

| State and location                            | Community No. | Effective date authorization/cancellation of sale of flood insurance in community | Current effective map date | Date certain Federal assistance no longer available in special flood hazard areas |
|---|---------------|---|----------------------------|---|
| <b>Region III</b>                             |               |   |                            |   |
| Pennsylvania:                                 |               |   |                            |   |
| Bern, township of, Berks County .....         | 421050        | March 25, 1974, Emerg., November 19, 1980, Reg. May 21, 2001, Susp.               | .....do .....              | Do.   |
| Heidelberg, township of, Berks County         | 421069        | March 7, 1977, Emerg., May 3, 1990, Reg. May 21, 2001, Susp.                      | .....do .....              | Do.   |
| Leesport, borough of, Berks County ....       | 420138        | December 26, 1973, Emerg., May 16, 1977, Reg. May 21, 2001, Susp.                 | .....do .....              | Do.   |
| Marion, township of, Berks County .....       | 421079        | October 28, 1975, Emerg., January 2, 1981, Reg. May 21, 2001, Susp.               | .....do .....              | Do.   |
| Muhlenberg, township of, Berks County.        | 420144        | March 9, 1973, Emerg., September 1, 1977, Reg. May 21, 2001, Susp.                | .....do .....              | Do.   |
| Ontelaunee, township of, Berks County         | 420966        | September 5, 1973, Emerg., June 1, 1977, Reg. May 21, 2001, Susp.                 | .....do .....              | Do.   |
| Spring, township of, Berks County .....       | 421108        | June 27, 1974, Emerg., April 18, 1983, Reg. May 21, 2001, Susp.                   | .....do .....              | Do.   |
| Tulpehocken, township of, Berks County.       | 421115        | April 19, 1978, Emerg., August 4, 1988, Reg. May 21, 2001, Susp.                  | .....do .....              | Do.   |
| Wyomissing, borough of, Berks County          | 421375        | August 28, 1974, Emerg., April 18, 1983, Reg. May 21, 2001, Susp.                 |                            |   |
| <b>Region V</b>                               |               |   |                            |   |
| Illinois: Winnebago, unincorporated areas ..  | 170720        | February 16, 1973, Emerg., November 19, 1980, Reg. May 21, 2001, Susp.            |                            |   |
| <b>Region VII</b>                             |               |   |                            |   |
| Kansas: Augusta, city of, Butler County ..... | 200038        | June 25, 1975, Emerg., August 15, 1980, Reg. May 21, 2001, Susp.                  |                            |   |
| <b>Region VIII</b>                            |               |   |                            |   |
| Colorado:                                     |               |   |                            |   |
| Durango, city of, La Plata County .....       | 080099        | April 30, 1974, Emerg., January 17, 1979, Reg. May 21, 2001, Susp.                | .....do .....              | Do.   |
| La Plata County, unincorporated areas         | 080097        | December 12, 1974, Emerg., December 15, 1981, Reg. May 21, 2001, Susp.            | .....do .....              | Do.   |

Code for reading third column: Emerg.—Emergency; Reg.—Regular; Susp—Suspension.

Dated: April 25, 2001.

**Margaret E. Lawless,**  
Acting Executive Associate Director for  
Mitigation.

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## DEPARTMENT OF THE INTERIOR

### Fish and Wildlife Service

#### 50 CFR Part 17

#### RIN 1018-AG14

#### Endangered and Threatened Wildlife and Plants; Final Determination of Critical Habitat for the Great Lakes Breeding Population of the Piping Plover

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

**ACTION:** Final rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), designate critical habitat pursuant to the Endangered Species Act (Act) of 1973,

as amended for the Great Lakes breeding population of the piping plover. The Great Lakes breeding population of the piping plover is listed as an endangered species under the Act. A total of approximately 325 km (201 mi) of Great Lakes shoreline (extending 500 m (1640 ft) inland) in 26 counties in Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio, Pennsylvania, and New York, is designated as critical habitat for the Great Lakes population of the piping plover. The total length of designated shoreline is divided among 35 separate critical habitat units.

Section 7 of the Act requires Federal agencies to ensure that actions they authorize, fund, or carry out are not likely to destroy or adversely modify critical habitat. As required by section 4 of the Act, we considered economic and other relevant impacts prior to making a final decision on what areas to designate as critical habitat.

**EFFECTIVE DATE:** This final rule is effective June 6, 2001.

**ADDRESSES:** The complete administrative record for this rule, including comments and materials

received, as well as supporting documentation used in the preparation of this final rule, will be available for public inspection, by appointment, during normal business hours at the U.S. Fish and Wildlife Service, Bishop Henry Whipple Federal Building, 1 Federal Drive, Fort Snelling, MN 55111.

#### FOR FURTHER INFORMATION CONTACT:

Laura J. Ragan at the above address (telephone 612/713-5157; facsimile 612/713-5292). TTY users may contact us through the Federal Relay Service at 1-800-877-8339.

#### SUPPLEMENTARY INFORMATION:

##### Background

The piping plover (*Charadrius melodus*), named for its melodic mating call, is a small, pale-colored North American shorebird. It weighs 43–63 grams (1.5–2.5 ounces) and is 17–18 centimeters (cm) (6–7 inches (in.)) long (Haig 1992). Its light, sand-colored plumage blends in well with the sandy beach, its primary habitat. Plumage and leg color help distinguish this bird from other plover species. During the breeding season, the legs are bright

orange, and the short, stout bill is orange with a black tip. There are two single dark bands, one around the neck and one across the forehead between the eyes. The female's neck band is often incomplete and is usually thinner than the male's (Haig 1992). In winter, the bill turns black, the legs fade to pale orange, and the black plumage bands on the head and neck are lost. Chicks have speckled gray, buff, and brown down, black beaks, pale orange legs, and a white collar around the neck. Juveniles resemble wintering adults and obtain their adult plumage the spring after they fledge (USFWS 1994).

Dominant plants within Great Lakes piping plover habitat include marram grass (*Ammophila brevigulata*), beach wormwood (*Artemisia campestris*), silverweed (*Potentilla anserina*), Lake Huron tansy (*Tanacetum huronense*), pitcher's thistle (*Cirsium pitcheri*), beach pea (*Lathyrus maritimus* var. *glaber*), sea rocket (*Cakile edentula*), sedges (*Carex* spp.), goldenrods (*Solidago* spp.), sand cherry (*Prunus pumila*), bearberry (*Arctostaphylos uva-ursi*), creeping juniper (*Juniper horizontalis*), cottonwood (*Populus deltoides*), and willow (*Salix* spp.).

The breeding range of the piping plover extends throughout the northern Great Plains, the Great Lakes, and the Atlantic Coast in the United States and Canada. Based on this distribution, three breeding populations of piping plovers have been described: the Northern Great Plains population, the Great Lakes population, and the Atlantic Coast population.

The northern Great Plains breeding range extends from southern Alberta, northern Saskatchewan, and southern Manitoba, south to eastern Montana, the Dakotas, southeastern Colorado, Iowa, Minnesota, and Nebraska, and east to Lake of the Woods in north-central Minnesota. The majority of the United States pairs in this population are in the Dakotas, Nebraska, and Montana (USFWS 1994). Occasionally, Great Plains birds nest in Oklahoma and Kansas. On the Atlantic coast, piping plovers nest from Newfoundland, southeastern Quebec, and New Brunswick to North Carolina. Sixty-eight percent of all nesting pairs breed in Massachusetts, New York, New Jersey, and Virginia (USFWS 1999). In the Great Lakes watershed, piping plovers formerly nested throughout much of the north-central United States and south-central Canada on beaches in Illinois, Indiana, Michigan, Minnesota, Ohio, Pennsylvania, New York, Wisconsin, and in Ontario, Canada. Currently they are limited to northern

Michigan and, recently, at one site in northern Wisconsin.

Piping plovers are migratory birds. They leave the breeding grounds between late July and early September and head for their wintering grounds, where they spend more than eight months of the year. Although the breeding ranges of the three piping plover populations are separate, their wintering ranges overlap and extend along the Atlantic and Gulf Coasts from North Carolina to Mexico and into the West Indies and Bahamas. Resightings of color-banded birds from the Great Lakes breeding population have occurred along the coastlines of North and South Carolina, Georgia, Florida, Louisiana, and Texas.

Pre-settlement populations of piping plovers in the Great Lakes are estimated at 492–682 breeding pairs (Russell 1983), although these estimates may be high (F. Cuthbert, professor, University of Minnesota, Minneapolis, pers. comm., 2000). In recent decades, piping plover populations have declined drastically, especially in the Great Lakes, coinciding with industrial development, urbanization, and increased recreational pressures. In 1973, the piping plover was placed on the National Audubon Society's Blue List of threatened species. By that time, piping plovers had been extirpated from beaches in Illinois, Indiana, Ohio, New York, Pennsylvania, and Ontario, and only a few birds were continuing to nest in Wisconsin (Russell, 1983). By 1977, the Great Lakes breeding population had decreased to 31 nesting pairs (Lambert and Ratcliff 1981) and by the time the species was listed under the Endangered Species Act in 1985, the Great Lakes breeding population had dwindled to only 17 breeding pairs, and the breeding areas had been reduced from sites in eight States to only portions of northern Michigan.

Since the species was listed, the Great Lakes breeding population has gradually increased and expanded its range within Michigan and into Wisconsin. In 1999, 31 pairs of piping plovers nested on the Great Lakes shoreline of northern Michigan and 1 pair nested in northern Wisconsin (Stucker and Cuthbert, 1999). In 2000, 30 pairs were documented, all in northern Michigan (Stucker et al. 2000). The slow population increase over the past 15 years has been aided by intense State, Tribal, Federal, and private conservation actions directed at the protection of the piping plover. Activities such as habitat surveys, beach restoration, public education, habitat protection and enhancement, and the protection of nests from predators and disturbance through the use of predator

exclosure fencing have all contributed to the improving status of the Great Lakes piping plover.

Great Lakes piping plovers nest on shoreline and island sandy beaches with sparse vegetation and the presence of small stones (greater than 1 cm (0.4 in.)) called cobble. Piping plovers spend 3 to 4 months a year on the breeding grounds. Nesting in the Great Lakes region begins in early to mid-May. Plovers lay 3 to 4 eggs in a small depression they scrape in the sand among the cobblestones and are, therefore, very difficult to see. Both sexes are involved in incubating the eggs, which hatch in about 28 days. Young plovers can walk almost as soon as they hatch, but remain vulnerable to predation and disturbance for another 21–30 days until they are able to fly.

Nesting piping plovers are highly susceptible to disturbance by people and pets on the beach. Human disturbance disrupts adult birds' care of their nests and young and may inhibit incubation of eggs (USFWS 1994). Furthermore, adults may leave the nest to lure away an intruder, leaving the eggs or chicks vulnerable to predators and exposure to weather. Ultimately, disturbance may lead to the abandonment of nests (USFWS 1994). As a result of disturbance and other natural and human-caused factors such as high water levels, flooding, eroding beaches, and beach-front commercial, recreational, and residential development, reproduction of Great Lakes piping plovers has been severely affected, resulting in perilously low numbers of nesting plovers (USFWS 1994).

This rule applies only to the breeding range of the Great Lakes population in the United States.

#### Previous Federal Actions

On December 30, 1982, we published a notice of review in the **Federal Register** (47 FR 58454) that identified vertebrate animal taxa being considered for addition to the List of Threatened and Endangered Wildlife. We included the piping plover in that review list as a Category 2 Candidate species, indicating that we believed the species might warrant listing as threatened or endangered, but that we had insufficient data to support a proposal to list at that time. Subsequent review of additional data indicated that the piping plover warranted listing, and in November, 1984, we published a proposed rule in the **Federal Register** (49 FR 44712) to list the piping plover as endangered in the Great Lakes watershed and as threatened along the Atlantic Coast, the Northern Great Plains, and elsewhere in

their range. The proposed listing was based on the decline of the species and the existing threats, including habitat destruction, disturbance by humans and pets, high levels of predation, and contaminants.

After a review of the best scientific data available and all comments received in response to the proposed rule, we published the final rule (50 FR 50726) on December 11, 1985, listing the piping plover as endangered in the Great Lakes watershed (Illinois, Indiana, Michigan, northeastern Minnesota, New York, Ohio, Pennsylvania, Wisconsin, and Ontario, Canada) and as threatened along the Atlantic coast (Quebec, Newfoundland, Maritime Provinces, and States from Maine to Florida), and in the Northern Great Plains region (Iowa, northwestern Minnesota, Montana, Nebraska, North Dakota, South Dakota, Alberta, Manitoba, and Saskatchewan). All piping plovers on migratory routes outside of the Great Lakes watershed or on their wintering grounds are considered threatened. We did not designate critical habitat for the species at that time.

After 1986, we focused our efforts on recovery by forming two recovery teams, the Great Lakes/Northern Great Plains Piping Plover Recovery Team and the Atlantic Coast Piping Plover Recovery Team. In 1988 the Great Lakes and Northern Great Plains (USFWS 1988b) and Atlantic Coast (USFWS 1988a) Recovery Plans were published. In 1994, the Great Lakes/Northern Great Plains Recovery Team began to revise the Recovery plan for these two populations (USFWS 1994). The 1994 draft included updated information on the species and was distributed for public comment. Subsequently, we decided that the recovery of these two inland populations would benefit from separate recovery plans. Individual recovery plans for the Great Lakes and Northern Great Plains populations are presently under development.

