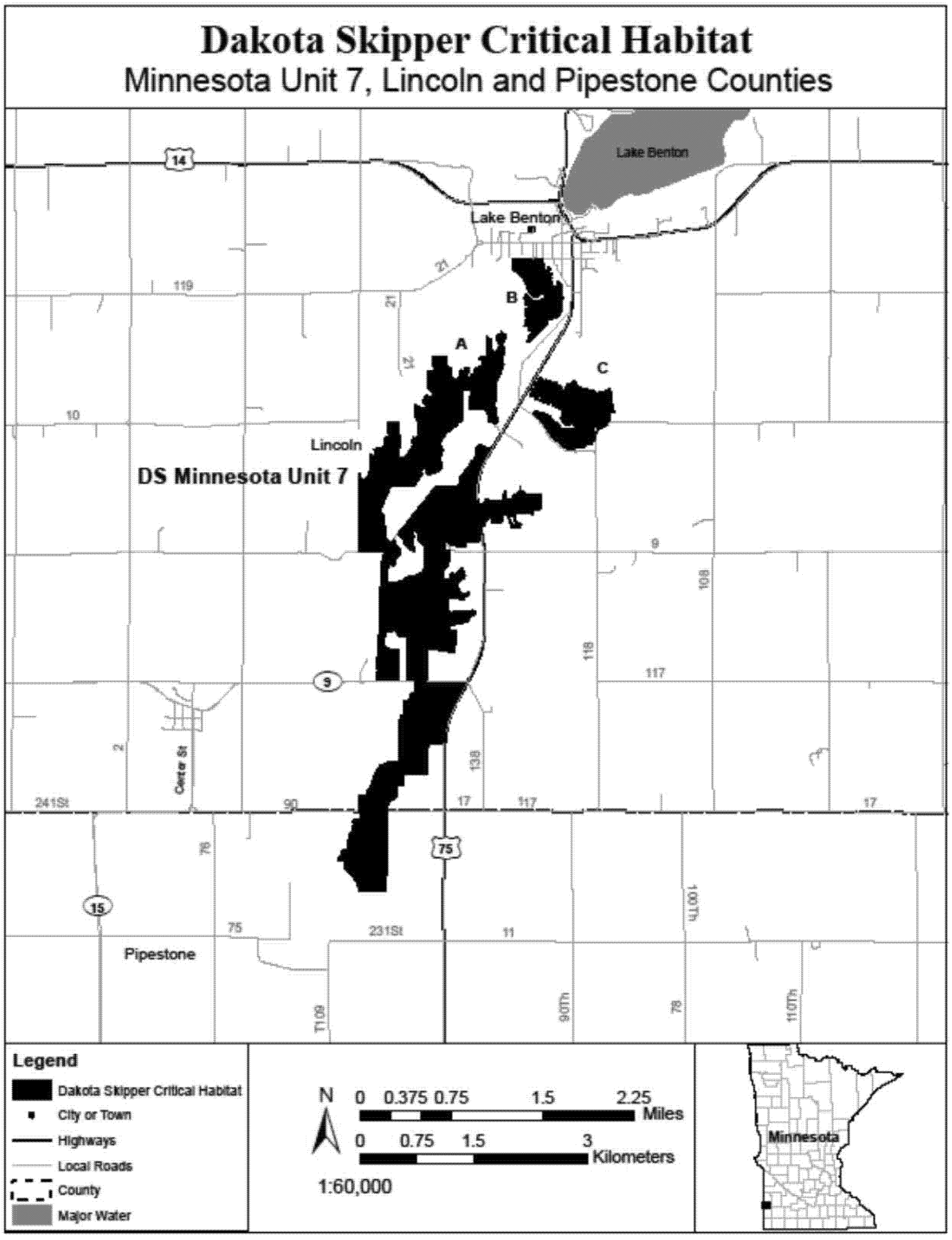
(26) PS Minnesota Unit 5, Clay County, Minnesota. Map of PS Minnesota Unit 5 follows:



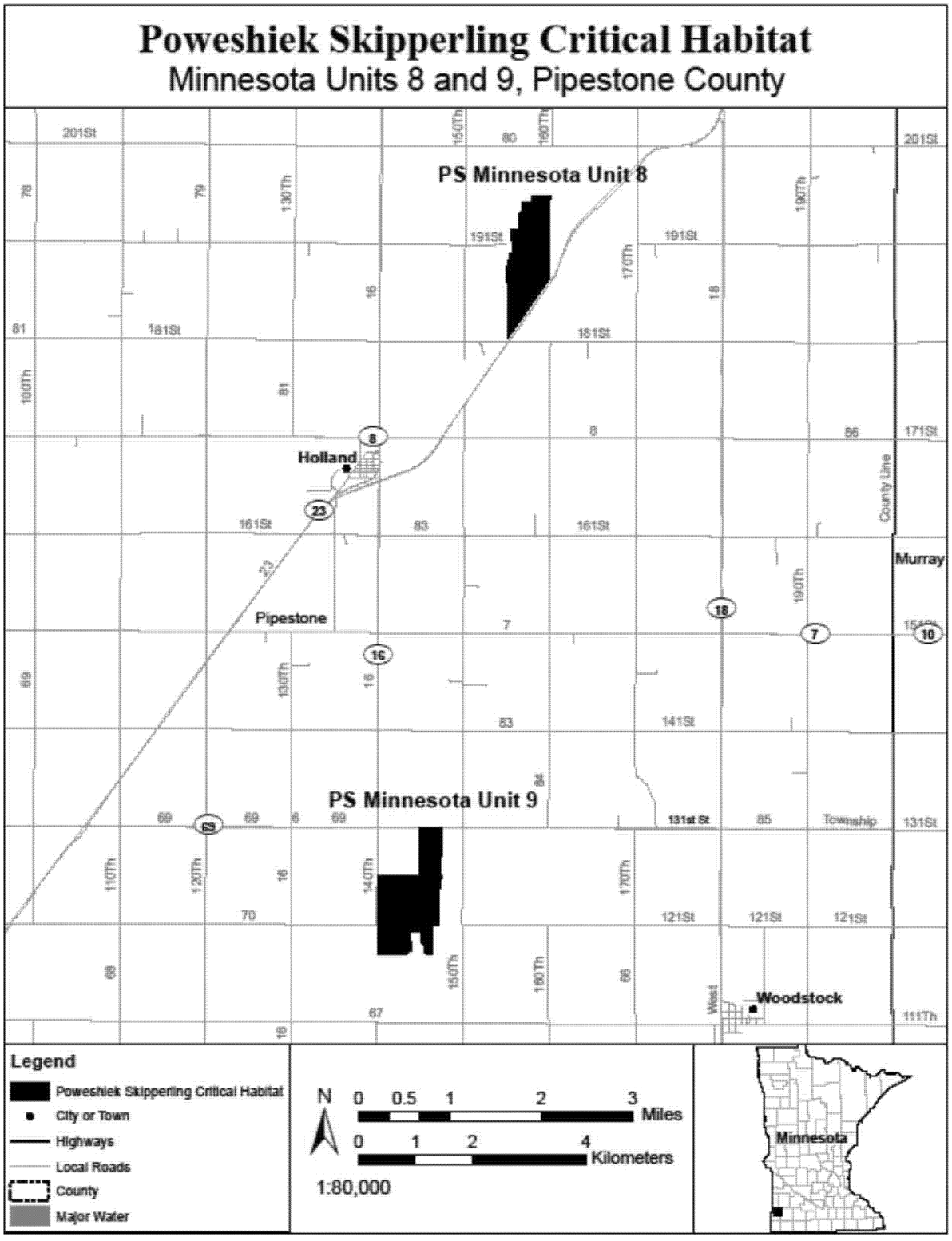
(27) PS Minnesota Unit 6, Norman County, Minnesota. Map of PS Minnesota Unit 6 follows:



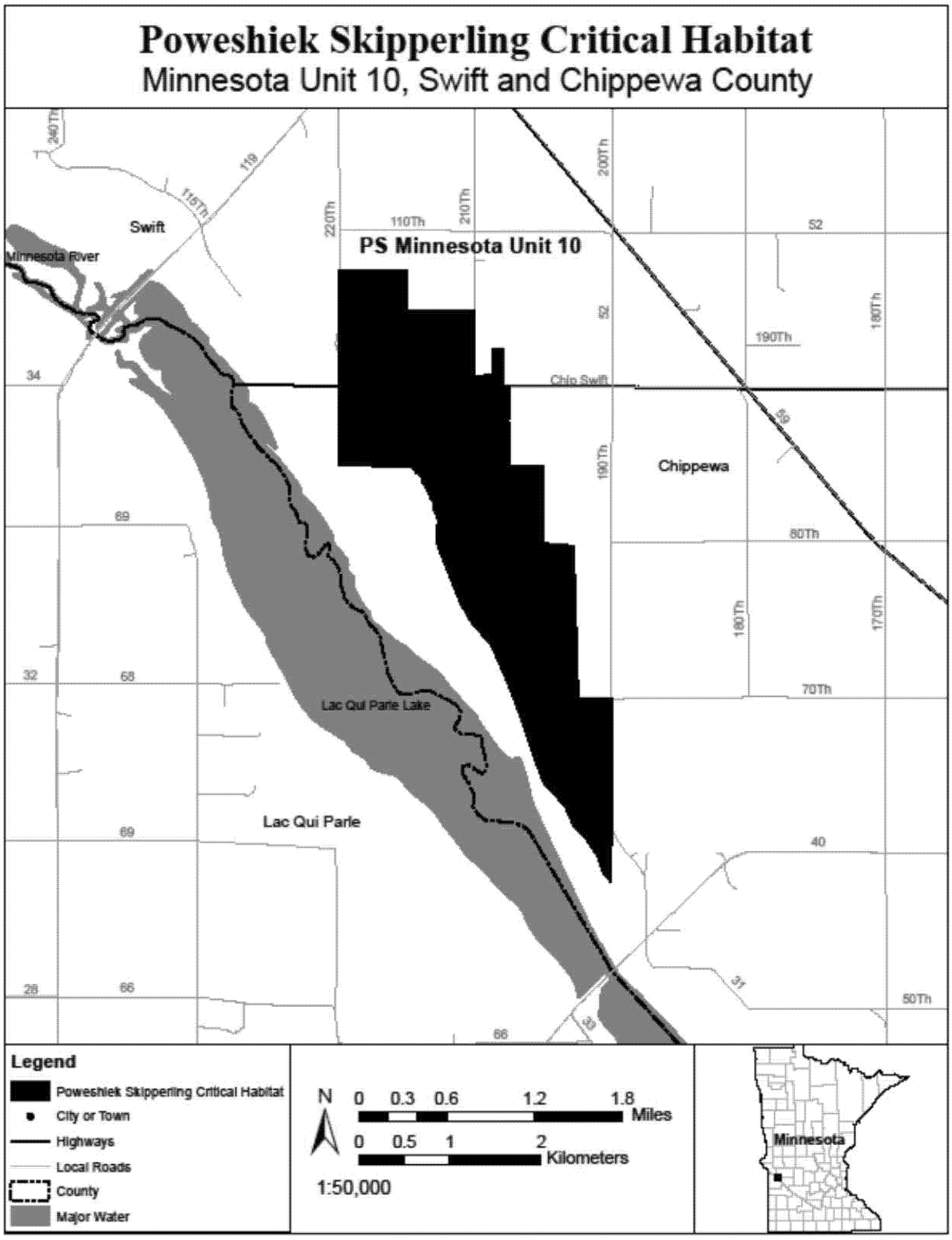
(28) PS Minnesota Unit 7, Lincoln and Pipestone Counties, Minnesota. Map of PS Minnesota Unit 7 follows:



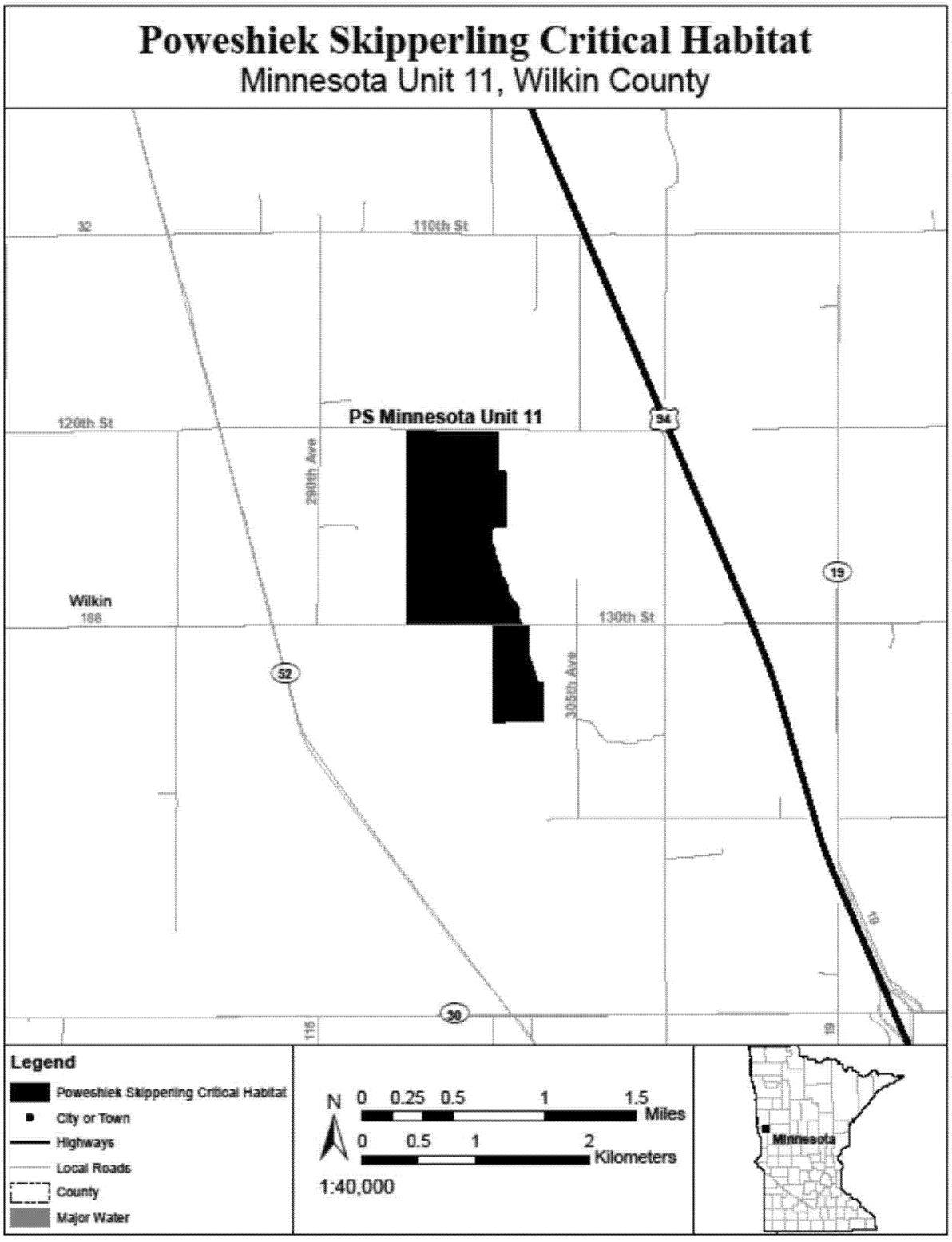
(29) PS Minnesota Units 8 and 9, Pipestone County, Minnesota. Map of PS Minnesota Units 8 and 9 follows:



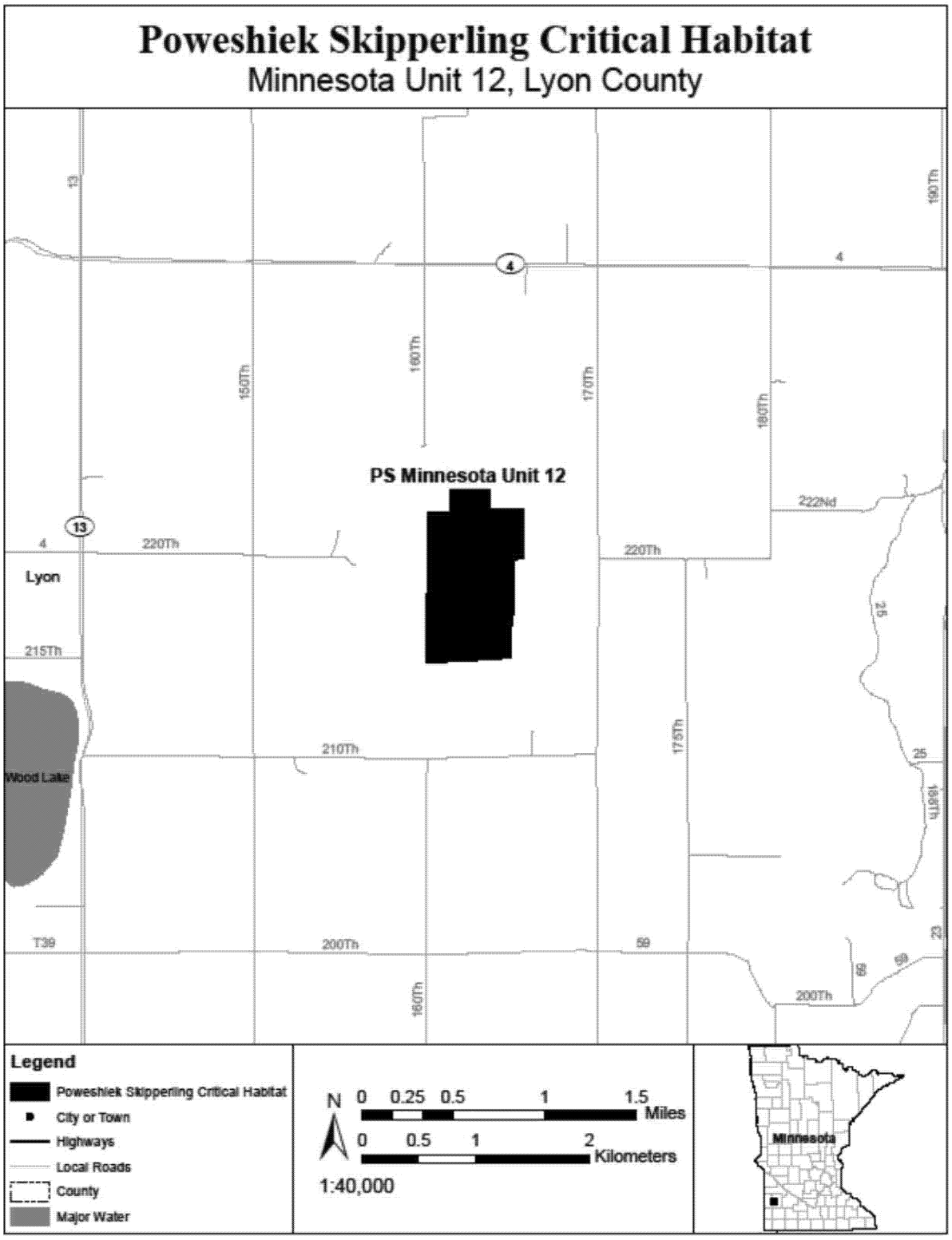
(30) PS Minnesota Unit 10, Swift and Chippewa Counties, Minnesota. Map of PS Minnesota Unit 10 follows:



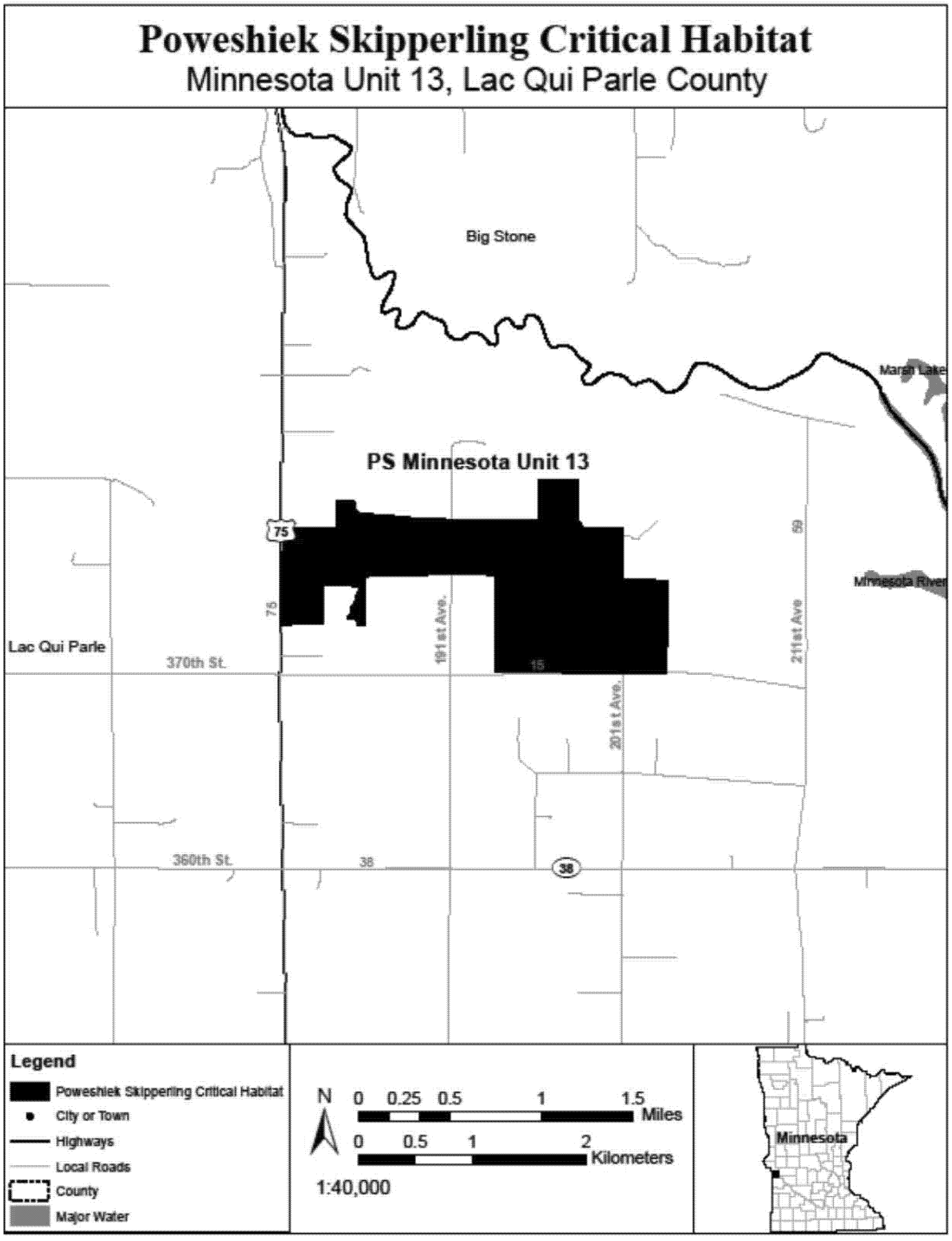
(31) PS Minnesota Unit 11, Wilkin County, Minnesota. Map of PS Minnesota Unit 11 follows:



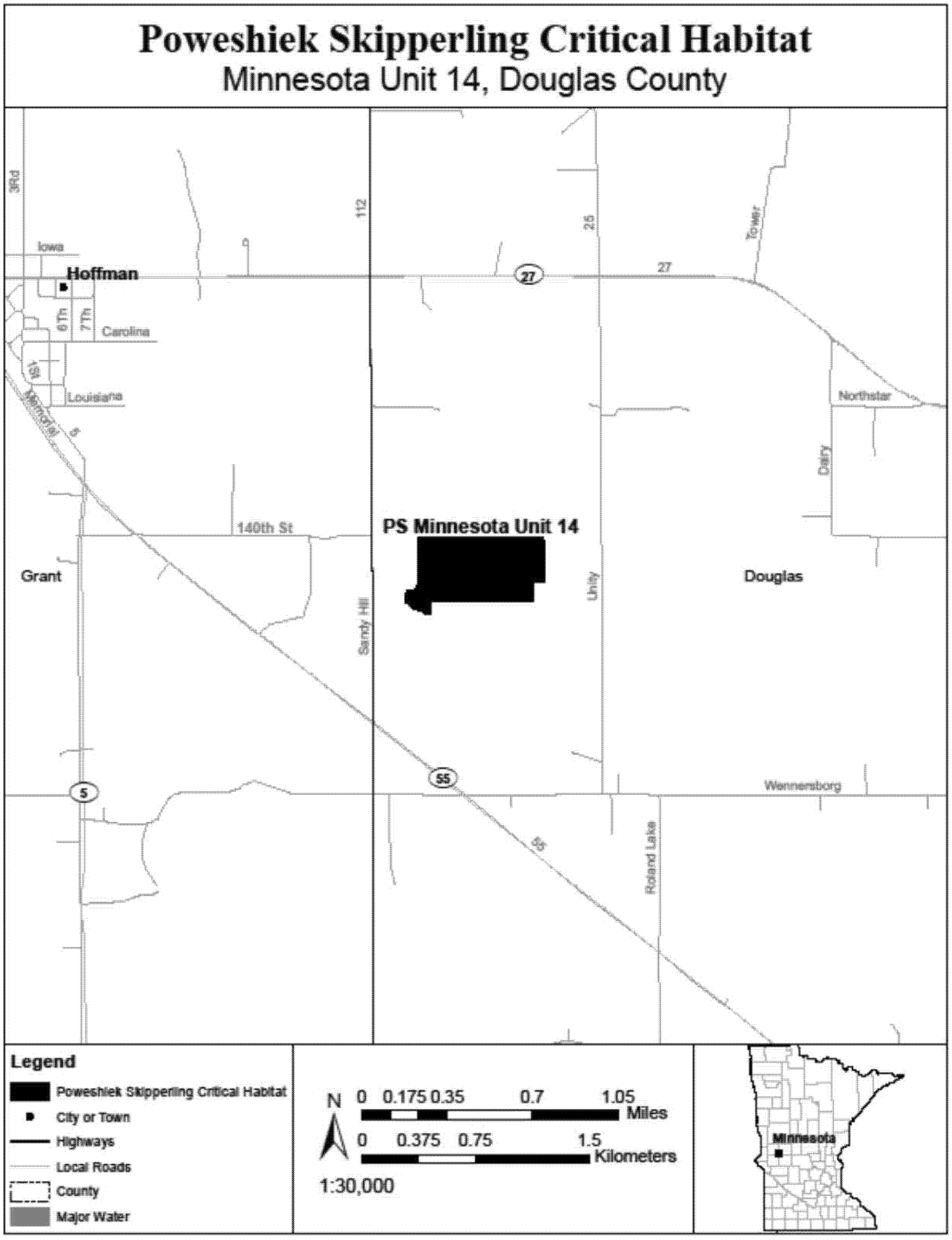
(32) PS Minnesota Unit 12, Lyon County, Minnesota. Map of PS Minnesota Unit 12 follows:



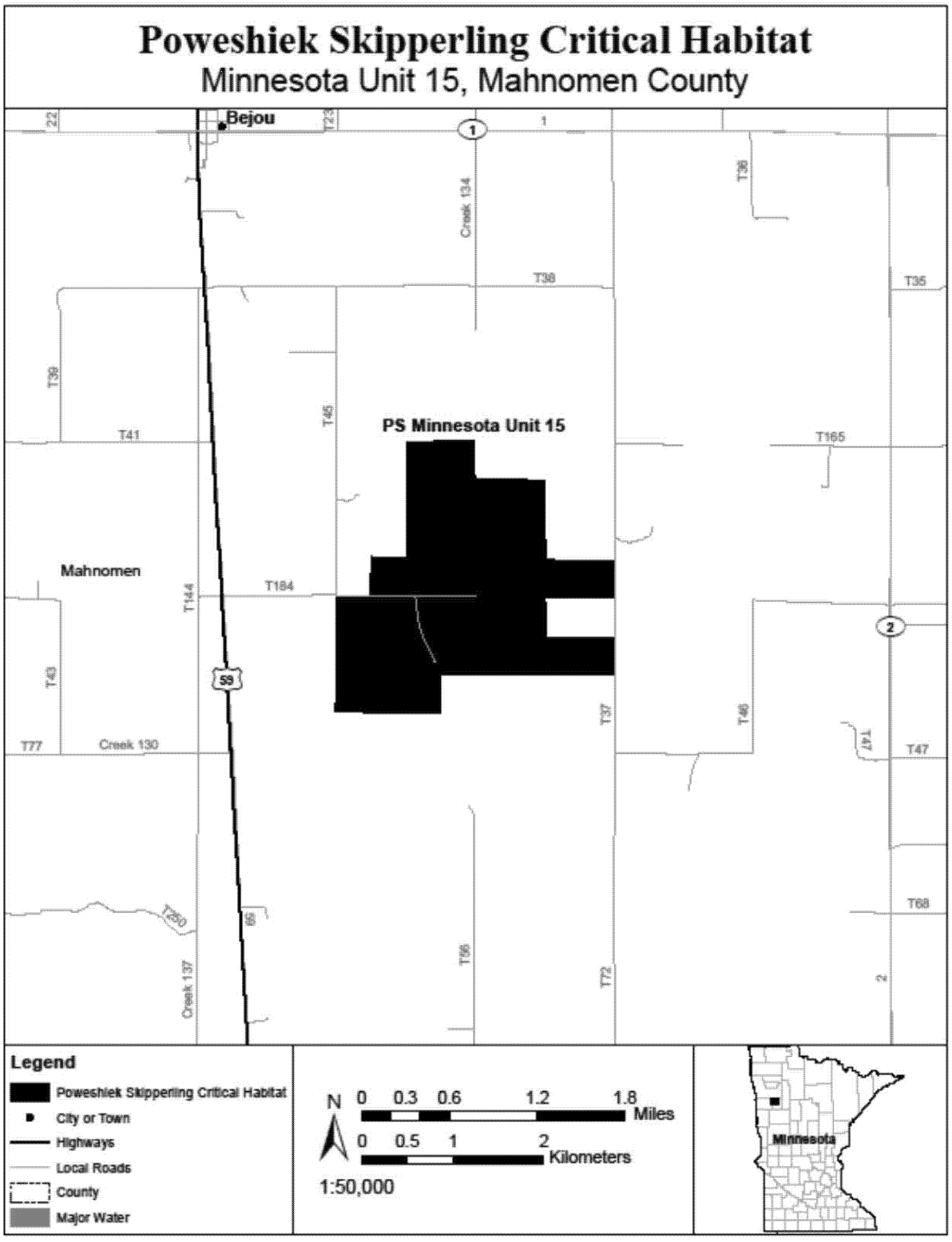
(33) PS Minnesota Unit 13, Lac Qui Parle County, Minnesota. Map of PS Minnesota Unit 13 follows:



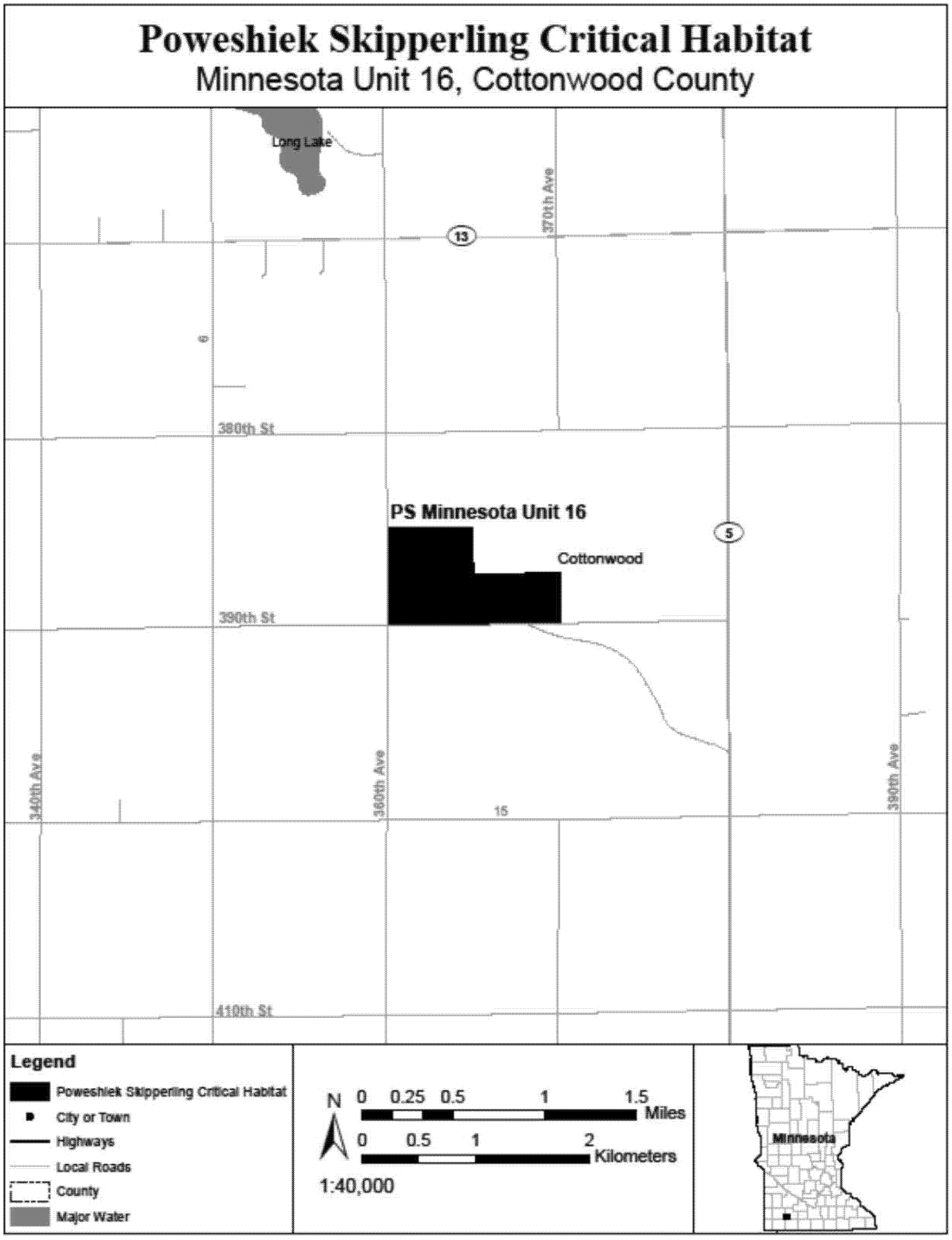
(34) PS Minnesota Unit 14, Douglas County, Minnesota. Map of PS Minnesota Unit 14 follows:



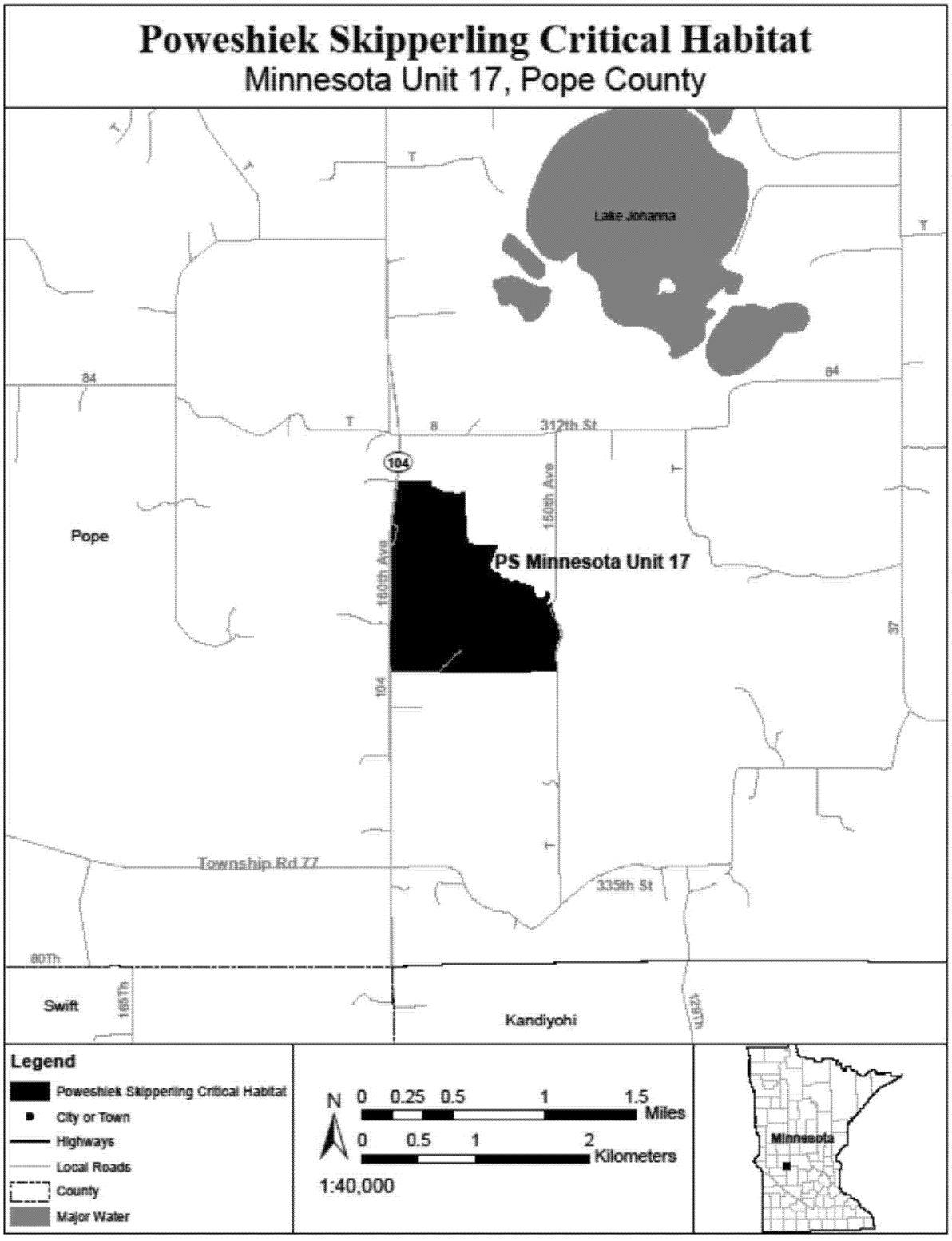
(35) PS Minnesota Unit 15, Mahnomen County, Minnesota. Map of PS Minnesota Unit 15 follows:



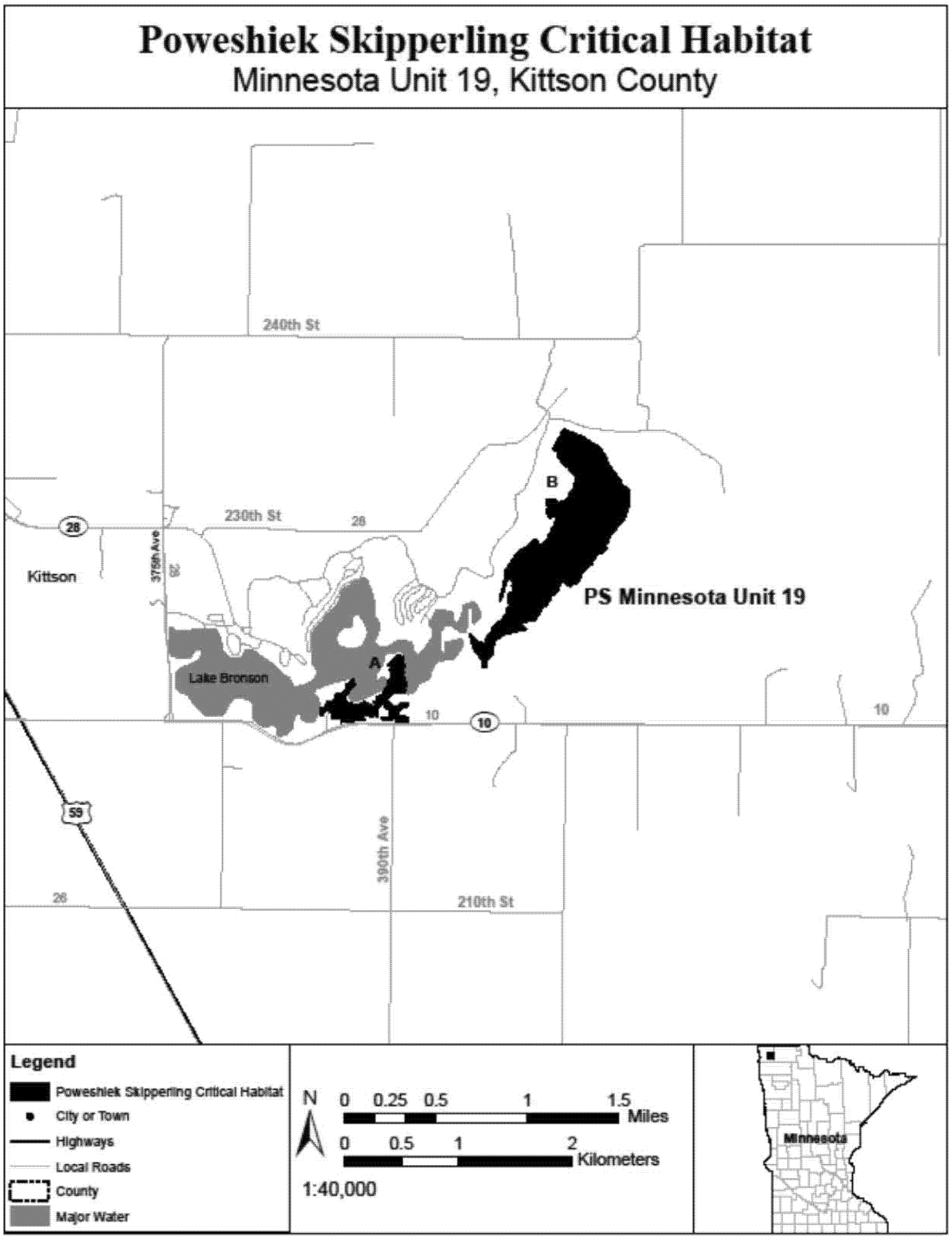
(36) PS Minnesota Unit 16, Cottonwood County, Minnesota. Map of PS Minnesota Unit 16 follows:



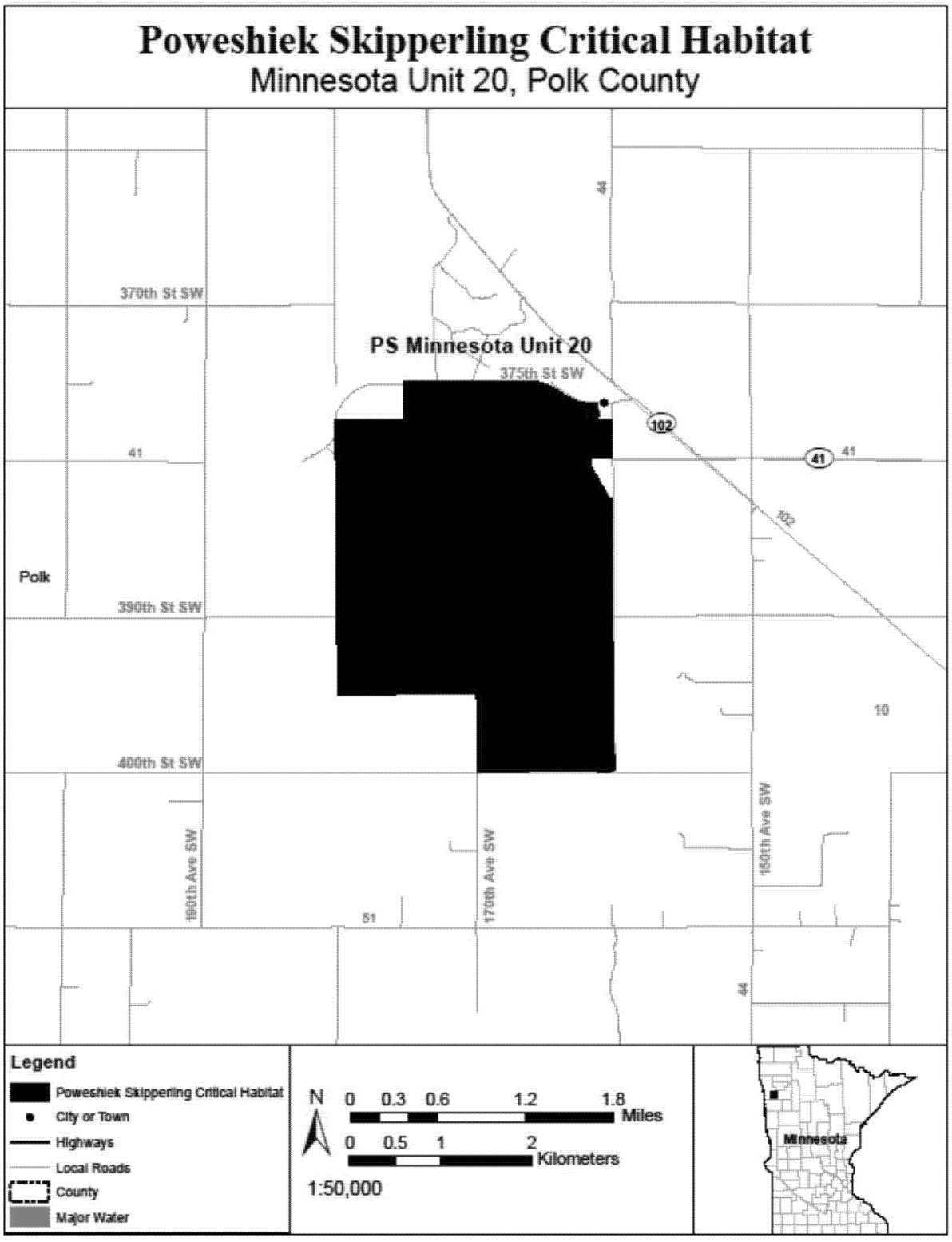
(37) PS Minnesota Unit 17, Pope County, Minnesota. Map of PS Minnesota Unit 17 follows:



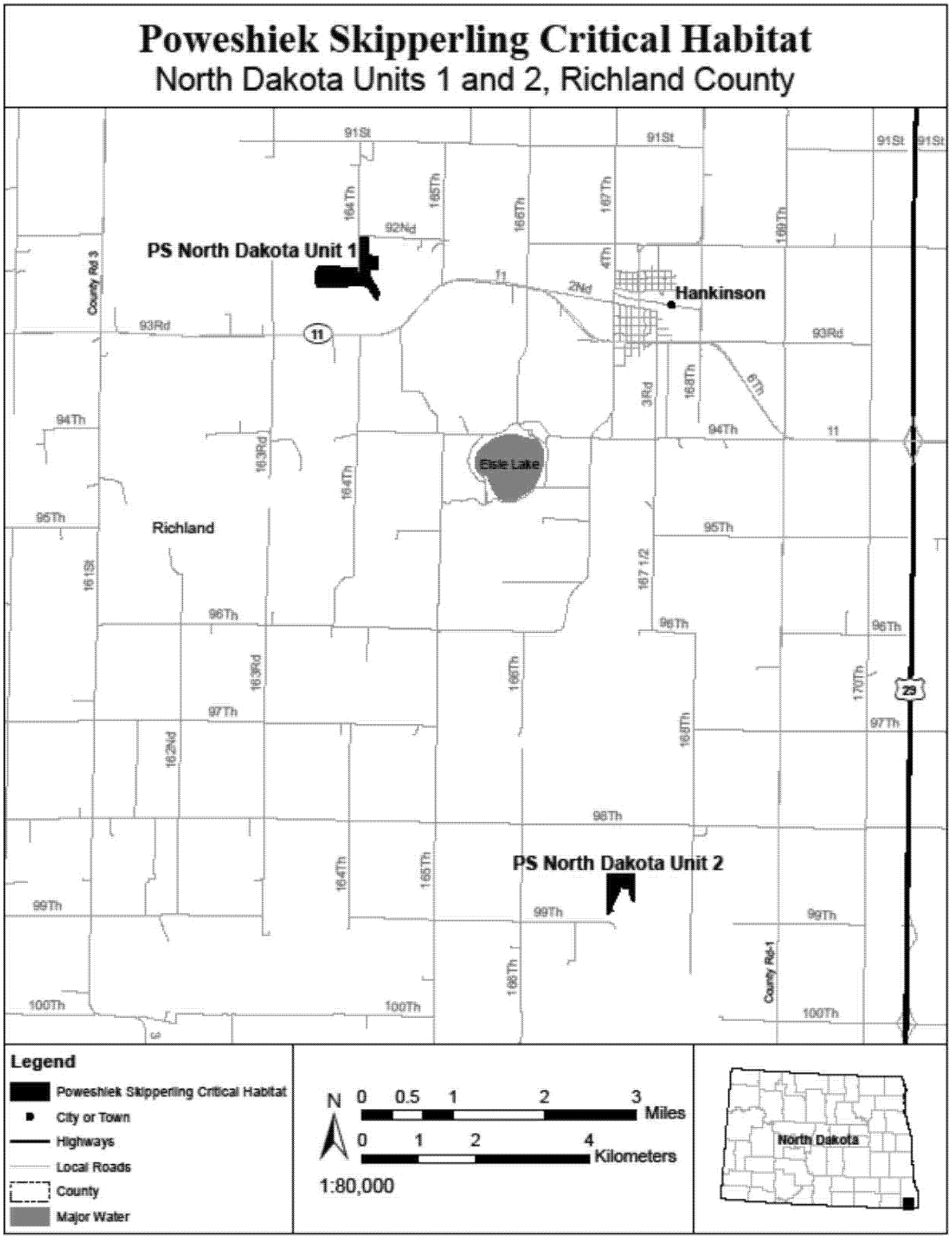
(38) PS Minnesota Unit 19, Kittson County, Minnesota. Map of PS Minnesota Unit 19 follows:



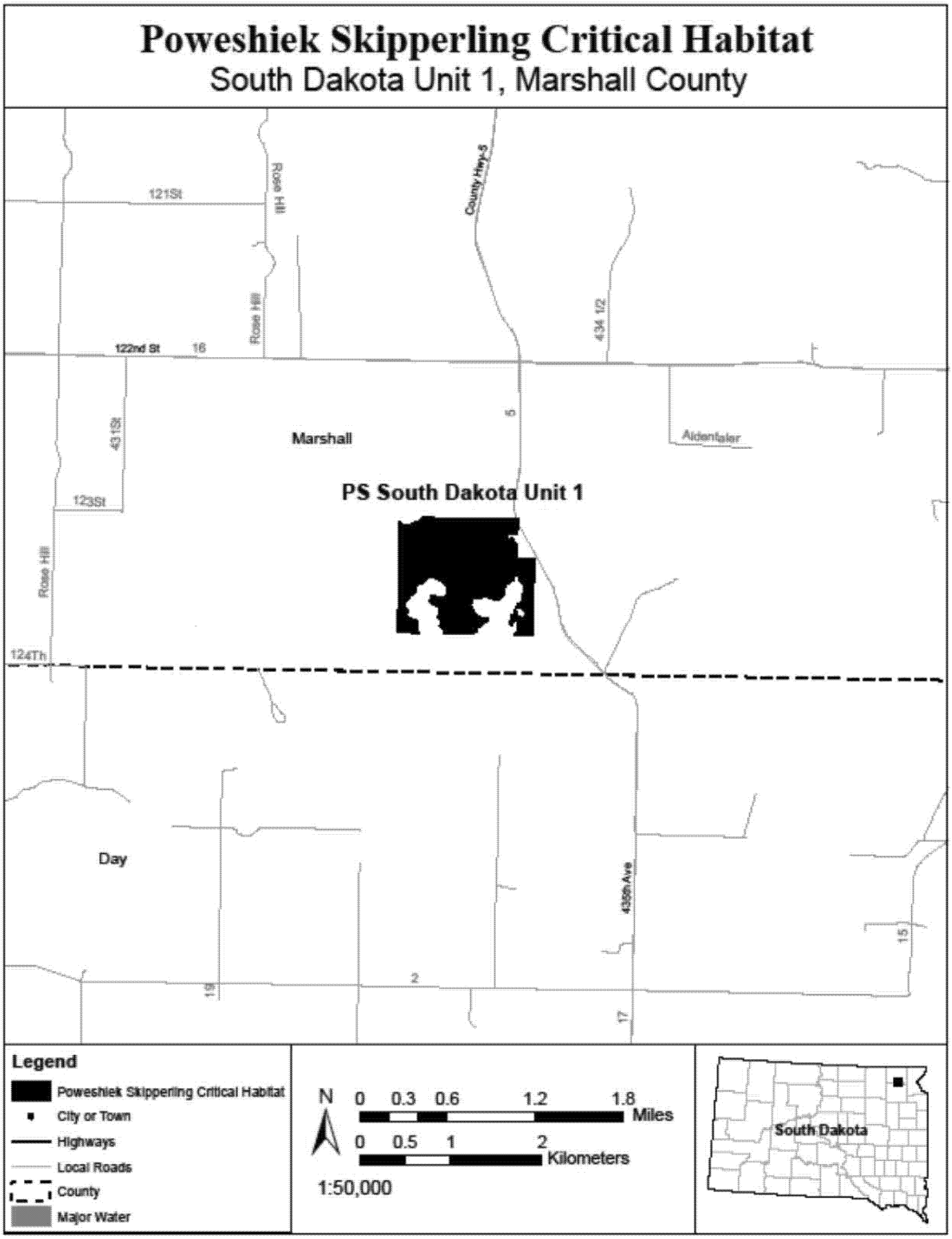
(39) PS Minnesota Unit 20, Polk County, Minnesota. Map of PS Minnesota Unit 20 follows:



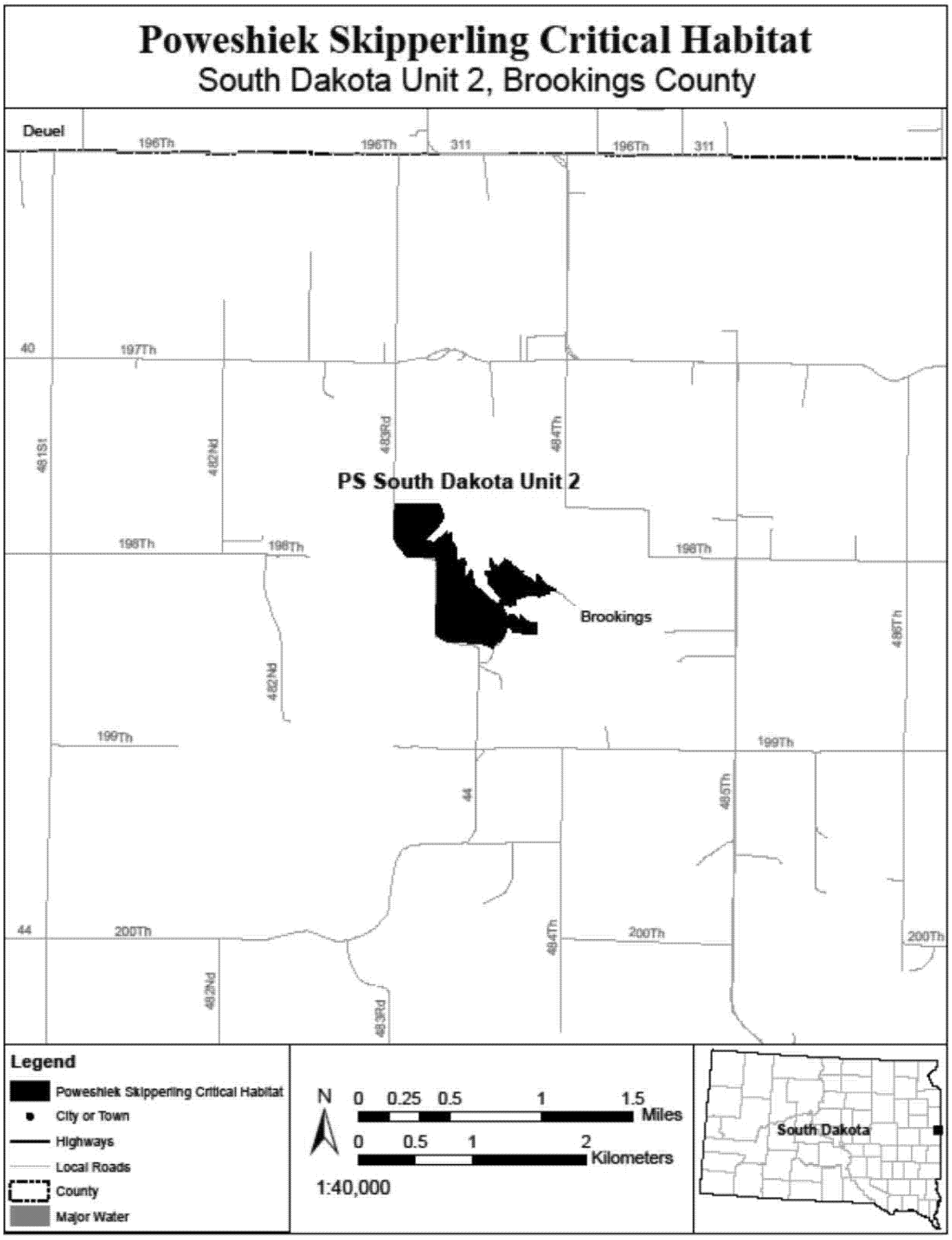
(40) PS North Dakota Units 1 and 2, Richland County, North Dakota. Map of PS North Dakota Units 1 and 2 follows:



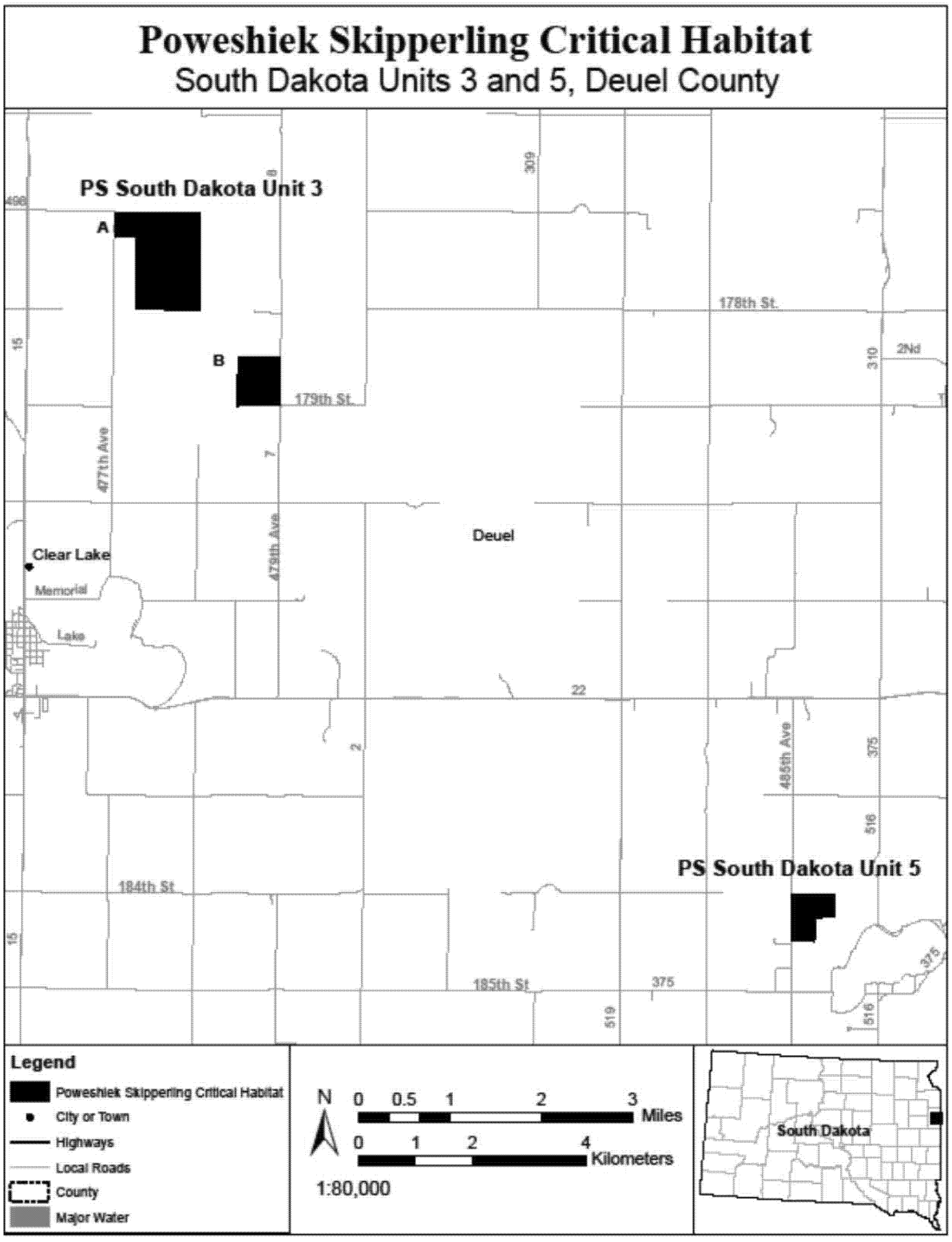
(41) PS South Dakota Unit 1, Marshall County, South Dakota. Map of PS South Dakota Unit 1 follows:



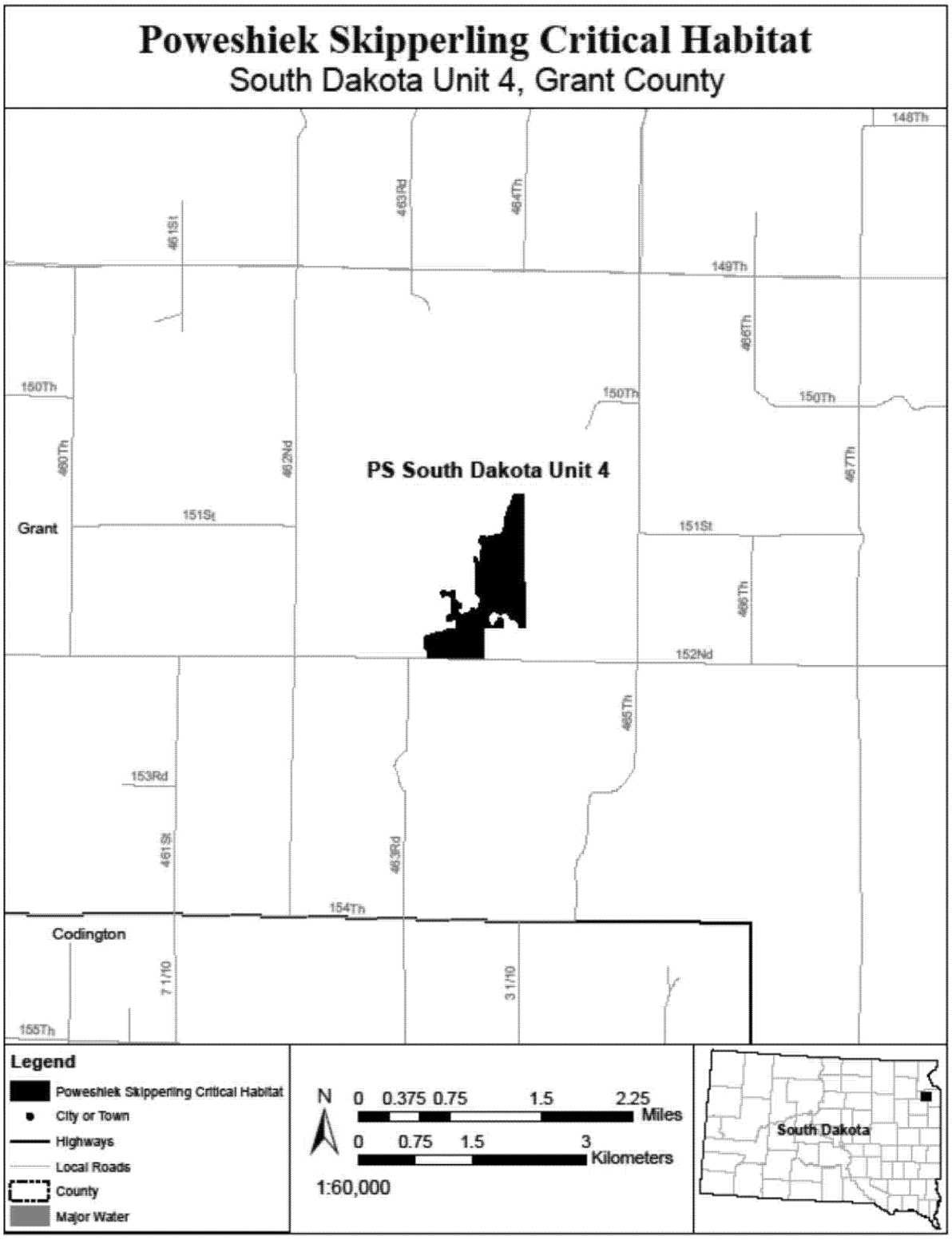
(42) PS South Dakota Unit 2, Brookings County, South Dakota. Map of PS South Dakota Unit 2 follows:



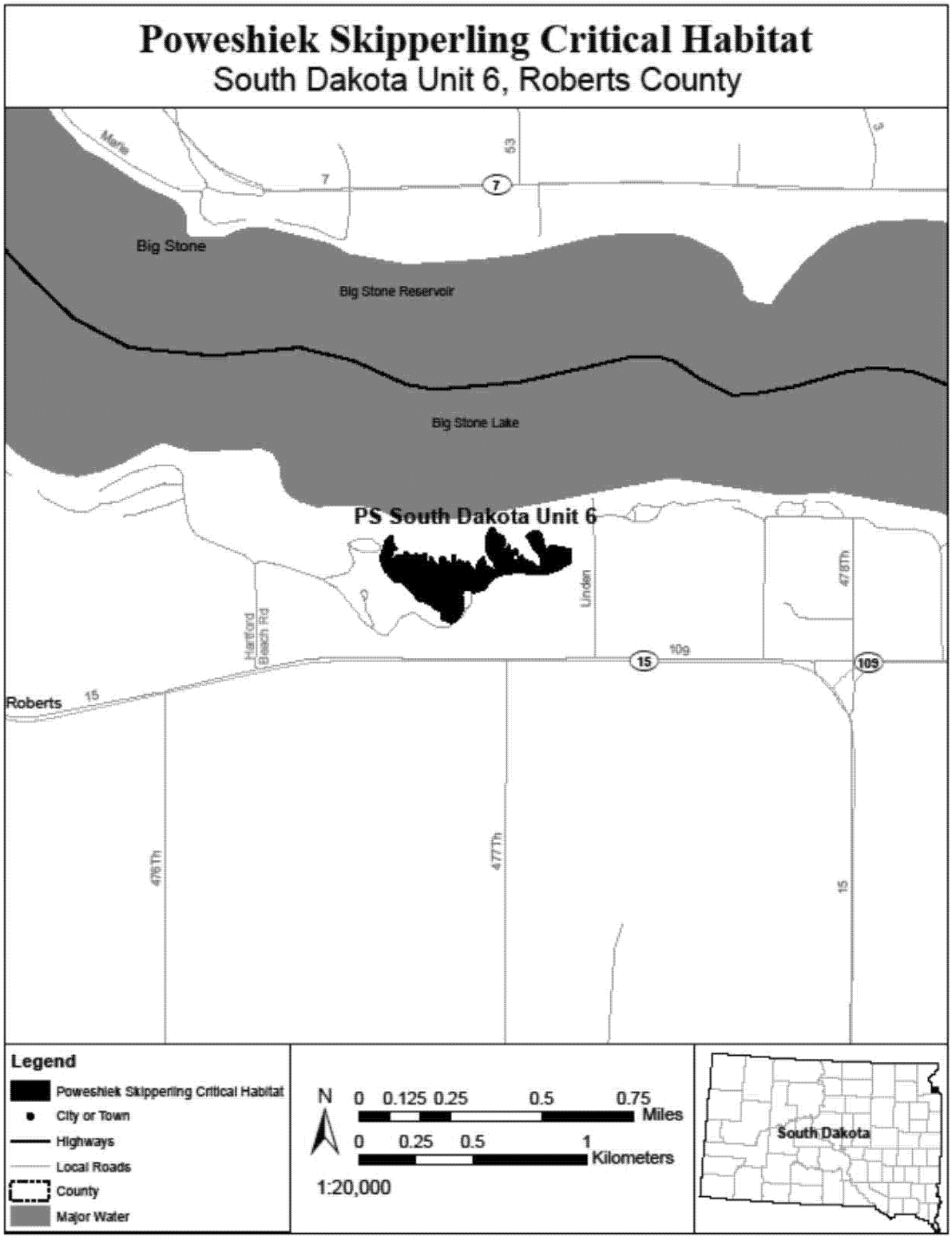
(43) PS South Dakota Units 3 and 5, Deuel County, South Dakota. Map of PS South Dakota Units 3 and 5 follows:



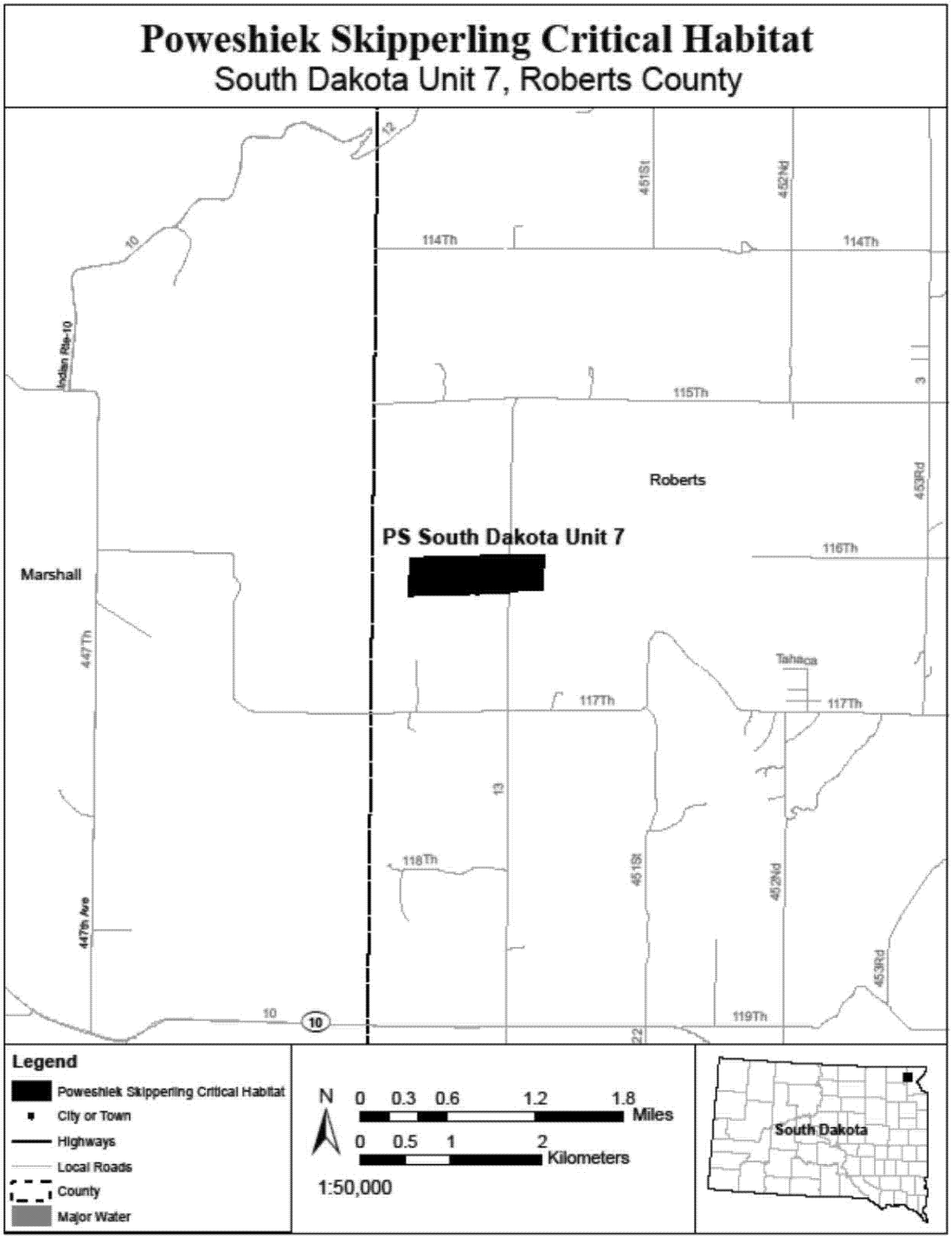
(44) PS South Dakota Unit 4, Grant County, South Dakota. Map of PS South Dakota Unit 4 follows:



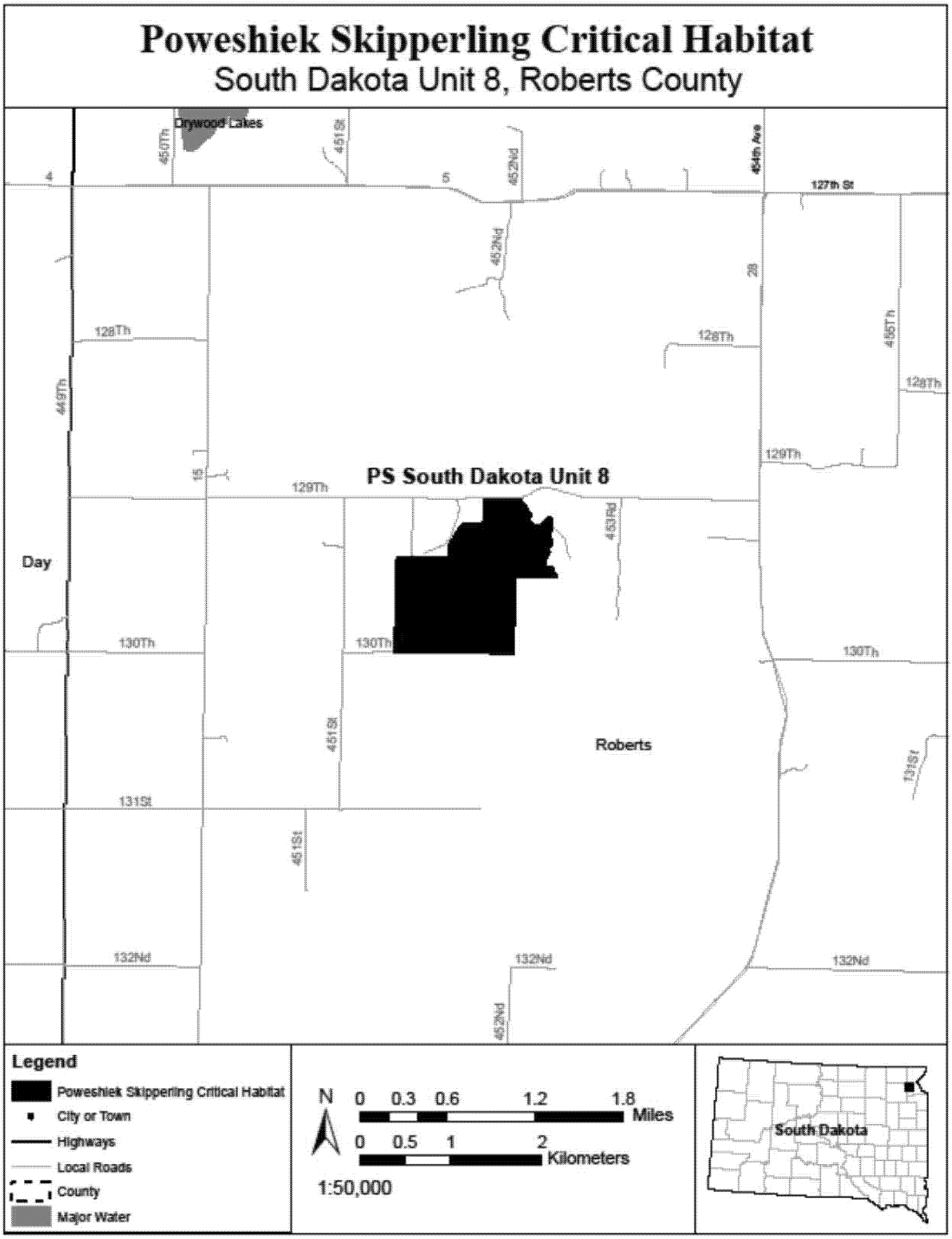
(45) PS South Dakota Unit 6, Roberts County, South Dakota. Map of PS South Dakota Unit 6 follows:



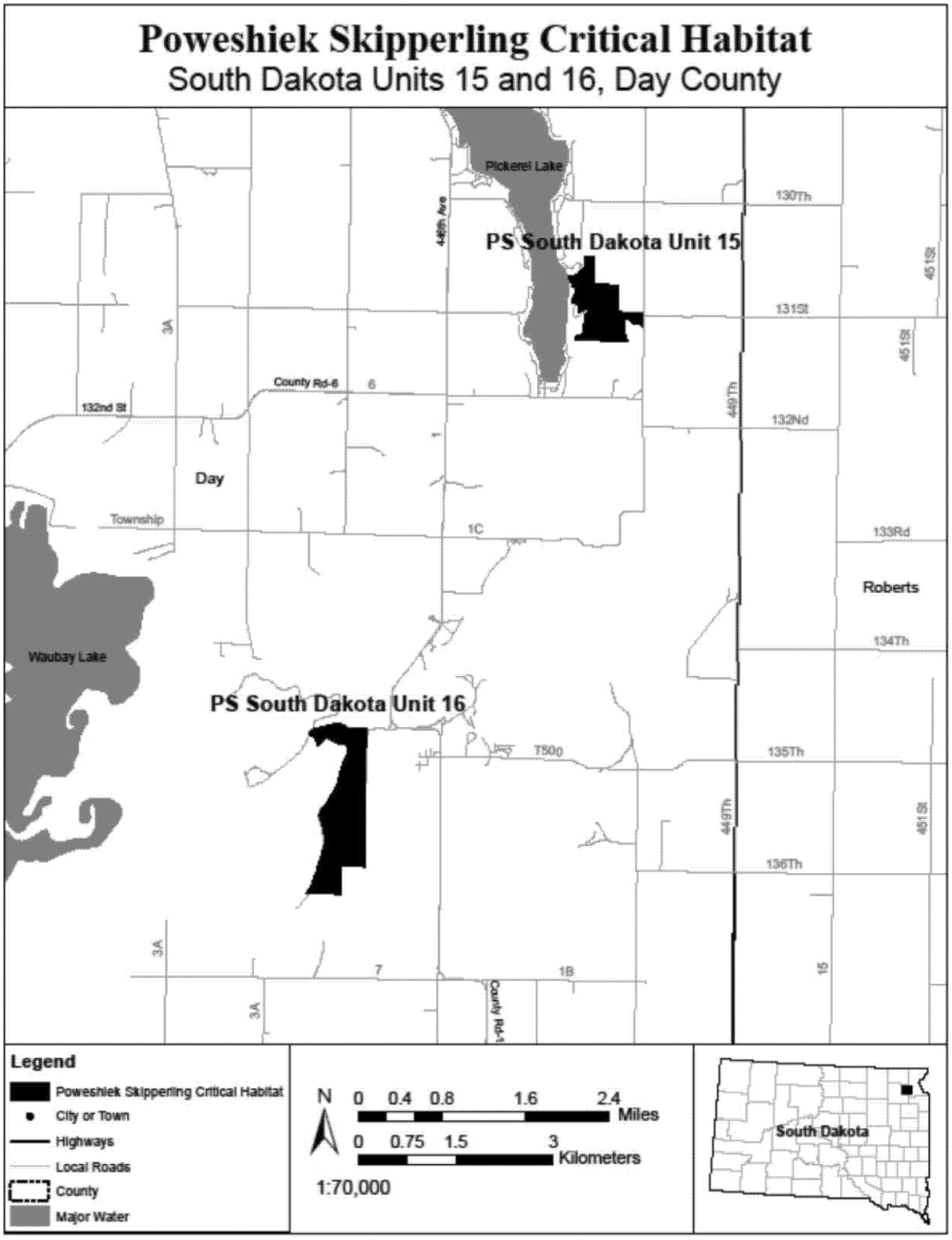
(46) PS South Dakota Unit 7, Roberts County, South Dakota. Map of PS South Dakota Unit 7 follows:



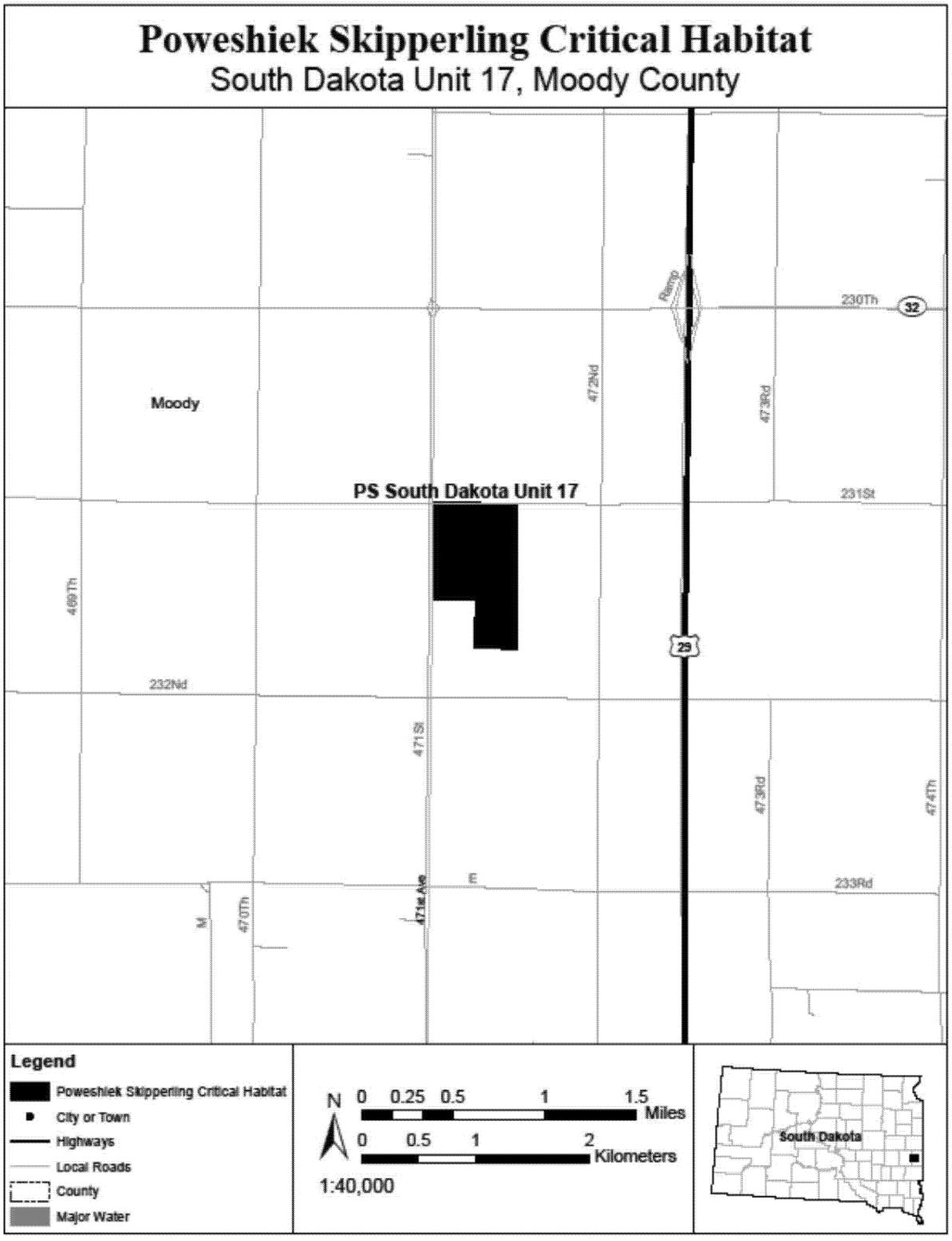
(47) PS South Dakota Unit 8, Roberts County, South Dakota. Map of PS South Dakota Unit 8 follows:



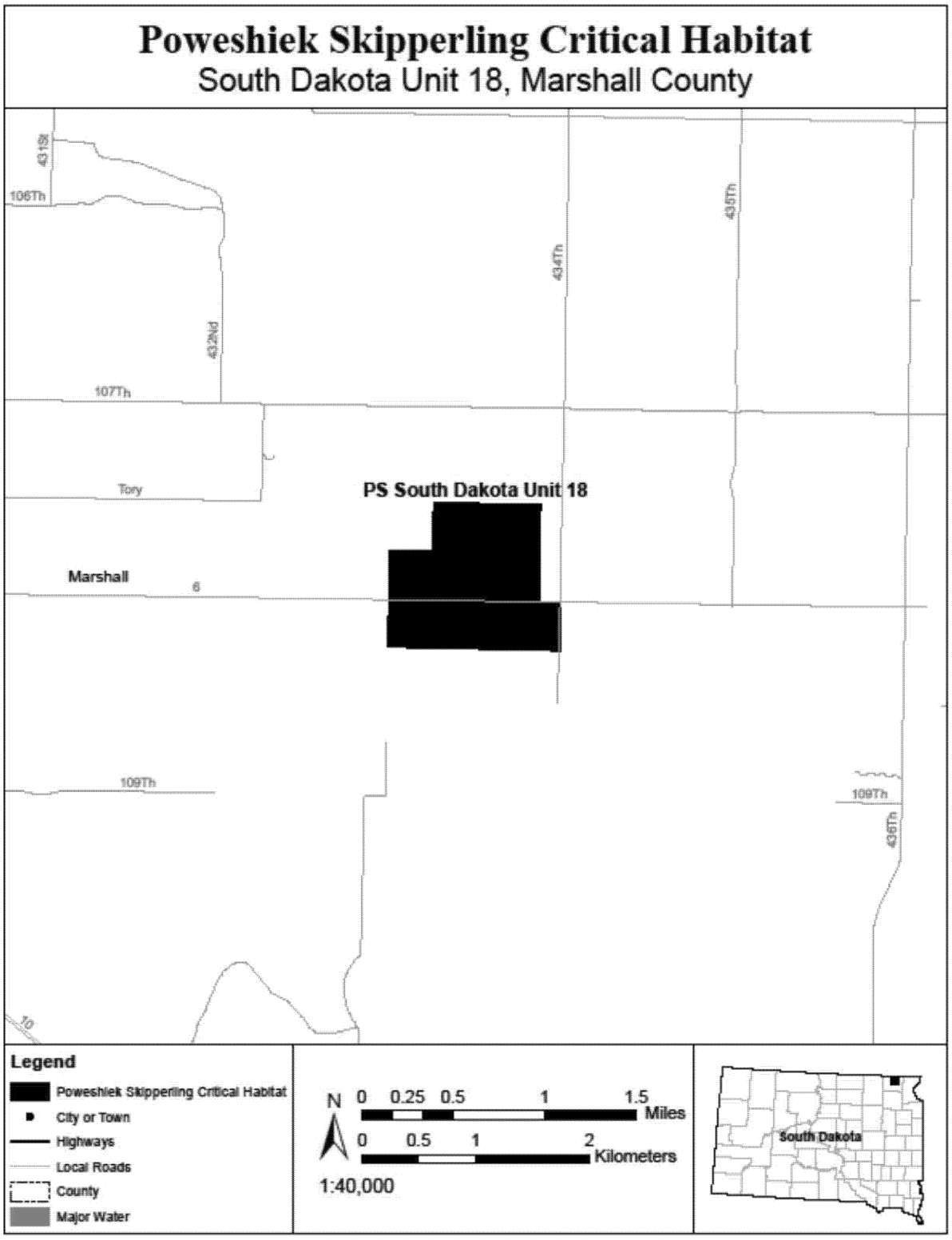
(48) PS South Dakota Units 15 and 16, Day County, South Dakota. Map of PS South Dakota Units 15 and 16 follows:



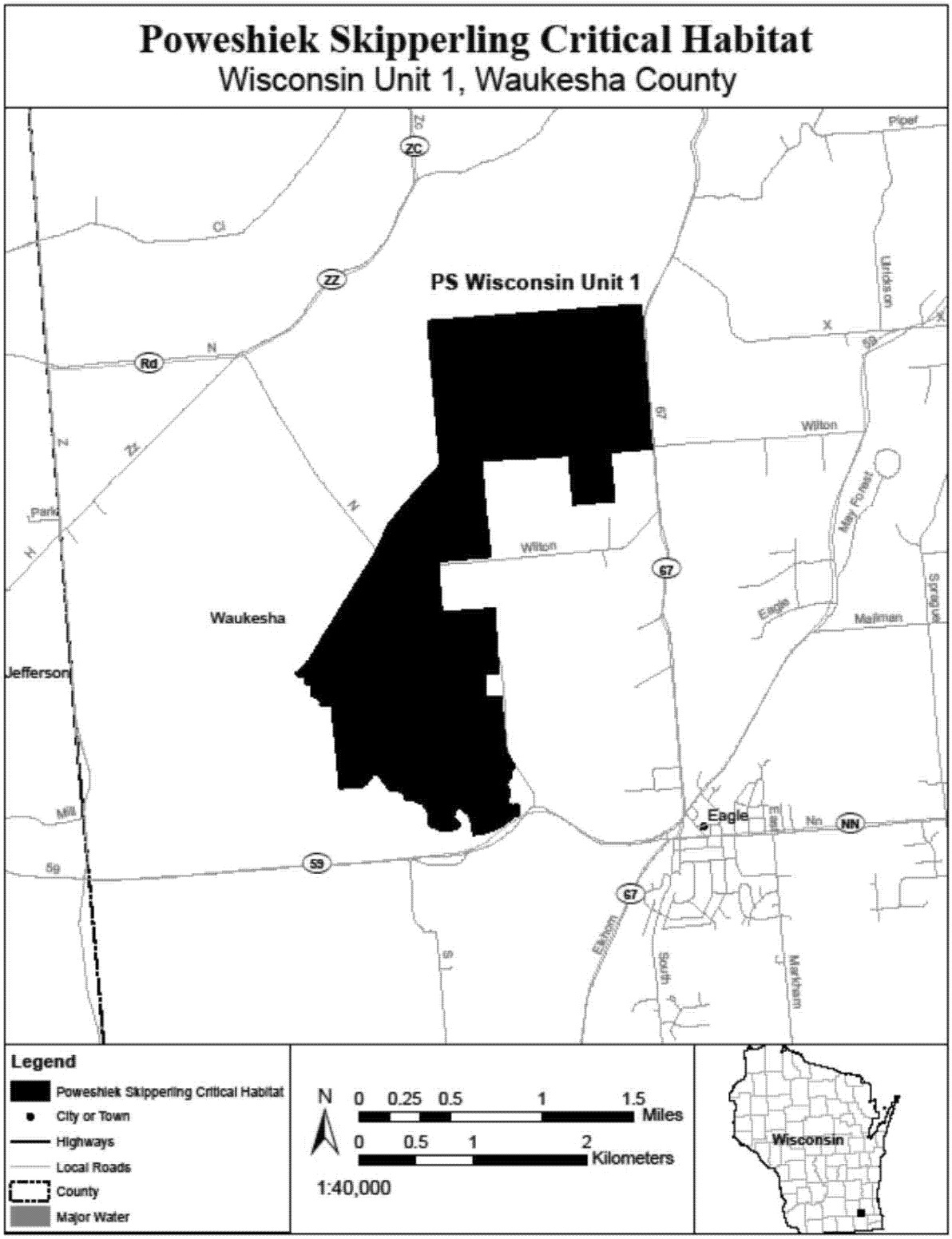
(49) PS South Dakota Unit 17, Moody County, South Dakota. Map of PS South Dakota Unit 17 follows:



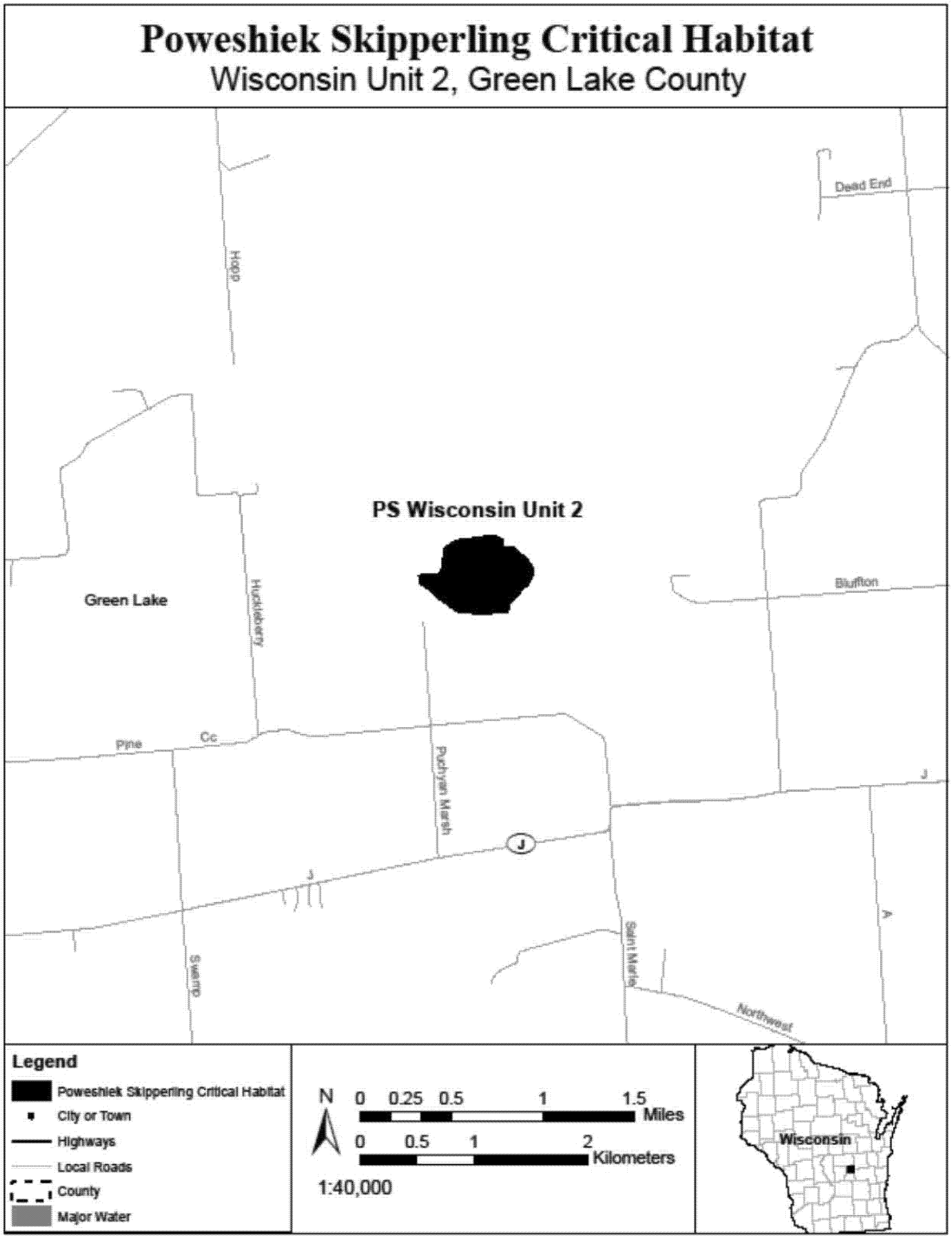
(50) PS South Dakota Unit 18, Marshall County, South Dakota. Map of PS South Dakota Unit 18 follows:



(51) PS Wisconsin Unit 1, Waukesha County, Wisconsin. Map of PS Wisconsin Unit 1 follows:



(52) PS Wisconsin Unit 2, Green Lake County, Wisconsin. Map of PS Wisconsin Unit 2 follows:



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Dated: August 19, 2015.

Karen Hyun,

Deputy Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 2015–24184 Filed 9–30–15; 8:45 am]

BILLING CODE 4310–55–C