The final listing rule for the piping plover indicated that designation of critical habitat was not determinable. Thus, designation was deferred. No further action was subsequently taken to designate critical habitat for piping plovers. On December 4, 1996, Defenders of Wildlife (Defenders) filed a suit (*Defenders of Wildlife and Piping Plover v. Babbitt*, Case No. 96CV02965) against the Department of the Interior and the Service over the lack of designated critical habitat for the Great Lakes population of the piping plover. Defenders filed a similar suit (*Defenders of Wildlife and Piping Plover v. Babbitt*, Case No. 97CV000777) for the Northern Great Plains piping plover population in

1997. During November and December 1999, and January 2000, we began negotiating a schedule for piping plover critical habitat decisions with Defenders. On February 7, 2000, before the settlement negotiations were concluded, the United States District Court for the District of Columbia issued an order directing us to publish a proposed critical habitat designation for nesting and wintering areas of the Great Lakes population of the piping plover by June 30, 2000, and for nesting and wintering areas of the Northern Great Plains piping plover population by May 31, 2001. A subsequent order, after requesting the court to reconsider its original order relating to final critical habitat designation, directs us to finalize the critical habitat designations for the Great Lakes population by April 30, 2001, and for the Northern Great Plains population by March 15, 2002. For biological and practical reasons, we chose to propose critical habitat for the Great Lakes breeding birds and for all wintering birds in two separate rules published concurrently.

On July 6, 2000, we published a proposed determination for the designation of critical habitat for the Great Lakes breeding population of the piping plover (65 FR 41812). A total of approximately 305 km (189 mi) (extending 1 km (0.6 mi) inland) was proposed as critical habitat for this piping plover population in 27 counties in Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio, Pennsylvania, and New York. The comment period was open until September 5, 2000. During this 60-day comment period, we held seven public hearings (Ashland, Wisconsin, on July 17; Green Bay, Wisconsin, on July 18; Newberry, Michigan, on July 19; Traverse City, Michigan, on July 20; Indiana Dunes, Indiana, on July 24; Cleveland, Ohio, on July 25; and Watertown, New York, on July 27). On September 19, 2000, we published a document (65 FR 56530) announcing the reopening of the comment period on the proposal to designate critical habitat for the Great Lakes breeding population of the piping plover and a notice of the availability of the draft economic analysis on the proposed determination. Our intention was for this comment period to be reopened for 60 days, but the document stated that the comment period closed on October 19, 2000, or 30 days. Therefore, on September 28, 2000, we published a document (65 FR 58258) correcting the closing date of the reopened comment period to November 20, 2000.

### Critical Habitat

Critical habitat is defined in section 3 of the Act as (i) the specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) that may require special management consideration or protections; and (ii) specific areas outside the geographic area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. "Conservation" means the use of all methods and procedures that are necessary to bring an endangered or a threatened species to the point at which listing under the Act is no longer necessary.

Critical habitat receives protection under section 7 of the Act through the prohibition against destruction or adverse modification of critical habitat with regard to actions carried out, funded, or authorized by a Federal agency. Section 7 also requires conferences on Federal actions that are likely to result in the destruction or adverse modification of proposed critical habitat. In our regulations at 50 CFR 402.02, we define destruction or adverse modification as ". . . the direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical." Aside from the added protection that may be provided under section 7, the Act does not provide other forms of protection to lands designated as critical habitat. Critical habitat designation would not afford any additional protections under the Act against activities on private or other non-Federal lands that do not involve a Federal nexus because the requirement for consultation under section 7 of the Act does not apply to activities on these types of lands.

In order to be included in a critical habitat designation, the habitat must first be "essential to the conservation of the species." Critical habitat designations identify, based on the best scientific and commercial data available, habitat areas that provide essential life cycle needs of the species (i.e., areas on which are found the primary constituent elements, as defined at 50 CFR 424.12(b)).

Within the geographic area occupied by the species, we will designate only

areas currently known to be essential. Essential areas should already have the features and habitat characteristics that are necessary to sustain the species (primary constituent elements). We will not speculate about what areas might be found to be essential if better information became available, or what other areas may become essential over time. If the information available at the time of designation does not show that an area provides essential life cycle needs of the species, then the area should not be included in the critical habitat designation. Within the geographic area occupied by the species, we will not designate areas that do not now have the primary constituent elements, as defined at 50 CFR 424.12(b), that provide essential life cycle needs of the species.

Our regulations state that, "The Secretary shall designate as critical habitat areas outside the geographic area presently occupied by the species only when a designation limited to its present range would be inadequate to ensure the conservation of the species" (50 CFR 424.12(e)). Accordingly, unless the best scientific and commercial data demonstrates that the conservation needs of the species require designation of critical habitat outside of occupied areas, we will not designate critical habitat in areas outside the geographic area occupied by the species. However, if unoccupied areas are essential to the recovery of the species, they may be designated as critical habitat.

The Service's policy on Information Standards Under the Endangered Species Act, published in the **Federal Register** on July 1, 1994 (59 FR 34271), provides criteria, establishes procedures, and provides guidance to ensure that decisions made by the Service represent the best scientific and commercial data available. It requires Service biologists, to the extent consistent with the Act and with the use of the best scientific and commercial data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat. When determining which areas are critical habitat, a primary source of information should be the listing package for the species. Additional information may be obtained from a recovery plan, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, and biological assessments or other unpublished materials (i.e. gray literature).

Habitat is often dynamic, and species may move from one area to another over time. Furthermore, we recognize that

designation of critical habitat may not include all of the habitat areas that may eventually be determined to be necessary for the recovery of the species. For these reasons, it should be understood that critical habitat designations do not signal that habitat outside the designation is unimportant or may not be required for recovery. Areas outside the critical habitat designation will continue to be subject to conservation actions that may be implemented under section 7(a)(1) and to the regulatory protections afforded by the section 7(a)(2) jeopardy standard and the section 9 take prohibition, as determined on the basis of the best available information at the time of the action. Federally funded or assisted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. 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, or other species conservation planning efforts if new information available to these planning efforts calls for a different outcome.

#### Methods

In determining areas that are essential to conserve the Great Lakes breeding population of the piping plover, the best scientific and commercial data available included information solicited from knowledgeable biologists and available information pertaining to habitat requirements of the species. In an effort to map areas essential to the conservation of the species, we used data of known piping plover breeding locations, records of historical nesting sites, International Census data, and those areas that were identified in the 1988 recovery plan and 1994 draft recovery plan as essential for the recovery of the population. We have chosen the 35 critical habitat units in order to protect adequate habitat to meet the recovery criteria, contained in the recovery plan and draft recovery plan, of 100 breeding pairs in Michigan and 50 breeding pairs in the other Great Lakes States combined. In addition, information provided in comments on the proposed designation and draft economic analysis were evaluated and taken into consideration in the development of this final designation.

#### Primary Constituent Elements

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, in determining which areas to propose as critical habitat, we are

required to base critical habitat determinations on the best scientific and commercial data available. We also are required to consider those physical and biological features that are essential to the conservation of the species and that may require special management considerations and protection. Such features include, but are not limited to: space for individual and population growth, and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, and rearing of offspring; and habitats that are protected from disturbance or are representative of the historical geographical and ecological distributions of a species.

The primary constituent elements for the Great Lakes breeding population of the piping plover are those habitat components that are essential for successful foraging, nesting, rearing of young, intra-specific communication, genetic exchange, roosting, dispersal, or sheltering.

The primary constituent elements required to sustain the Great Lakes breeding population of the piping plover are found on Great Lakes islands and mainland shorelines that support open, sparsely vegetated sandy habitats, such as sand spits or sand beaches, that are associated with wide, unforested systems of dunes and inter-dune wetlands. In order for habitat to be physically and biologically suitable for piping plovers, it must have a total shoreline length of at least 0.2 km (0.12 mi) of gently sloping, sparsely vegetated (less than 50 percent herbaceous and low woody cover) sand beach with a total beach area of at least 2 hectares (ha) (5 acres (ac)).

Appropriately sized sites must also have areas of at least 50 meters (m) (164 feet (ft)) in length where (1) the beach width is more than 7 m (23 ft), (2) there is protective cover for nests and chicks, and (3) the distance to the treeline (from the normal high water line to where the forest begins) is more than 50 m (164 ft). Beach width is defined as the distance from the normal high water line to the foredune (a low barrier dune ridge immediately inland from the beach) edge, or to the sand/vegetation boundary in areas where the foredune is absent. The beach width may be narrower than 7 m (23 ft) if appropriate sand and cobble areas of at least 7 m (23 ft) exist between the dune and the treeline.

Protective cover for nests and chicks consists of small patches of herbaceous vegetation, cobble (stones larger than 1 cm (0.4 inches (in)) diameter), gravel (stones smaller than 1 cm (0.4 in))

diameter), or debris such as driftwood, wrack, root masses, or dead shrubs. These areas must have a low level of disturbance from human activities and from domestic animals. As the nesting season progresses, the level of disturbance tolerated by piping plovers increases. A lower level of disturbance is required at the beginning of the nesting period during nest site selection, egg laying, and incubation. Beach activities that may be associated with a high level of disturbance include, but are not limited to, walking pets off leash, loud noise, driving all terrain vehicles (ATVs), or activities that significantly increase the level of people using the beach. The level of disturbance is relative to the proximity to the nest, intensity, and frequency of these and other similar activities.

The dynamic ecological processes that create and maintain piping plover habitat are also important primary constituent elements. These geologically dynamic lakeside regions are controlled by processes of erosion, accretion, plant succession, and lake-level fluctuations. The integrity of the habitat depends upon regular sediment transport processes, as well as episodic, high-magnitude storm events. By their nature, Great Lakes shorelines are in a constant state of change; habitat features may disappear, or be created nearby. The critical habitat boundaries reflect these natural processes and the dynamic character of Great Lakes shorelines.

#### **Criteria Used To Identify Critical Habitat**

All of the designated critical habitat areas are considered essential to the conservation of the Great Lakes breeding population of the piping plover as described in the approved 1988 Recovery Plan for the Great Lakes and Northern Great Plains Piping Plover (Plan) and the 1994 Draft Revised Recovery Plan for the Great Lakes Piping Plover. The designation encompasses those areas considered necessary to achieve the recovery goals of 150 breeding pairs (USFWS 1988b, 1994) for this population.

To identify critical habitat units, we first examined those sites identified as "essential habitat" in the approved Recovery Plan and draft revised Recovery Plan. We began by evaluating those essential habitat areas that are currently (at least once during the past 5 years) or were recently (in the last 5 to 15 years) occupied by piping plovers in the Great Lakes. Through site visits and consultation with local habitat experts, we determined which of these sites still contain the primary constituent elements. Piping plover

occupied habitat in the Great Lakes has declined from historical occupation of more than 70 sites in eight States to approximately 32 sites in two States (Wemmer 2000). The currently occupied sites and recently occupied (since 1985) sites in Michigan may have the capacity to support an estimated 56 to 136 breeding pairs (Wemmer 2000). Because of this severe reduction in range and numbers of piping plovers, we have determined it is essential to the conservation of this species to include all currently occupied habitat and all recently occupied habitat that still contains the primary constituent elements in this critical habitat designation.

As we proceed with recovery efforts, expansion of the present small population will require more habitat than is currently occupied by piping plovers along the Great Lakes (Wemmer 2000, USFWS 1988b, 1994). In an effort to protect sufficient habitat to allow for the expansion of the species, our second step was to evaluate the essential habitat areas outlined in the Recovery Plan that are documented as historical piping plover habitat. In addition to evaluating those areas identified by the Recovery Plan as essential habitat, we solicited information from habitat experts on areas that contain the primary constituent elements and that would provide suitable piping plover nesting habitat. Based upon consultation with Great Lakes piping plover habitat experts, we determined which historically occupied sites contain the primary constituent elements and are suitable for supporting nesting piping plovers. We designated historically occupied habitat in the Great Lakes watershed (in the United States) that still contain the primary constituent elements.

Much known historical habitat in the Great Lakes region has been destroyed or altered in such ways that it can no longer support piping plovers (Wemmer 2000, USFWS 1988b). As a result, suitable habitat areas that are currently/recently occupied, or that were documented to be historically occupied, are not sufficient to meet the conservation goals outlined in the approved Recovery Plan and draft revised Recovery Plan. Thus, as a final step, we evaluated those essential habitat areas identified in the Recovery Plan where occupation has not been documented, but habitat features similar to currently occupied sites occur. To reach the minimum amount of habitat sufficient to meet the recovery plan goals, we designated those areas that are known to contain the primary constituent elements as critical habitat.

Critical habitat designation is effective year-round, even if the primary constituent elements are temporarily obscured by snow, ice, or other temporary features.

In defining critical habitat boundaries, it was not possible to exclude all existing human-made features and structures, such as buildings, roads, marinas, piers, parking lots, bridges, boat ramps, lighthouses, and other such human-made features, within the area designated. These features do not contain most or all of the primary constituent elements and thus are not considered to be critical habitat despite their being within the geographic boundaries. Federal actions limited to those features, therefore, would not trigger a section 7 consultation, unless they affect the species and/or primary constituent elements within a critical habitat unit.

In summary, in determining areas that are essential to the conservation of the Great Lakes breeding population of the piping plover, we used the best scientific and commercial information available to us. The critical habitat areas described below constitute our best assessment of areas needed for the species' conservation and recovery.

#### **Critical Habitat Designation**

At this time, the critical habitat units discussed below are our best appraisal of areas needed for the conservation of the Great Lakes breeding population of the piping plover. Very little suitable piping plover habitat remains in the Great Lakes region, and all the areas identified here are essential for the recovery of the species because these areas represent the habitat necessary to achieve the recovery goal of 100 breeding pairs in Michigan and 50 breeding pairs in the other Great Lakes States combined. Critical habitat designations may be subsequently revised if new information becomes available after this final rule is published. Any additional areas of critical habitat will be designated, or other changes made to this designation, only after a formal proposal and opportunity for public comment.

The approximate length of proposed critical habitat shoreline identified by land ownership is shown in Table 1. Critical habitat includes Great Lakes piping plover habitat throughout the species' breeding range in the United States. Lands proposed as critical habitat are under private, State, municipal, Tribal, and Federal ownership, with Federal lands including lands managed by the National Park Service, U.S. Forest Service, U.S. Coast Guard, U.S. Army

Corp of Engineers, and by us. Estimates reflect the total area within critical habitat unit boundaries.

TABLE 1.—KILOMETERS OF GREAT LAKES SHORELINE PROPOSED AS CRITICAL HABITAT UNITS FOR THE PIPING PLOVER IN EACH GREAT LAKES STATE SUMMARIZED BY FEDERAL, STATE, MUNICIPAL, PRIVATE AND OTHER OWNERSHIP

|                    | Ownership<br>km shoreline (% within each State) |              |            |             |                   | Total |
|--------------------|---|--------------|------------|-------------|-------------------|-------|
|                    | Federal   | State        | Municipal  | Private     | Other             |       |
| Michigan .....     | 40.9 (18.3)                                     | 107.9 (48.1) | 6.9 (3.1)  | 66.1 (29.1) | 1.6 TNC (0.7)     | 223.4 |
| Minnesota .....    | 0   | 0.2 (100)    | 0          | 0           | 0                 | 0.2   |
| Wisconsin .....    | 18.1 (40.0)                                     | 8.7 (19.2)   | 4.4 (9.7)  | 9.0 (19.9)  | 5.1 Tribal (11.2) | 45.3  |
| Illinois .....     | 0   | 4.7 (46.1)   | 1.3 (12.7) | 4.2 (41.2)  | 0                 | 10.2  |
| Indiana .....      | 2.9 (36.7)                                      | 5.0 (63.3)   | 0          | 0           | 0                 | 7.9   |
| Ohio .....         | 0   | 2.0 (50)     | 0          | 2.0 (50)    | 0                 | 4.0   |
| Pennsylvania ..... | 0   | 6.0 (100)    | 0          | 0           | 0                 | 6.0   |
| New York .....     | 0   | 12.4 (45.3)  | 0          | 14.6 (53.3) | 0.4 TNC (1.5)     | 27.4  |
| Total (% of) ..... | 61.9 (19.1)                                     | 146.9 (45.2) | 12.6 (3.9) | 95.9 (29.5) | 7.1 (2.2)         | 324.4 |

Critical habitat has been designated in 35 units in the Great Lakes region. All critical habitat unit boundaries extend 500 meters (1640 feet) inland from the normal high water line, although the inland edge of the area that contains the

primary constituent elements may vary depending on the extent of the open dune system. This area is needed to provide foraging habitat as well as incorporate cobble pans between the dunes where piping plovers

occasionally nest. A brief description of each unit and reasons for designating it as critical habitat are presented below and in Table 2. More detailed descriptions are included with the maps.

TABLE 2.—LOCATION, OWNERSHIP, PIPING PLOVER USE, AND ESTIMATED LENGTH OF CRITICAL HABITAT AREAS WITHIN MAPPED CONSERVATION UNITS IN THE U.S. GREAT LAKES REGION

| Habit unit   | Location name   | County                   | USGS 7.5' quad<br>map(s)<br>1:24,000 scale   | Land ownership <sup>1</sup>      | Plover use <sup>2</sup> | Est.<br>length<br>(km) |
|--|---|--------------------------|--|----------------------------------|-------------------------|------------------------|
| <b>Whitefish Point to Grand Marais—</b>                |   |                          |  |                                  |                         |                        |
| MI-1 .....   | Whitefish Point .....                                 | Chippewa .....           | Whitefish Point (1951)   | Federal (USFWS), private.        | Recent past, transient  | 2.5                    |
|  | Vermilion/<br>Weatherhogs Beach.                      | Luce .....               | Vermilion (1951) .....   | Private .....                    | Current .....           | 2.3                    |
|  | Crisp Point .....                                     | Luce .....               | Betsy Lake North<br>(1968).  | Municipal private .....          | Recent past .....       | 1.0                    |
|  | Little Lake Harbor .....                              | Luce .....               | Betsy Lake North<br>(1968).  | Private .....                    | Recent past .....       | 1.6                    |
|  | Deer Park .....                                       | Luce .....               | Muskallonge Lake<br>East (1968);<br>Muskallonge Lake<br>West (1968).                             | State, private .....             | Recent past .....       | 2.8                    |
|  | Grand Marais Inner<br>Harbor and Lone-<br>some Point. | Alger .....              | Grand Marais (1968)  | Multiple private, municipal.     | Current .....           | 2.9                    |
|  | Grand Marais Superior<br>Beach.                       | Alger .....              | Grand Marais (1968)  | Multiple private, Federal (NPS). | Current .....           | 1.2                    |
| MI-2 .....   | Point Aux Chenes .....                                | Mackinac .....           | Pointe Aux Chenes<br>(1964, photorevised<br>1975).   | Federal (USFS), private.         | Current .....           | 2.0                    |
| MI-3 .....   | Port Inland .....                                     | Schoolcraft<br>Mackinac. | Hughes Point (1972) ..   | Private/State .....              | Current .....           | 3.0                    |
| <b>Waugoshance Point to beach west of McCort Hill—</b> |   |                          |  |                                  |                         |                        |
| MI-4 .....   | Waugoshance Point<br>Temperance and<br>Crane Islands. | Emmet .....              | Big Stone Bay (1964,<br>photoinspected<br>1975),<br>Waugoshance Island<br>(provisional<br>1982). | State .....                      | Current .....           | 5.0                    |
|  | Sturgeon Bay .....                                    | Emmet .....              | Bliss (1982) .....   | State .....                      | Current .....           | 3.9                    |
|  | Bliss Township Park ..                                | Emmet .....              | Bliss (1982) .....   | Municipal .....                  | Current .....           | 1.1                    |
|  | Sturgeon Bay Point ....                               | Emmet .....              | Bliss (1982) Cross Village<br>(1982).  | Multiple private .....           | Current .....           | 2.4                    |

TABLE 2.—LOCATION, OWNERSHIP, PIPING PLOVER USE, AND ESTIMATED LENGTH OF CRITICAL HABITAT AREAS WITHIN MAPPED CONSERVATION UNITS IN THE U.S. GREAT LAKES REGION—Continued

| Habit unit  | Location name                                | County           | USGS 7.5' quad map(s)<br>1:24,000 scale                           | Land ownership <sup>1</sup>          | Plover use <sup>2</sup>    | Est. length (km) |
|---|--|------------------|---|--------------------------------------|----------------------------|------------------|
|   | Cross Village Beach ..                       | Emmet .....      | Cross Village (1982) ..   | Municipal, multiple private.         | Current .....              | 1.3              |
|   | Beach West McCort Hill.                      | Emmet .....      | Cross Village (1982) ..   | Multiple private .....               | Current .....              | 1.4              |
| <b>Sevenmile Point to Thorneswift Nature Preserve—</b>  |  |                  |   |                                      |                            |                  |
| MI-5 .....  | Sevenmile Point .....                        | Emmet .....      | Forest Beach (1983 provisional).                                  | Multiple private .....               | Suitable .....             | 0.5              |
|   | Thorneswift Nature Preserve.                 | Emmet .....      | Forest Beach (1983 provisional).                                  | Multiple private .....               | Current .....              | 0.4              |
| MI-6 .....  | Petoskey State Park ..                       | Emmet .....      | Harbor Springs (1983 provisional).                                | State, private .....                 | Historical .....           | 2.0              |
| MI-7 .....  | North Point .....                            | Charlevoix ..... | Ironton (1983), Charlevoix (1983).                                | Municipal .....                      | Suitable .....             | 1.1              |
| MI-8 .....  | Fisherman's Island State Park.               | Charlevoix ..... | Charlevoix (1983) .....   | State .....                          | Current .....              | 1.3              |
| <b>Indian Point to McCauley's Point, Beaver Island—</b> |  |                  |   |                                      |                            |                  |
| MI-9 .....  | Donegal Bay-Beaver Island.                   | Charlevoix ..... | Garden Island West (1980), Beaver Island North (1986).            | Multiple private .....               | Current .....              | 2.0              |
|   | McCauley's Point-Beaver Island.              | Charlevoix ..... | Beaver Island North (1986).                                       | State .....                          | Recent past .....          | 0.6              |
| MI-10 .....   | Greenes Bay-Beaver Island.                   | Charlevoix ..... | Beaver Island North (1986).                                       | State/private .....                  | Recent past .....          | 0.8              |
| MI-11 .....   | High Island .....                            | Charlevoix ..... | High Island (1986) .....  | State .....                          | Current .....              | 1.8              |
| <b>Cathead Bay to Christmas Cove—</b>                   |  |                  |   |                                      |                            |                  |
| MI-12 .....   | Cathead Bay .....                            | Leelanau .....   | Northport (provisional 1983).                                     | State/private .....                  | Current .....              | 2.6              |
|   | Cathead Point to Christmas Cove.             | Leelanau .....   | Northport/Northport NW (provisional 1983).                        | Private .....                        | Suitable .....             | 2.5              |
| MI-13 .....   | South Fox Island .....                       | Leelanau .....   | South Fox Island (provisional 1986).                              | State .....                          | Historical .....           | 6.0              |
| MI-14 .....   | North Manitou .....                          | Leelanau .....   | North Manitou Island (provisional 1983).                          | Federal (NPS) .....                  | Current .....              | 3.3              |
| MI-15 .....   | Crystal Run to Empire Beach.                 | Leelanau .....   | Glen Arbor (1983), Glen Haven (1983), Empire (1983).              | Municipal, Federal .....             | Suitable .....             | 18.6             |
| <b>Esch Road to Sutter Road and Point Betsie—</b>       |  |                  |   |                                      |                            |                  |
| MI-16 .....   | Platte Bay and Platte River Point and beach. | Benzie .....     | Empire (1983), Beulah (provisional 1983).                         | Federal (NPS) .....                  | Suitable/current .....     | 13.8             |
|   | Point Betsie .....                           | Benzie .....     | Frankfort (1983) .....  | Federal (USCG) TNC managed, private. | Historical .....           | 4.8              |
| MI-17 .....   | Nordhouse Dunes to Ludington.                | Mason .....      | Manistee NW (provisional 1982), Hamlin Lake (1982).               | Federal (USFS), State                | Transient, historical .... | 13.4             |
| MI-18 .....   | Muskegon State Park                          | Muskegon .....   | Muskegon West (1972, photoinspected 1980).                        | State .....                          | Historical .....           | 2.5              |
| MI-19 .....   | Lake Superior State Forest, St. Vital Point. | Chippewa .....   | Albany Island (1964, photoinspected 1976), DeTour Village (1964). | State .....                          | Historical .....           | 3.0              |
| <b>Lighthouse Point to Cordwood Point—</b>              |  |                  |   |                                      |                            |                  |
| MI-20 .....   | Lighthouse Point .....                       | Cheboygan ....   | Cheboygan (1982) .....  | State .....                          | Recent past .....          | 1.4              |
|   | Grass Bay .....                              | Cheboygan ....   | Cordwood Point (1982).  | TNC preserve .....                   | Historical transient ....  | 1.6              |

TABLE 2.—LOCATION, OWNERSHIP, PIPING PLOVER USE, AND ESTIMATED LENGTH OF CRITICAL HABITAT AREAS WITHIN MAPPED CONSERVATION UNITS IN THE U.S. GREAT LAKES REGION—Continued

| Habit unit    | Location name  | County             | USGS 7.5' quad map(s)<br>1:24,000 scale   | Land ownership <sup>1</sup>                | Plover use <sup>2</sup>    | Est. length (km) |
|---------------|--|--------------------|---|--|----------------------------|------------------|
| MI-21 .....   | PH Hoeft State Park ..                                     | Pesque Isle ....   | Roger's City (1971), Moltke (1971).   | State .....                                | Suitable .....             | 3.7              |
| MI-22 .....   | Thompson's Harbor ...                                      | Presque Isle ...   | Thompson's Harbor (1971).   | State, private .....                       | Suitable .....             | 2.8              |
| MI-23 .....   | Tawas Point State Park.                                    | Iosco .....        | East Tawas (1989) ....  | State .....                                | Suitable, transient .....  | 2.0              |
| MN/WI-1 ..... | Duluth Harbor .....  | St. Louis .....    | West Duluth (1953, photorevised 1969).  | State, private .....                       | Recent past .....          | 0.6              |
| WI-1 .....    | Wisconsin Point .....                                      | Douglas .....      | Parkland (1954, photorevised 1975), Superior (1954, photorevised 1983).                           | Municipal, Federal (USACE).                | Historical .....           | 4.0              |
| WI-2 .....    | Long Island-Chequamegon Pt.                                | Ashland .....      | Cedar (1964, photorevised 1975), Chequamegon Point (1964, photorevised 1975), Long Island (1964). | Federal (NPS) tribal (Bad River), private. | Current .....              | 25.3             |
| WI-3 .....    | Western Michigan Island.                                   | Ashland .....      | Michigan Island (1963).   | Federal (NPS) .....                        | Suitable .....             | 6.5              |
| WI-4 .....    | Seagull Bar .....  | Marinette .....    | Marinette East (1963, photorevised 1969).   | State, municipal .....                     | Suitable .....             | 1.5              |
| WI-5 .....    | Point Beach State Forest.                                  | Manitowoc .....    | Two Rivers (1978) ....  | State .....                                | Suitable .....             | 8.0              |
| IL-1 .....    | Illinois Beach State Park to Waukegan Beach.               | Lake .....         | Zion, Ill. (1993), Waukegan (1993).   | Municipal, State, private.                 | Historical .....           | 10.2             |
| IN-1 .....    | Indiana Dunes National Lakeshore/Indiana Dunes State Park. | Porter .....       | Ogden Dunes (1991), Dunes Acres (1991).   | Federal (NPS), State                       | Historical, transient .... | 7.9              |
| OH-1 .....    | Sheldon Marsh .....  | Erie .....         | Huron (1969), Sandusky (1969, photorevised 1975).   | State, private .....                       | Transient .....            | 3.2              |
| OH-2 .....    | Headlands Dunes .....                                      | Lake .....         | Mentor (1963, revised 1992).  | State .....                                | Historical/suitable .....  | 0.8              |
| PA-1 .....    | Presque Isle State Park.                                   | Erie .....         | Erie North (1957, revised 1969 and 1975, photoinspected 1977).                                    | State .....                                | Historical, transient .... | 6.0              |
| NY-1 .....    | Salmon River to Stony Point.                               | Oswego, Jefferson. | Pulaski (1956), Ellisburg (1958), Henderson (1959).   | State, multiple private                    | Historical .....           | 27.4             |

<sup>1</sup> USACE = U.S. Army Corp of Engineers; NPS = National Park Service; TNC = The Nature Conservancy; USFS = U.S. Forest Service; USFWS = U.S. Fish and Wildlife Service; USCG = U.S. Coast Guard.

<sup>2</sup> Current = used for nesting since 1995; recent past = used for nesting since 1985; historical = used for nesting prior to 1985; transient = recent (since 1990) sightings of piping plovers; suitable = no known record of use but habitat appears suitable for nesting and is within the historic range of piping plover.

## Michigan

### Unit MI-1: Whitefish Point to Grand Marais

This unit encompasses approximately 83.5 km (50 mi) of Lake Superior shoreline in Chippewa, Luce, and Alger Counties on the Upper Peninsula of Michigan. It includes long stretches of habitat that have been recently used by piping plovers in addition to areas currently used by plovers.

Approximately 47 km (29.2 mi) are part of Muskallonge State Park and Lake Superior State Forest, approximately 36

km (22.4 mi) are privately owned, and approximately 0.5 km (0.3 mi) are part of Whitefish Point National Wildlife Refuge. This unit also includes a small area of municipal property at Crisp Point. This unit extends from just southwest of Whitefish Point, around and including the Point, and westward to the Pictured Rocks National Lakeshore property boundary, excluding the area from the junction of Highway 58 and Morris Road to the breakwall north of the harbor near the former Coast Guard station in Grand Marais.

### Unit MI-2: Pointe Aux Chenes

This unit encompasses approximately 1.7 km (1.1 mi) of Lake Michigan shoreline in Mackinac County on the Upper Peninsula of Michigan. It includes areas that are currently occupied by piping plovers. The majority of the unit (1.1 km (0.7 mi)) is within the Hiawatha National Forest and is being considered for a Research and Natural Area. The rest of the unit (approximately 0.6 km (0.4 mi)) is privately owned land. This unit extends from the mouth of the Pointe Aux

Chenes river to the Hiawatha National Forest property boundary.

*Unit MI-3: Port Inland to Hughes Point*

This unit encompasses approximately 3 km (1.8 mi) of Lake Michigan shoreline in western Mackinac and eastern Schoolcraft Counties on the Upper Peninsula of Michigan. It includes areas that are currently occupied by piping plovers. Approximately 0.8 km (0.5 mi) of the designated shoreline is owned by Port Inland Stone and Dolomite Quarry and the remaining 2.2 km (1.4 mi) are part of the Lake Superior State Forest. This unit extends from the westernmost breakwall at the Port Inland Gaging Station to the mouth of Swan Creek.

*Unit MI-4: Waugoshance Point to McCort Hill Beach*

This unit encompasses approximately 32 km (19.2 mi) of Lake Michigan shoreline in Emmet County, Michigan, and includes Temperance and Waugoshance islands. It includes areas that are currently occupied by piping plovers and supports about half of the current Great Lakes piping plover population. Approximately 8.5 km (5.3 mi) are privately owned and 1 km (0.6 mi) is municipal land (Bliss Township beach and Cross Village beach). The remaining 22.5 km (14 mi) are part of Wilderness State Park. This unit extends from the junction of the northeast corner of T39N R5W section 28 and the Lake Michigan shoreline in Wilderness State Park, including Waugoshance and Temperance Islands, to the southwest boundary of T37N R6W section 5 south of Cross Village.

*Unit MI-5: Sevenmile Point to Thornswift Nature Preserve*

This unit encompasses approximately 7 km (4.3 mi) of Lake Michigan shoreline in Emmet County, Michigan. It includes areas of suitable piping plover nesting habitat and areas that are currently occupied by piping plovers. The entire designated area is under private ownership. It extends from the junction of the Lake Michigan shoreline and the northwest boundary of T36N R6W section 30 to the junction of the shoreline and the southeast corner of T35N R6W section 9.

*Unit MI-6: Petoskey State Park*

This unit encompasses approximately 2 km (1.2 mi) of Lake Michigan shoreline in Emmet County, Michigan. It includes areas of historical piping plover habitat. Approximately 0.7 km (0.4 mi) is privately owned land and 1.3 km (0.8 mi) are part of Petoskey State

Park. This unit extends from the mouth of Tannery Creek to Mononaqua Beach.

*Unit MI-7: North Point*

This unit encompasses approximately 1.1 km (0.7 mi) of Lake Michigan shoreline in Charlevoix County, Michigan. It includes areas of suitable piping plover nesting habitat. The entire designated area is a city park owned by the city of Charlevoix. It includes all Lake Michigan shoreline within T34N R8W section 14.

*Unit MI-8: Fisherman's Island State Park*

This unit encompasses approximately 1.3 km (0.8 miles) of Lake Michigan shoreline in Charlevoix County, Michigan. It includes areas that are currently occupied by piping plovers. The entire designated area is within Fisherman's Island State Park. This unit extends from the junction of the line separating T34N R8W section 31 and T33N R8W section 6 from the Lake Michigan shore to the Fisherman's Island State Park property boundary at the end of Lakeshore Drive, including Fisherman Island.

*Unit MI-9: Indian Point to McCauley's Point, Beaver Island*

This unit encompasses approximately 5 km (3.1 mi) of Lake Michigan shoreline on Beaver Island in Charlevoix County, Michigan. It includes areas that are currently occupied, as well as areas that have been recently used by piping plovers. Approximately 4.4 km (2.7 mi) are privately owned and 0.6 km (0.4 mi) is part of Beaver Islands State Wildlife Research Area. This unit extends from Indian Point southward to the junction of the dividing line of T39 N R10W and T38N R10W and the Lake Michigan shoreline.

*Unit MI-10: Greenes Bay, Beaver Island*

This unit encompasses approximately 0.8 km (0.5 mi) of Lake Michigan shoreline on Beaver Island in Charlevoix County, Michigan. It includes areas that have been recently used by piping plovers. Approximately 0.3 km (0.2 mi) is part of the Beaver Islands State Wildlife Research Area and the remaining 0.5 km (0.3 mi) is privately owned land. This unit encompasses Greenes Bay on the western side of Beaver Island.

*Unit MI-11: High Island*

This unit encompasses approximately 1.8 km (1.1 mi) of Lake Michigan shoreline on High Island in Charlevoix County, Michigan. It includes areas that are currently occupied by piping

plovers. The entire designated area is part of the Beaver Islands State Wildlife Research Area. This unit includes all Lake Michigan shoreline within T39N R11W section 32 and T38N R11W section 5 on the western side of the island and within T39N R11W section 27 on the northeastern corner of the island.

*Unit MI-12: Cathead Bay to Christmas Cove*

This unit encompasses approximately 5.1 km (3.2 mi) of Lake Michigan shoreline in Leelanau County, Michigan. It includes areas that are currently occupied by piping plovers and areas of suitable piping plover nesting habitat. Approximately 1.9 km (1.2 mi) are part of Leelanau State Park, and the remaining 3.2 km (2.0 mi) are privately owned land. This unit extends from the northwest end of Cathead Bay southward to just north of Christmas Cove, excluding lands of the Magic Carpet Woods Association HCP.

*Unit MI-13: South Fox Island*

This unit encompasses approximately 6 km (3.8 mi) of Lake Michigan shoreline on South Fox Island in Leelanau County, Michigan. It includes areas that were historically occupied by piping plovers. The entire designated area is part of the Beaver Island State Wildlife Research Area. This unit includes all Lake Michigan shoreline within T34N R13W sections 15, 16, and 21 on the south end of the island and within T35N R13W section 30 on the north end of the island.

*Unit MI-14: North and South Manitou Islands*

This unit encompasses approximately 3.3 km (2.1 mi) of Lake Michigan shoreline on North Manitou Island in Leelanau County, Michigan. It includes areas that are currently occupied by piping plovers. The entire designated area is part of Sleeping Bear Dunes National Lakeshore. This unit includes Dimmick's Point and Donner's Point on the southern end of North Manitou Island.

*Unit MI-15: Crystal Run to Empire Beach*

This unit encompasses approximately 18.6 km (11.6 mi) of Lake Michigan shoreline in Leelanau County, Michigan. It includes areas of suitable piping plover nesting habitat. Approximately 4.8 km (3.0 mi) are municipal beach in Glen Arbor Township, and the remaining 13.8 km (8.6 mi) are part of Sleeping Bear Dunes National Lakeshore. This unit extends from Crystal Run to the southern

Sleeping Bear Dunes National Lakeshore property boundary.

*Unit MI-16: Esch Road to Sutter Road and Point Betsie*

This unit encompasses approximately 18.6 km (11.6 mi) of Lake Michigan shoreline in Benzie County, Michigan. It includes areas that are currently occupied by piping plovers, areas that were historically occupied, and areas of suitable piping plover nesting habitat. The majority of the unit (13.8 km (8.6 mi)) is part of Sleeping Bear Dunes National Lakeshore, 3.8 km (2.4 mi) are private land, and the remaining 1.0 km (0.6 mi) is U.S. Coast Guard land that is managed by The Nature Conservancy, a private conservation organization. This unit extends from Esch Road to the Sleeping Bear Dunes National Lakeshore property boundary at Sutter Road. The unit then continues from the Point Betsie Natural Area northern property boundary south to include all shoreline within T26N R16W section 4.

*Unit MI-17: Nordhouse Dunes and Ludington State Park*

This unit encompasses approximately 13.4 km (8.3 mi) of Lake Michigan shoreline in Mason County, Michigan. It includes areas that were historically occupied by piping plovers. At least one pair of piping plovers were sighted in the area in 1999, but no nests were found. Approximately 7.4 km (4.6 mi) are part of the Manistee National Forest/Nordhouse Dunes Wilderness Area, and the remaining 6.0 km (3.7 mi) are part of Ludington State Park. This unit extends from the mouth of Cooper Creek to the mouth of the Big Sable River.

*Unit MI-18: Muskegon State Park*

This unit encompasses approximately 2.5 km (1.6 mi) of Lake Michigan shoreline in Muskegon County, Michigan. It includes areas that were historically occupied by piping plovers. In the early 1950s, several pairs of piping plovers were reported nesting in this unit, but the last known nesting was in 1953. The entire designated area is part of Muskegon State Park. This unit extends from the north breakwall of the canal joining Muskegon Lake and Lake Michigan to the northern Muskegon State Park property boundary at the shoreline.

*Unit MI-19: Lake Superior State Forest-St. Vital Point*

This unit encompasses approximately 3.0 km (1.9 mi) of Lake Huron shoreline in Chippewa County, Michigan. It includes areas that were historically occupied by piping plovers. The entire designated area is within Lake Superior

State Forest. This unit extends from the Lake Superior State Forest boundary to the mouth of Joe Straw Creek.

*Unit MI-20: Lighthouse Point to Cordwood Point*

This unit encompasses approximately 5.2 km (3.3 mi) of Lake Huron shoreline in Cheboygan County, Michigan. It includes areas that were historically occupied by piping plovers and currently serve as foraging areas. Approximately 3 km (1.9 mi) are part of Cheboygan State Park, and approximately 1.6 km (1 mi) are Nature Conservancy property. The remaining 0.6 km (0.4 mi) is privately owned land. This unit extends from the junction of the Lake Huron shoreline and the western boundary of T38N R1W section 22 near Lighthouse Point to just west of Cordwood Point.

*Unit MI-21: P.H. Hoefft State Park*

This unit encompasses approximately 3.7 km (2.3 mi) of Lake Huron shoreline in Presque Isle County, Michigan. It includes areas of suitable piping plover nesting habitat. The entire designated area is part of P.H. Hoefft State Park. This unit includes Lake Huron shoreline within T35N R5E section 6 northwestward to the junction of Nagel Road and Forty Mile Road.

*Unit MI-22: Thompson's Harbor State Park*

This unit encompasses approximately 2.8 km (1.7 mi) of Lake Huron shoreline in Presque Isle County, Michigan. It includes areas of suitable piping plover nesting habitat. Most of this designated area is within Thompson's Harbor State Park with a small portion of privately owned land. This unit extends along the Lake Huron shoreline from Black Point to Grand Lake Outlet.

*Unit MI-23: Tawas Point State Park*

This unit encompasses approximately 2.0 km (1.2 mi) of Lake Huron shoreline in Iosco County, Michigan. It includes areas used for foraging by transient piping plovers and suitable nesting habitat. The entire designated area is part of Tawas Point State Park. This unit extends from the Tawas State Park boundary on the east side of Tawas Point including all shoreline within T22N R8E section 34 and offshore sand spits.

**Minnesota/Wisconsin**

*Unit MN/WI-1: Interstate Island*

This unit encompasses approximately 0.6 km (0.4 mi) of Lake Superior shoreline on Interstate Island in St. Louis County, Minnesota and Douglas County, Wisconsin. Although piping

plover nesting has not been documented on this island, it contains viable piping plover habitat. A portion of the 0.6 km (0.4 mi) of island shoreline on Interstate Island is in Minnesota, and a portion is in Wisconsin. Approximately 0.2 km (0.1 mi) of Interstate Island shoreline is owned by the State of Minnesota and is a State Wildlife Management Area and bird sanctuary. The remaining 0.4 km (0.2 mi) of Interstate Island shoreline is in Wisconsin and is private land owned by C. Rice Coal and Burlington Northern Railroad. This unit is comprised of Interstate Island.

**Wisconsin**

*Unit WI-1: Wisconsin Point*

This unit encompasses approximately 4.0 km (2.5 mi) of Lake Superior shoreline in Douglas County, Wisconsin. It includes areas that were historically occupied by piping plovers. Approximately 0.4 km (0.2 mi) of the unit is Army Corps of Engineers land. The rest of the designated area is municipal land belonging to the city of Superior. This unit extends from the mouth of Dutchman Creek to the Douglas and St. Louis County line.

*Unit WI-2: Long Island/Chequamegon Point*

This unit encompasses approximately 25.3 km (15.7 mi) of Lake Superior shoreline in Ashland County, Wisconsin. It includes areas currently occupied by piping plovers. Nesting occurred in this unit in 1998 and 1999. Approximately 11.2 km (6.9 mi) are part of the Apostle Islands National Lakeshore, approximately 9.0 km (5.6 mi) are private land, and the remaining 5.1 km (3.2 mi) are Tribal lands belonging to the Bad River Band of Lake Superior Tribe of Chippewa Indians. This unit extends from the base of Chequamegon Point (where it meets the mainland) to Chequamegon Point Light.

*Unit WI-3: Western Michigan Island Beach and Dunes*

This unit encompasses approximately 6.5 km (4 mi) of Lake Superior shoreline on Michigan Island in Ashland County, Wisconsin. It includes areas of suitable piping plover nesting habitat. The entire designated area is part of the Apostle Island National Lakeshore. This unit includes all Lake Superior shoreline on Michigan Island within T51N R1W sections 28, 20, and 21.

*Unit WI-4: Seagull Bar*

This unit encompasses approximately 1.5 km (0.9 mi) of Lake Michigan shoreline in Marinette County, Wisconsin. It includes areas of suitable piping plover nesting habitat. About one

half of the unit is State owned and the other half is municipal property owned by the city of Marinette. This unit extends from the end of Leonard Street at Red Arrow Park to the south end of Seagull Bar including nearshore sand bars.

*Unit WI-5: Point Beach State Forest*

This unit encompasses approximately 8 km (5 mi) of Lake Michigan shoreline in Manitowoc County, Wisconsin. It includes areas of suitable piping plover nesting habitat. The entire designated area is part of the Point Beach State Forest. This unit extends from the southwest property boundary of Point Beach State Forest to Rawley Point.

**Illinois**

*Unit IL-1: Illinois Beach State Park and Nature Preserve to Waukegan Beach*

This unit encompasses approximately 10.2 km (6.3 mi) of Lake Michigan shoreline in Lake County, Illinois. It includes areas that were historically occupied by piping plovers. Approximately 4.7 km (2.9 mi) are part of the Illinois Beach State Park and Nature Preserve, approximately 1.3 km (0.8 mi) are municipal property (Zion municipal park and Waukegan municipal beach), and the remaining 4.2 km (2.6 mi) are privately owned. This unit extends from 17th Street and the Lake Michigan shoreline in Illinois Beach State Park southward to the northern Waukegan Beach breakwall at North Beach Park, excluding the public beach and campground to just south of the Illinois Beach State Park Lodge and Conference Center.

**Indiana**

*Unit IN-1: Indiana Dunes National Lakeshore and Indiana Dunes State Park Beaches*

This unit encompasses approximately 7.9 km (4.9 mi) of Lake Michigan shoreline in Porter County, Indiana. It includes areas that were historically occupied by piping plovers. 5 km (3.1 mi) are part of Indiana Dunes State Park and the remaining 2.9 km (1.8 mi) are part of Indiana Dunes National Lakeshore. This unit extends from the western boundary of the Cowels Bog/ Dune Acres Unit, east of the Port of Indiana and the NIPSCO Baily Generating Station and along the Indiana Dunes State Park to Kemil Road at Beverly Shores.

**Ohio**

*Unit OH-1: Sheldon Marsh*

This unit encompasses approximately 3.2 km (2.0 mi) of Lake Erie shoreline in Erie County, Ohio. It includes

foraging areas for transient piping plovers and suitable nesting habitat. Approximately 1.2 km (0.7 mi) are part of Sheldon Marsh State Nature Preserve, and the remaining 2.0 km (1.2 mi) are privately owned land. This unit extends from the mouth of Sawmill Creek to the western property boundary of Sheldon Marsh State Natural Area.

*Unit OH-2: Headland Dunes*

This unit encompasses approximately 0.8 km (0.5 mi) of Lake Erie shoreline in Lake County, Ohio. It includes historical nesting habitat and areas of suitable piping plover nesting habitat. The entire designated area is part of Headland Dunes State Nature Preserve. This unit extends from the eastern boundary line of Headland Dunes Nature Preserve to the western boundary of the Nature Preserve and Headland Dunes State Park.

**Pennsylvania**

*Unit PA-1: Gull Point Natural Area, Presque Isle State Park*

This unit encompasses approximately 6.0 km (3.7 mi) of Lake Erie shoreline in Erie County, Pennsylvania. It includes foraging areas for transient piping plovers and areas that were historically used for nesting. The entire unit is part of the Presque Isle State Park. This unit extends from the lighthouse north of Peninsula Drive on the north side of Presque Isle to the southern terminus of the hiking trail on the southeast side of Gull Point. It includes any new beach habitat that may accrete along the present shoreline portion of the unit.

**New York**

*Unit NY-1: Salmon River to Stony Point*

This unit encompasses approximately 27.4 km (17 mi) of Lake Ontario shoreline in Jefferson and Oswego Counties, New York. It includes areas that were historically occupied by piping plovers. Approximately 12.4 km (7.7 mi) are State land (New York State Department of Environmental Conservation (DEC) Wildlife Management Area/ New York DEC Unique Area and New York State Park), approximately 14.6 km (9.1 mi) are privately owned, and the remaining 0.4 km (0.2 mi) belong to The Nature Conservancy. This unit extends from the mouth of the Salmon River to the Eldorado Road.

**Effects of Critical Habitat Designation**

*Section 7 Consultation*

Section 7(a) of the Act requires all Federal agencies, including the Service, to ensure that actions they fund,

authorize, or carry out do not destroy or adversely modify critical habitat to the extent that the action appreciably diminishes the value of the critical habitat for the survival and recovery of the species. Individuals, organizations, States, Tribes, local governments, and other non-Federal entities are affected by the designation of critical habitat only if their actions occur on Federal lands, require a Federal permit, license, or other authorization, or involve Federal funding.

Section 7(a) of the Act requires all Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its proposed or designated critical habitat. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(4) of the Act requires Federal agencies to confer with us on any action that is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed critical habitat. Conference reports provide conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. The conservation recommendations in a conference report are advisory. If a species is listed or critical habitat is designated, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of the species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must consult with us. Through this consultation we would ensure that the permitted actions do not destroy or adversely modify critical habitat.

When we issue a biological opinion concluding that a Federal action is likely to result in the destruction or adverse modification of critical habitat, we also provide reasonable and prudent alternatives to the project, if any are identifiable. Reasonable and prudent alternatives are defined at 50 CFR 402.02 as alternative actions identified during consultation that can be implemented in a manner consistent with the intended purpose of the action, that are consistent with the scope of the Federal agency's legal authority and jurisdiction, that are economically and technologically feasible, and that we believe would avoid destruction or adverse modification of 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 critical habitat is subsequently designated and the Federal agency has retained discretionary involvement or control over the action or such discretionary involvement or control is authorized by law. Consequently, some Federal agencies may request reinitiation of consultation with us on actions for which formal consultation has been completed, if those actions may affect designated critical habitat. Further, some Federal agencies may have conferred with us on proposed critical habitat. We may adopt the formal conference report as the biological opinion when critical habitat is designated, if no significant new information or changes in the action alter the content of the opinion (see 50 CFR 402.10(d)).

Activities on Federal lands that may affect the piping plover or its critical habitat will require section 7 consultation. Activities on private, State or Tribal lands requiring a permit from the U.S. Army Corps of Engineers (Army Corps) under section 404 of the Clean Water Act, or some other Federal action, including funding (e.g. from the Federal Highway Administration, Environmental Protection Agency, or Federal Emergency Management Agency) will also continue to be subject to the section 7 consultation process. Federal actions not affecting listed species or critical habitat and actions on non-Federal lands that are not federally funded or permitted do not require section 7 consultation.

Section 4(b)(8) of the Act requires us to evaluate briefly in any proposed or final regulation that designates critical habitat those activities involving a Federal action that may adversely modify such habitat or may be affected by such designation. Activities that may destroy or adversely modify critical habitat include those that alter the primary constituent elements to the extent that the value of critical habitat for both the survival and recovery of the Great Lakes breeding population of the piping plover is appreciably diminished. We note that such activities may also jeopardize the continued existence of the species.

To properly portray the effects of critical habitat designation, we must first compare the section 7 requirements for actions that may affect critical habitat with the requirements for

actions that may affect a listed species. Section 7 prohibits actions funded, authorized, or carried out by Federal agencies from jeopardizing the continued existence of a listed species or destroying or adversely modifying the listed species' critical habitat. Actions likely to "jeopardize the continued existence" of a species are those that would appreciably reduce the likelihood of the species' survival and recovery. Actions likely to "destroy or adversely modify" critical habitat are those that would appreciably reduce the value of critical habitat for the survival and recovery of the listed species.

Common to both definitions is an appreciable detrimental effect on both survival and recovery of a listed species. Given the similarity of these definitions, actions likely to destroy or adversely modify critical habitat would almost always result in jeopardy to the species concerned when the area of the proposed action is occupied by the species. In those cases, it is highly unlikely that additional modifications to the action would be required as a result of designating critical habitat. However, critical habitat may provide benefits toward recovery when designated in areas unoccupied by the species.

Designation of critical habitat could affect Federal agency activities. Federal agencies already consult with us on activities that may affect the species to ensure that their actions do not jeopardize the continued existence of the species. These actions include, but are not limited to: (1) Marina and boat launch construction and maintenance; (2) harbor dredging and dredge spoil placement and disposal; (3) fill of intertidal wetlands for residence, driveway, or other construction; (4) waste-water discharge from communities; (5) all-terrain vehicular activity on beaches or the construction of facilities that increase such activity; (6) beach stabilization activities that impede natural overwash processes including beach nourishment, planting of vegetation, and construction and maintenance of seawalls, breakwaters, and other off-shore stabilizing devices; (7) sale, exchange, or lease of Federal land that contains suitable habitat that is likely to result in the habitat being destroyed or appreciably degraded; (8) oil and other hazardous material spills and cleanup; and (9) stormwater and wastewater discharge from communities. Additionally, public access may be temporarily or seasonally restricted on beaches under Federal ownership or jurisdiction to reduce disturbance so that piping plovers in search of suitable nesting sites could utilize them. Some of these closures

may be voluntary by governmental and private land managers. Most closures would end prior to the time the public would frequent these beaches.

This section serves in part as a general guide to clarify activities that may affect or destroy or adversely modify critical habitat. However, specific Federal actions should be reviewed by the action agency. If the agency determines the activity may affect critical habitat, they will consult with us under section 7 of the Act. We will work with the agencies and affected public early in the consultation process to avoid or minimize potential conflicts and, whenever possible, find a solution that protects listed species and their habitat while allowing the action to go forward in a manner consistent with its intended purpose.

#### **Exclusions Under Section 4(b)(2)**

Subsection 4(b)(2) of the Act allows us to exclude areas from critical habitat designation where the benefits of exclusion outweigh the benefits of designation, provided the exclusion will not result in the extinction of the species. For the following reasons, we believe that in most instances the benefits of excluding areas covered by approved Habitat Conservation Plans (HCPs) from critical habitat designations will outweigh the benefits of including them.

##### *(1) Benefits of Inclusion*

The benefits of including HCP lands in critical habitat are normally small. The principal benefit of any designated critical habitat is that Federal activities in such habitat that may affect it require consultation under section 7 of the Act. Such consultation would ensure that adequate protection is provided to avoid adverse modification of critical habitat. Where HCPs are in place, our experience indicates that this benefit is small or non-existent. Currently approved and permitted HCPs are already designed to ensure the long-term survival of covered species within the plan area. Where we have an approved HCP, lands that we ordinarily would define as critical habitat for the covered species will normally be protected in reserves and other conservation lands by the terms of the HCP and its implementation agreements. The HCP and implementation agreements include management measures and protections for conservation lands that are crafted to protect, restore, and enhance their value as habitat for covered species.

In addition, a 10(a)(1)(B) permit issued by us as a result of an HCP application must itself undergo

consultation. While this consultation may not look specifically at the issue of adverse modification of critical habitat, it will look at the very similar concept of jeopardy to the listed species in the plan area. Since HCPs, particularly large regional HCPs, address land use within the plan boundaries, habitat issues within the plan boundaries will have been thoroughly addressed in the HCP and the consultation on the HCP. Our experience is also that, under most circumstances, consultations under the jeopardy standard will reach the same result as consultations under the adverse modification standard. Implementing regulations (50 CFR Part 402) define "jeopardize the continued existence of" and "destruction or adverse modification of" in virtually identical terms. Jeopardize the continued existence of means to engage in an action "that reasonably would be expected to reduce appreciably the likelihood of both the survival and recovery of a listed species." Destruction or adverse modification means an "alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species." Common to both definitions is an appreciable detrimental effect on both survival and recovery of a listed species, in the case of critical habitat by reducing the value of the habitat so designated. Thus, actions satisfying the standard for adverse modification are nearly always found to also jeopardize the species concerned, and the existence of a critical habitat designation does not materially affect the outcome of consultation. Additional measures to protect the habitat from adverse modification are not likely to be required.

Further, HCPs typically provide for greater conservation benefits to a covered species than section 7 consultations because HCPs assure the long term protection and management of a covered species and its habitat, and funding for such management through the standards found in the 5-Point Policy for HCPs (64 FR 35242) and the HCP No Surprises regulation (63 FR 8859). Such assurances are typically not provided by section 7 consultations which, in contrast to HCPs, often do not commit the project proponent to long term special management or protections. Thus, a consultation typically does not accord the lands it covers the extensive benefits an HCP provides.

The development and implementation of HCPs provide other important conservation benefits, including the development of biological information to guide conservation efforts and assist in species recovery and the creation of

innovative solutions to conserve species while allowing for development. The educational benefits of critical habitat, including informing the public of areas that are important for the long-term survival and conservation of the species, are essentially the same as those that would occur from the public notice and comment procedures required to establish an HCP, as well as the public participation that occurs in the development of many regional HCPs. For these reasons, then, we believe that designation of critical habitat has little benefit in areas covered by HCPs.

#### *(2) Benefits of Exclusion*

The benefits of excluding HCPs from being designated as critical habitat may be more significant. During two public comment periods on our critical habitat policy, we received several comments about the additional regulatory and economic burden of designating critical habitat. These include the need for additional consultation with the Service and the need for additional surveys and information gathering to complete these consultations. HCP applicants have also stated that they are concerned that third parties may challenge HCPs on the basis that they result in adverse modification or destruction of critical habitat, should critical habitat be designated within the HCP boundaries.

The benefits of excluding HCPs include relieving landowners, communities and counties of any additional minor regulatory review that might be imposed by critical habitat. Many HCPs, particularly large regional HCPs, take many years to develop and, upon completion, become regional conservation plans that are consistent with the recovery of covered species. Many of these regional plans benefit many species, both listed and unlisted. Imposing an additional regulatory review after HCP completion may jeopardize conservation efforts and partnerships in many areas and could be viewed as a disincentive to those developing HCPs. Excluding HCPs provides us with an opportunity to streamline regulatory compliance and confirms regulatory assurances for HCP participants.

A related benefit of excluding HCPs is that it would encourage the continued development of partnerships with HCP participants, including States, local governments, conservation organizations, and private landowners, that together can implement conservation actions we would be unable to accomplish alone. By excluding areas covered by HCPs from critical habitat designation, we preserve these partnerships, and, we believe, set

the stage for more effective conservation actions in the future.

In general, we believe the benefits of critical habitat designation to be small in areas covered by approved HCPs. We also believe that the benefits of excluding HCPs from designation are significant. Weighing the small benefits of inclusion against the benefits of exclusion, including the benefits of relieving property owners of an additional layer of approvals and regulation, together with the encouragement of conservation partnerships, would generally result in HCPs being excluded from critical habitat designation under Section 4(b)(2) of the Act.

Not all HCPs are alike with regard to species coverage and design. Within this general analytical framework, we need to individually evaluate completed and legally operative HCPs in the range of the Great Lakes breeding population of the piping plover to determine whether the benefits of excluding these particular areas outweigh the benefits of including them.

Presently, one approved HCP exists for the piping plover in the Great Lakes region. The Magic Carpet Woods Association HCP covers approximately 792 meters (2,600 feet) of shoreline within the proposed Cathead Bay critical habitat unit in Leelanau County, Michigan. This plan addresses the piping plover as a covered species and provides conservation management and protection for the species. We evaluated this plan and determined that the conservation management measures and protection afforded the piping plover are sufficient to assure its conservation on the involved lands. Consequently, we have determined that the benefits of excluding this area outweigh the benefits of inclusion, and have excluded the area covered by the HCP from the fixed critical habitat designation.

In the event that future HCPs covering the Great Lakes breeding population of the piping plover are developed within the boundaries of designated critical habitat, we will work with applicants to ensure that the HCPs provide for protection and management of habitat areas essential for the conservation of the piping plover by either directing development and habitat modification to nonessential areas or appropriately modifying activities within essential habitat areas so that such activities will not adversely modify the primary constituent elements. The HCP development process provides an opportunity for more intensive data collection and analysis regarding the use of particular habitat areas by the piping plover. The process also enables

us to conduct detailed evaluations of the importance of such lands to the long term survival of the species.

We will provide technical assistance and work closely with applicants throughout the development of future HCPs to identify lands essential for the long-term conservation of the piping plover and appropriate management for those lands. The take minimization and mitigation measures provided under these HCPs are expected to protect the essential habitat lands designated as critical habitat in this rule. If an HCP that addresses the piping plover as a covered species is ultimately approved, the Service will reassess the critical habitat boundaries in light of the HCP. The Service will seek to undertake this review when the HCP is approved, but funding constraints may influence the timing of such a review.

Should additional information become available that changes our analysis of the benefits of excluding any of these (or other) areas compared to the benefits of including them in the critical habitat designation, we may revise this final designation accordingly.

Similarly, if new information indicates any of these areas should not be included in the critical habitat designation because they no longer meet the definition of critical habitat, we may revise this final critical habitat designation. If, consistent with available funding and program priorities, we elect to revise this designation, we will do so through a subsequent rulemaking.

If you have questions regarding whether specific activities will constitute adverse modification of critical habitat, or requests for copies of the regulations on listed wildlife and inquiries about prohibitions and permits contact the U.S. Fish and Wildlife Service (see addresses section).

#### **Summary of Comments and Recommendations**

In the July 6, 2000, proposed rule (65 FR 41812), we requested all interested parties to submit comments on the specifics of the proposal including information, policy, treatments of HCPs, and proposed critical habitat boundaries as provided in the proposed rule. The first comment period closed on September 5, 2000. The comment period was reopened for 30 days, from September 19 to October 20, 2000 (65 FR 56530), to allow for additional comments on the proposed rule and comments on the draft economic analysis of the proposed critical habitat. Since our intention was to reopen the comment period for 60 days, we published a correction on September 28, 2000 (65 FR 58258), correcting the

closing date of the reopened comment period to November 20, 2000. Comments received from July 6 to November 20, 2000, were entered into the administrative record.

We contacted all appropriate State and Federal agencies, Tribes, County governments, elected officials, and other interested parties and invited them to comment. In addition, we invited public comments through the publication of notices in newspapers in Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio, Pennsylvania, and New York. In these notices and the proposed rule, we announced the dates and times of seven public hearings to be held on the proposed rule. Their dates and locations are specified above in the section "Previous Federal Actions". Transcripts of these hearings are available for inspection (see addresses section). We posted copies of the proposed rule and draft economic analysis on our internet site (<http://midwest.fws.gov/>).

We requested three ornithologists and conservation biologists, who have familiarity with the piping plover and its habitat requirements, to peer review the proposed critical habitat designation. All three responded by the close of the comment period. They provided valuable information about the biology, status, and historical range of the species, and suggested removing some areas from the critical habitat designation that no longer meet the criteria of piping plover critical habitat and provided data on other areas that may deserve critical habitat designation at a later date. These comments are addressed in this section, and relevant data provided by the reviewers have been incorporated throughout the rule.

We received a total of 140 written and 36 oral comments during the 2 public comment periods. Several people submitted comments more than once. In total, oral and written comments were received from 7 Federal agencies, 14 State agencies, 5 Tribal representatives, 3 elected officials, 10 local governments, 31 private organizations, and 97 private individuals. Comments were received from residents in 13 States, with Michigan sources submitting the most of any one State. All comments received were reviewed for substantive issues and new data regarding critical habitat and the biology and status of the Great Lakes breeding population of the piping plover, and economic information. We address all relevant comments received during the comment periods and public hearing testimonies in the following summary of issues. Comments of a similar nature are grouped into a single issue. Comments that we incorporated into this final rule are discussed in the

"Summary of Changes from Proposed Rule" section of this document.

#### *Issue 1: Biological Justification and Methodology*

The following comments and responses involve issues related to the biological basis for the designation.

(1A) *Comment:* The broad scale of the proposed critical habitat includes areas that do not contain the primary constituent elements for the Great Lakes piping plover.

*Response:* We recognize that not all parcels of land within designated critical habitat units will contain the habitat components essential to piping plover conservation. We are required to designate critical habitat based on the best available information and to describe critical habitat (50 CFR 424.12(c)) with specific limits using reference points and specific definable boundaries. In preparation of the final determination, we used information gathered during the public comment period to more accurately define the written critical habitat boundaries. Despite our efforts to exclude areas that do not contain the primary constituent elements for the piping plover from critical habitat unit boundaries, it is not practicable to develop unit boundaries and provide maps and legal descriptions that exclude all developed areas such as towns, housing developments, or other developed lands unlikely to provide for the piping plover. Because of the time constraints imposed by the Court, and the absence of detailed Geographic Information System (GIS) coverage we defined the critical habitat unit boundaries as specifically as practicable but, due to the mapping scale, some areas not essential to the conservation of the piping plover were included within the boundaries of proposed critical habitat. However, developed areas such as buildings, marinas, paved areas, boat ramps, piers, bridges, lighthouses, and similar human-made structures are not being designated as critical habitat.

(1B) *Comment:* Designating critical habitat for the piping plover will result in such high public animosity that the designation will cause more harm to the species than benefit.

*Response:* Public support is a vital asset in the protection of endangered species and their habitat, but, by law we must designate essential areas as critical habitat even if it will cause public backlash due to misconceptions about its impacts. In an effort to clear up misunderstandings about critical habitat and to increase public support for piping plovers, we are increasing our education and outreach programs.

(1C) *Comment:* One person commented that there is a lack of data to support the proposed measures and no data to support that designating critical habitat will result in an increased piping plover population.

*Response:* In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12, in determining which areas to designate as critical habitat, we are basing this critical habitat determination on the best scientific and commercial data available at the time of designation. The designation indicates the areas that we believe are essential to the conservation of the species. Designation of critical habitat is only one tool to use towards the recovery of the piping plover, and we will continue to work with other Federal agencies, State and local agencies, Tribes, the scientific community, local landowners, and the public to eliminate and reduce the range of threats that endanger this species.

(1D) *Comment:* Inland lakes are mentioned in the 1988 Recovery Plan as potential breeding habitat around the Great Lakes. Were smaller, inland lakes considered for designation?

*Response:* Inland lake records of piping plovers in the Great Lakes are very few and from long ago. Cottrille (1957) cites four records of piping plovers at three inland locations in Michigan between 1938 and 1954, but no such sightings have been made in recent years. Additionally, there are no inland lakes in the Great Lakes area that are presently known to contain the primary constituent elements for this population of piping plovers.

(1E) *Comment:* There is no mention of migratory sites or habitat needs during migration.

*Response:* Areas used by piping plovers on migratory routes are likely very important for survival to the next breeding season. Extraordinarily little is known, however, about important stop-over sites and habitat needs of the piping plover during migration. Because so little is known about where essential migratory stop-over sites are located, we did not designate migratory habitat in this rule. Important migratory sites may be added to the critical habitat designation (by following the complete proposal process and soliciting public comments) when we have a better understanding of migratory habitat requirements.

(1F) *Comment:* Why is unoccupied habitat being designated as critical habitat?

*Response:* The inclusion of unoccupied areas in this critical habitat designation is in accordance with section 3(5)(A) of the Act, which

provides that areas outside the geographic area currently occupied by the species may meet the definition of critical habitat upon a determination that they are essential for the conservation of the species. Our regulations also provide for the designation of areas outside the geographical area currently occupied if we find that a designation limited to its present range would be inadequate to ensure the conservation of the species (50 CFR 424.12(e)).

In 2000, there were about 30 breeding pairs of piping plovers in the Great Lakes area, all of which occur in Michigan (Stucker et al. 2000). The Great Lakes and Northern Great Plains Piping Plover Recovery Plan (USFWS 1988b) establishes a recovery goal of 150 breeding pairs in the Great Lakes watershed. This number is considered a minimum for the recovery of the species and eventual removal from the protections of Act. Of these 150 breeding pairs, at least 100 are to be in Michigan and at least 50 in other Great Lakes States. In order to achieve this recovery goal, additional habitat areas are needed beyond those currently occupied by the species. We have designated currently unoccupied areas as critical habitat on the basis of historical piping plover occurrences and the existence of most or all of the primary constituent elements at other sites lacking historical occurrences. Additionally, all of the currently unoccupied areas designated as critical habitat are included as essential habitat in the draft revised Recovery Plan (USFWS 1994).

#### *Issue 2: Policy and Regulations*

The following comments and responses involve issues related to public involvement in the designation process and compliance with the Act and other laws, regulations, and policies.

(2A) *Comment:* Several commenters were supportive of the policy that lands covered by approved HCPs that provide incidental take authorization for the piping plover should be excluded from critical habitat. Other commenters believe that critical habitat designation should occur within the boundaries of such HCPs.

*Response:* We recognize that critical habitat is only one of many conservation tools for federally listed species. HCPs are one of the most important tools for reconciling land use with the conservation of listed species on non-Federal lands. Section 4(b)(2) of the Act allows us to exclude areas from critical habitat designation where the benefits of exclusion outweigh the benefits of

designation, provided the exclusion will not result in the extinction of the species. We believe that in most instances the benefits of excluding HCPs from critical habitat designations will outweigh the benefits of including them. For this designation, we find that the benefits of exclusion outweigh the benefits of designation for the one legally operative HCP issued for the piping plover in the Great Lakes.

We anticipate that future HCPs in the range of the Great Lakes breeding population of piping plovers will include it as a covered species and provide for its long term conservation. We expect that HCPs undertaken by local jurisdictions (e.g. counties, cities) and other parties will identify, protect, and provide appropriate management for those specific lands within the boundaries of the plans that are essential for the long term conservation of the species. Section 10(a)(1)(B) of the Act states that HCPs must meet issuance criteria, including minimizing and mitigating any take of the listed species covered by the permit to the extent practicable, and that the taking must not appreciably reduce the likelihood of the survival and recovery of the species in the wild. We fully expect that our future analyses of HCPs and section 10(a)(1)(B) permits under section 7 will show that covered activities carried out in accordance with the provisions of the HCP and section 10(a)(1)(B) permits will not result in the destruction or adverse modification of critical habitat designated for the piping plover.

In the event that future HCPs covering the Great Lakes breeding population of the piping plover are developed within the boundaries of designated critical habitat, we will work with applicants to ensure that the HCPs provide for protection and management of habitat areas essential for the conservation of the piping plover by either directing development and habitat modification to nonessential areas or appropriately modifying activities within essential habitat areas so that such activities will not adversely modify the primary constituent elements. The HCP development process provides an opportunity for more intensive data collection and analysis regarding the use of particular habitat areas by the piping plover. We will provide technical assistance and work closely with applicants throughout the development of future HCPs to identify lands essential for the long term conservation of the species and appropriate management of those lands. If the piping plover is a covered species under future HCPs, the plans should provide for the long term conservation

of the species. The take minimization and mitigation measures provided under these HCPs are expected to adequately protect the essential habitat lands designated as critical habitat in this rule, such that the value of these lands for the survival and recovery of the Great Lakes breeding population of the piping plover is not appreciably diminished through direct or indirect alterations. If an HCP that addresses the piping plover as a covered species is ultimately approved, the Service will reassess the relevant critical habitat boundaries in light of the protection and management provided by the HCP. The Service will seek to undertake this review when the HCP is approved, but funding constraints may influence the timing of such a review. However, an HCP can proceed without a concurrent amendment to the critical habitat designation should all involved parties agree.

(2B) *Comment:* Specific lands should be excluded using the exemption afforded pursuant to 4(b)(2) of the Act. The biological benefits of critical habitat are outweighed by the benefits of exclusion.

*Response:* Section 4(b)(2) of the Act and 50 CFR 424.19 require us to consider the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. We may exclude any area from critical habitat if we determine that the benefits of exclusion outweigh the benefits of designating the area as critical habitat, unless that exclusion will lead to extinction of the species. As discussed in this final rule, we have determined that no significant adverse economic effects will result from this critical habitat designation. Consequently, none of the proposed lands have been excluded from the designation based on economic impacts. As discussed in the response to the comment above, we have excluded the one legally operative HCP from the designation pursuant to section 4(b)(2) of the Act based on other relevant impacts.

(2C) *Comment:* We received three written requests to extend the comment period for the proposed designation and draft economic analysis.

*Our Response:* Following the publication of the proposed critical habitat designation on July 6, 2000, we opened a 60 day public comment period which closed on September 5, 2000, held seven public hearings during July, and conducted outreach notifying elected officials, local jurisdictions, interest groups, and property owners. We conducted much of this outreach through legal notices in regional newspapers, telephone calls, letters and

news releases mailed to affected elected officials, local jurisdictions, and interest groups, and publication of the proposed determination and associated materials on our internet site. We published a document in the **Federal Register** on September 19, 2000, announcing the availability of the draft economic analysis and reopening the comment period until October 19, 2000. On September 28, 2000, in order to fulfill our intention that the comment period be reopened for 60 days, we published a document correcting the closing date of the comment period, to November 20, 2000. Because of the court-ordered ten month time frame for completing the designation, we were not able to extend or open an additional public comment period beyond the four and one-half months we provided.

(2D) *Comment:* We received two requests to hold additional public hearings on the proposed designation.

*Our Response:* We are required to hold one public hearing on a proposed action, if it is requested. Due to the short time between proposal and the court-ordered deadline for publication of the final rule, we chose to announce public hearings at the time the proposal was published. We published notification of the hearings in the **Federal Register** as part of the proposal, published legal notices in regional newspapers, posted information on our internet site, and issued news releases about the hearings. During the month of July, 2000, we held seven public hearings throughout the Great Lakes States affected by the proposed critical habitat designation. Additional public hearings were requested in locations near one of the seven hearings. Because of the court-ordered deadline and the broad coverage of the original public hearings, we chose not to hold additional public hearings.

(2E) *Comment:* One commenter suggested that we post the hearing transcripts and all of the comments received during the public comment period on the internet.

*Response:* We have not posted copies of hearing transcripts and the comments received on a proposed action on the internet in the past. The volume of public comments received on some proposals is very large, thus it is not practicable to post them on the internet at this time. The hearing transcripts and comments on the proposal to designate critical habitat for the Great Lakes breeding population of the piping plover are available during normal business hours at the U.S. Fish and Wildlife Service offices at: Bishop Henry Whipple Building, 1 Federal Drive, Fort Snelling, Minnesota 55111;

and 2651 Coolidge Road, Suite 101, East Lansing, Michigan 48823. Call our Ecological Services office in Fort Snelling at 612-713-5350 for more information on how to view the transcripts and comments.

(2F) *Comment:* Alternatives to designating critical habitat were not considered.

*Response:* By law, according to section 4(a)(3) of the Act, we are required to designate critical habitat "to the maximum extent prudent" for all listed species. Furthermore, in the case of the piping plover, we were ordered by the United States District Court for the District of Columbia to designate critical habitat for the Great Lakes breeding population of this species. Other conservation actions are important to the recovery of the piping plover and will be carried out as part of the recovery process, but they are not legal alternatives to designating critical habitat.

(2G) *Comment:* A few commenters recommended that we postpone issuing a final determination until a more specific and defensible critical habitat proposal can be written and an accurate and quantitative economic analysis be conducted.

*Response:* We are required to use the best available information in designating critical habitat. We are under a court order to complete the designation of critical habitat for the Great Lakes breeding population of the piping plover by April 30, 2001. We did solicit new biological data and public participation during the comment periods on the proposed rule and draft economic analysis. These comments have been taken into consideration in the development of the final economic analysis and this final determination. Furthermore, we will continue to monitor and collect new information and may revise the critical habitat designation in the future if new information indicates a change is needed, given our available funding and priorities.

(2H) *Comment:* The maps presented in the proposed rule are difficult to interpret and therefore will be difficult to use in planning efforts.

*Response:* The maps published in the **Federal Register** are provided for reference purposes to guide Federal agencies and other interested parties in identifying the general boundaries within which the critical habitat is located. While the verbal descriptions of each critical habitat unit are meant to provide a more precise reference for actual boundaries, we recognize the value to the public and resource managers of more detailed maps. Due to

the time constraints of the court ordered deadline and our limited Geographic Information System (GIS) capabilities, we have not been able to produce more detailed maps to match our verbal descriptions. We have made it a priority to complete more detailed GIS maps of the designated areas and make these maps available for public use.

#### *Issue 3: Economic and Other Relevant Impacts*

(3A) *Comment:* Designation of critical habitat will cause private property values to decline and will negatively affect businesses.

*Response:* The economic analysis indicates that designation of critical habitat for the Great Lakes breeding population on the piping plover will not have a significant economic impact. The economic analysis does acknowledge that the designation of critical habitat may have some effect on private property values. We believe that this short-term effect would occur from market uncertainty and public misperception of the impacts of the critical habitat designation on private land use. We also believe that this short-term effect on property values would diminish over time as the uncertainty and misperceptions are dispelled. We did not find supporting evidence during the preparation of the economic analysis to estimate or document this potential short-term effect on property values. The economic analysis determined that there will be an insignificant impact to businesses.

(3B) *Comment:* Several commenters expressed concern about a quick response to emergency maintenance activities, specifically emergency erosion control and environmental clean-up, and questioned whether emergency activities are exempt from consultation under section 7 of the Act.

*Response:* Emergency activities are not exempt from consultation under section 7 of the Act. However, the regulations at 50 CFR 402.05 allow for informal consultation where emergency circumstances mandate the need to consult in an expedited manner. Formal consultation must be initiated as soon as possible after the emergency is under control. In addition, programmatic consultations can be conducted prior to an emergency to address response activities which can be reasonably anticipated.

(3C) *Comment:* Some commenters voiced concern that they were not directly contacted for their opinions on the economic impacts of critical habitat designations or why their specific land parcels were not addressed.

*Response:* We did not feel it was necessary to contact every potential stakeholder in order for us to develop a draft economic analysis. Especially in light of the limited resources and time available to us, we believe that we were adequately able to understand the issues of concern to local communities based on public comments submitted on the proposed rule, on transcripts from public hearings, and from detailed discussions among our staff and with representatives from other Federal, State, Tribal, and local government agencies, as well as some landowners. When the draft economic analysis was completed, we reopened the comment period to request public comment, in particular on the adequacy of the economic analysis.

(3D) *Comment:* Several commenters expressed concern about the impact critical habitat will have on future development projects and the maintenance of existing structures.

*Response:* The designation of critical habitat does not necessarily restrict further development. Within critical habitat boundaries, Federal agencies must make special efforts to protect the important characteristics of these areas, therefore, if a proposed development project with a Federal nexus were to affect critical habitat of the piping plover, consultation under section 7 of the Act would be required. Because the Great Lakes population of the piping plover is listed as an endangered species under the Act, section 7 consultations would be required for development projects in areas with piping plovers, even if these areas are not designated critical habitat.

Existing human-made structures, such as buildings, parking lots, and boat ramps are not critical habitat, therefore, many maintenance projects on such structures will not affect critical habitat. Only those projects with a Federal nexus that modify the primary constituent elements to such a degree as to cause the habitat to be unsuitable for breeding piping plovers will be affected.

We understand the importance of beach nourishment and dredging for maintaining beach areas and harbors in the Great Lakes. Additionally, these activities, if conducted in an appropriate manner, may be beneficial to nesting piping plovers. These activities, however, do alter the habitat, and thus will likely require consultation. For these types of ongoing activities, programmatic consultations can be conducted to reduce the time necessary for annual consultations.

In those cases where consultation is required, we will work cooperatively with Federal agencies to see that

necessary work can proceed in concert with the requirements of the Act to conserve the piping plover and its habitat. In cases where critical habitat has been designated for areas occupied by the piping plover, consultations would likely have been required, regardless of the designation of critical habitat.

(3E) *Comment:* A number of commenters expressed concern about the impact on recreational activities, tourism, and the possibility of restricted beach access within designated critical habitat.

*Response:* Most recreational activities on the majority of beaches within critical habitat will not be impacted by critical habitat designation. Since non-Federal activities are not affected by critical habitat designation, beach use would only be affected if a Federal agency funds, authorizes, or carries out an action that will result in a level of human use that precludes successful piping plover breeding. In those cases, we will work with the Federal agency involved to protect potential breeding habitat while having as minimal an effect as possible on people's enjoyment of the areas. On non-Federal lands, recreational beach activities such as walking, jogging, sunning, swimming, and picnicking will not be affected by the critical habitat designation.

The recovery of piping plovers in the Great Lakes area can be consistent with recreational and other economic activities. According to the 1996 National Survey of Fishing, Hunting, and Wildlife Associated Recreation, wildlife observation is one of the fastest growing outdoor activities. The presence of piping plovers on Michigan's beaches should continue to attract bird watchers who are excited to view this rare species in its natural habitat.

#### *Issue 4: Site Specific Issues*

The following comments and responses involve issues related to the inclusion or exclusion of specific areas, or our methods for selecting appropriate areas for designation as critical habitat.

(4A) *Comment:* Several comments pointed out errors in mileages, locations, or descriptions of critical habitat units in the proposed rule.

*Response:* Corrections have been made in the final rule to reflect these comments, where appropriate.

(4B) *Comment:* A number of commenters identified specific areas that they thought should not be designated as critical habitat.

*Response:* Where site specific documentation was submitted to us providing a rationale as to why an area

should not be designated as critical habitat, we evaluated that information in accordance with the definition of critical habitat pursuant to section 3 of the Act and made a determination as to whether modifications to the proposal were appropriate. Based on the comments we received, we excluded lands from the final designation that we determined to be nonessential to the conservation of the piping plover (i.e., areas that did not contain the primary constituent elements) or that were located within an approved HCP for the piping plover (refer to the "Summary of Changes from Proposed Rule" section for specific areas that were excluded). None of the proposed lands have been excluded from the final designation based on economic impacts. We included in the final designation those lands that we still consider essential to the recovery of the Great Lakes breeding population of piping plovers.

(4C) *Comment:* Multiple commenters recommended adding specific lands to critical habitat or further investigating additional areas for suitable habitat.

*Response:* During the Federal rule-making process for designating critical habitat, we may, based upon information received during the public comment period, remove proposed critical habitat lands from a final designation and refine proposed boundaries. However, according to section 4(b)(4) of the Act, we may not add new critical habitat units without first proposing these lands in the **Federal Register** and providing a public comment period. Therefore, potential critical habitat units that were not included in the proposal for the Great Lakes population of the piping plover are not designated as critical habitat in this final determination.

Some of the lands recommended for addition to critical habitat were not included in the proposal because we earlier concluded that these lands were not essential for the conservation of the species or did not meet the definition of piping plover critical habitat. After reassessing the requested additional lands on South Fox Island in Michigan, we continue to believe that these lands, at this time, do not meet the definition of critical habitat because they do not contain the primary constituent elements required by piping plovers.

Several of the other requested sites were excluded from the proposed designation because information on current habitat suitability was not available. These sites will require further investigation to determine whether they are essential to the conservation of the species. Data gathered following the publication of

the proposed rule indicates that some of the requested lands contain suitable nesting habitat and may be essential to the conservation of the species. For example, we received a comment from the National Park Service requesting that a portion of Sleeping Bear Dunes National Lakeshore on South Manitou Island, Michigan be included in the designation because it is an important piping plover foraging area. We will continue to investigate potential piping plover critical habitat and may revise the critical habitat designation in the future if new information supports a change, and as available funding and other priorities allow. The data on additional sites that were provided to us during the comment period will be important in any future revisions to designated critical habitat.

#### *Issue 5: Other Relevant Issues*

(5A) *Comment:* Two people commented that we should also designate critical habitat for piping plovers that breed along the north Atlantic coast.

*Response:* We are currently required to complete a significant number of listing-related actions, pursuant to court orders and judicially approved settlement agreements. Complying with these court orders and settlement agreements will require the Service to spend nearly all of its listing and critical habitat funding for fiscal year 2001, and a substantial amount in fiscal year 2002. We are currently working to prioritize our critical habitat workload within the ESA listing budget allocated by Congress. The priority for designating critical habitat for the Atlantic Coast breeding population of piping plovers relative to other species and pending litigation has not yet been determined.

(5B) *Comment:* Piping plovers that nest at Lake of the Woods, Minnesota represent an important genetic link between the Great Lakes and Great Plains populations. Piping plovers at Lake of the Woods should be considered part of the endangered Great Lakes breeding population instead of part of the threatened Great Plains breeding population.

*Response:* We agree that the piping plovers that nest at Lake of the Woods, Minnesota represent an important link between the Great Lakes and Great Plains populations. Piping plovers that nest at Lake of the Woods are considered part of the Great Plains population because current data suggested that they are more closely associated with plovers in nearby Manitoba, Canada (Haig and Oring, 1988). Proposed critical habitat for piping plovers at Lake of the Woods will

be considered in the proposal to designate critical habitat for the Great Plains piping plover, to be published on or before May 31, 2001.

(5C) *Comment:* Many commenters suggested additional protection for piping plovers, beyond the designation of critical habitat.

*Response:* Other conservation actions, besides the designation of critical habitat, are crucial to the recovery and survival of the piping plover. These other actions, including public education, predator control, law enforcement, and monitoring are addressed in the 1988 and 1994 Recovery Plans for Piping Plovers Breeding in the Great Lakes and Northern Great Plains. We are currently revising these recovery plans and the public will be provided the opportunity to comment on the draft revised plan.

(5D) *Comment:* One commenter stated that the effect of critical habitat should include situations that are not funded, authorized, or carried out by a Federal agency.

*Response:* Once designated, critical habitat has only one regulatory impact: under section 7(a)(2) of the Act, Federal agencies must, in consultation with the Service, ensure that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. By law, the effect of critical habitat does not extend to situations that do not involve a Federal nexus.

#### **Summary of Changes From Proposed Rule**

Based on a review of public comments received on the proposed determination of critical habitat for the Great Lakes breeding population of the piping plover, we re-evaluated our proposed designation of critical habitat for the piping plover. This re-evaluation resulted in the following changes that are reflected in this final determination.

#### *Removal of Proposed Units*

Based on comments received on the proposal and site visits following the publication of the proposal, we removed three sites—Pensaukee Harbor and Peshtigo Point, Wisconsin and Erie Pier/Hearing Island, Minnesota—from this final critical habitat designation. We determined that these sites do not have, and are unlikely to develop, the features and habitat characteristics that are necessary to sustain the species and thus we no longer consider these areas to be essential for the conservation of the species.

### *Change in Extent of Inland Boundary*

The proposed 1 km (0.6 mi.) inland boundary was intended to incorporate dune blow-out areas and extensive dune-wetland systems. These inland areas provide important foraging habitat, as well as cobble pans between the dunes where plovers occasionally nest. Data gathered during the public comment period indicate that the majority of the dune systems within designated critical habitat do not extend further than 500 m (1,640 ft) inland from the normal high water line. Therefore, in this final determination, the inland boundary for all critical habitat units was changed from the proposed 1 km (0.6 mi) to 500 m (1,640 ft) inland from normal high water line.

### *Errors in Unit Descriptions*

Several comments pointed out corrections or clarifications to unit descriptions. We applied this corrected information to the final rule and adjusted the verbal descriptions of 10 units; White Fish Point to Grand Marais (MI-1), Seven Mile Point to Thornswift Nature Preserve (MI-5), Petoskey State Park (MI-6), Greenes Bay-Beaver Island (MI-10), High Island (MI-11), South Fox Island (MI-13), Esch Road to Sutter Road and Point Betsie (MI-16), Lighthouse Point to Cordwood Point (MI-20), Thompson's Harbor (MI-22), and Illinois Beach State Park/Waukegan Beach (IL-1). None of the changes resulted in any significant alteration of the units.

### *Refined Unit Boundaries*

The boundaries of several of the units were refined to better reflect the areas that are essential to the conservation of the Great Lakes breeding population of the piping plover. The southeastern boundary of the unit at Long Island-Chequamegon Point, Wisconsin (WI-2) was moved northwestward approximately 5 km (3.1 mi) to the base of Chequamegon Point at the southern boundary of T48N R3W, section 1. This change was the result of discussions with the Bad River Band of Lake Superior Chippewa Indians and the Wisconsin Department of Natural Resources. The revised boundary excludes areas that do not have the required habitat features for nesting piping plovers and, therefore, are not essential to the conservation of the species. Additionally, the description of this unit given in the proposal, although inclusive of the entire peninsula, only calculated the length of the peninsula, not the perimeter shoreline of the peninsula. The calculation of the length of this unit as presented in this final

determination includes the entire perimeter of the peninsula, and therefore appears to be larger, when in actuality it has been reduced by approximately 5 km (3.1 mi). The proposal states that the unit was 18 km (11.2 mi) long when, consistent with the verbal description and calculating both sides of the peninsula, it was actually 30.3 km (18.8 mi) long. Therefore, this unit is being reduced from 30.3 km (18.8 mi) to 25.3 km (15.7 mi) in this final determination.

The western boundary of the Indiana Dunes (IN-1) unit was moved approximately 549 meters (1,800 feet) eastward to the western boundary of Indiana Dunes National Lakeshore. This revised boundary excludes lands owned by the Northern Indiana Public Service Company (NIPSCO) that do not have the required habitat features for nesting piping plovers and, therefore, are not essential to the conservation of the species.

The southeastern boundary of the Pennsylvania unit (PA-1) at Gull Point Natural Area/Presque Isle State Park was moved approximately 2.3 km (1.4 mi) north. The refined boundary excludes the public beach area that does not have the required habitat features for nesting piping plovers and, therefore, is not essential to the conservation of the species. Additionally, the length of this unit was miscalculated in the proposed rule. The proposal states that the unit was 1.5 km (0.9 mi) long when, consistent with the verbal description, it was actually 8.3 km (5.1 mi) long. Therefore, this unit is being reduced from 8.3 km (5.1 mi) to 6.0 km (3.7 mi) in this final determination.

### *Exclusions Under Section 4(b)(2) of the Act*

In our proposed determination of critical habitat for the Great Lakes population of the piping plover, we asked for public comment on the appropriate relationship between approved HCPs and designated critical habitat. After considering the comments we received, we have chosen to evaluate areas covered by an approved HCP for the piping plover for exclusion under the benefits-balancing test found in section 4(b)(2) of the Act. This section allows us to exclude areas upon determination that the benefits of excluding the area outweigh the benefits of including the area in the critical habitat designation, provided the exclusion would not result in the extinction of the species. Our application of this balancing test to lands covered by HCPs for the piping

plover is described in detail in the preamble.

Presently, one approved HCP exists for the piping plover in the Great Lakes region. The Magic Carpet Woods Association HCP covers approximately 792 m (2,600 ft) of shoreline within the proposed Cathead Bay critical habitat unit in Leelanau County, Michigan. This plan addresses the piping plover as a covered species and provides conservation management and protection for the species. We evaluated this plan and determined that the conservation management measures and protection afforded to the piping plover are sufficient to assure its conservation on the involved lands. Among other features, the plan requires residences be set back from the beach, biological monitoring, the presence of a piping plover steward, containing garbage, and restraining pets. Therefore, we have excluded the lands covered by the Magic Carpet Woods Association HCP from the final determination of critical habitat for the Great Lakes breeding population of the piping plover.

### **Economic Analysis**

Section 4(b)(2) of the Act requires us to designate critical habitat on the basis of the best scientific and commercial data available and to consider the economic and other relevant impacts of designating a particular area as critical habitat. We may exclude areas from critical habitat upon a determination that the benefits of such exclusions outweigh the benefits of specifying such areas as critical habitat. We cannot exclude such areas from critical habitat when such exclusion will result in the extinction of the species.

The economic analysis must examine the incremental economic effects of the critical habitat designation above those effects of the listing. Economic effects are measured as changes in national income, regional jobs, and household income. A draft analysis of the economic effects of the critical habitat designation for the Great Lakes breeding population of the piping plover was prepared (Industrial Economics, Incorporated, 2000) and made available for public review (September 19 to November 20, 2000; 65 FR 56530 and 65 FR 58258). We also completed a final economic analysis that incorporated public comments, information gathered since the draft analysis, and changes to the critical habitat designation. The analysis found that there would be an economic impact from the designation that would vary on a situational level, and that most of the impact would come in the form of new section 7 consultations in unoccupied habitat

units. In the economic analysis, we estimate that, over the next ten years, the total costs by landowners associated with consultation and technical assistance attributable to this rulemaking will range between \$314,200 and \$592,000. Our economic analysis also recognizes that there may be costs from delays associated with reinitiating previously completed consultations after the critical habitat designation is made final. There may also be economic effects due to the reaction of the real estate market to critical habitat designation, as real estate values may be lowered due to a perceived increase in the regulatory burden. However, we believe this impact will be minor and short-term. We have determined that these economic impacts do not warrant excluding any areas from the designation.

A copy of the final economic analysis is included in our administrative record

and may be obtained by contacting our office (see **ADDRESSES** section).

### Required Determinations

#### *Regulatory Planning and Review*

This document has been designated as significant and reviewed by the Office of Management and Budget (OMB), in accordance with Executive Order 12866. OMB makes the final determination of significance under Executive Order 12866.

(a) This rule will not have an annual economic effect of \$100 million or more or adversely affect an economic sector, productivity, jobs, the environment, or other units of government. The Great Lakes breeding population of piping plover was listed as an endangered species in 1985. In fiscal years 1992 through 2000, we conducted only one formal section 7 consultation with other Federal agencies to ensure that their actions would not jeopardize the continued existence of the piping plover

in the Great Lakes watershed. We have also issued one section 10(a)(1)(B) incidental take permit for an entity that has prepared an HCP involving piping plover habitat.

Approximately 236 km (146 mi) of the areas encompassing proposed critical habitat for the Great Lakes breeding population of piping plovers are currently unoccupied by piping plovers. The remaining 89 km (55 mi) of the total designated critical habitat are currently occupied by piping plovers. Under the Act, critical habitat may not be adversely modified or destroyed by a Federal agency action; it does not impose any restrictions on non-Federal entities unless they are conducting activities funded or otherwise sponsored or permitted by a Federal agency (see Table 3 below). Section 7 requires Federal agencies to ensure that they do not jeopardize the continued existence of the species.

TABLE 3.—ACTIVITIES POTENTIALLY IMPACTED BY PIPING PLOVER LISTING AND CRITICAL HABITAT DESIGNATION

| Categories of activities  | Activities potentially affected by species listing only <sup>1</sup>  | Additional activities potentially affected by critical habitat designation <sup>2</sup>                     |
|---|---|---|
| Federal Activities Potentially Affected. <sup>3</sup> .....                       | Direct take and activities such as removing or destroying piping plover breeding habitat, whether by mechanical, chemical, or other means (e.g., construction, road building, boat launch and marina construction or maintenance, beach nourishment); recreational activities that significantly deter the use of suitable habitat areas by piping plovers or alter habitat through associated maintenance activities (e.g., off-road vehicle parks, paved walking paths); sale, exchange, or lease of Federal land that contains suitable habitat that may result in the habitat being destroyed or appreciably degraded (e.g., shoreline development, building of recreational facilities such as off-road vehicle parks, road building); activities that may result in increased human activity and disturbance. | Activities by Federal agencies in any unoccupied critical habitat areas.                                    |
| Private and other non-Federal Activities Potentially Affected. <sup>4</sup> ..... | Direct take and activities such as removing or destroying piping plover habitat, whether by mechanical, chemical, or other means (e.g., construction, road building, boat launch and marina construction or maintenance, beach nourishment) and appreciably decreasing habitat value or quality (e.g., increased predation, invasion of exotic species, increased human presence or disturbance) that require a Federal action (permit, authorization, or funding).   | Funding, authorization, or permitting actions by Federal Agencies in any unoccupied critical habitat areas. |

<sup>1</sup> This column represents the activities potentially affected by listing the piping plover as an endangered species (December 11, 1985; 50 FR 50726) under the Endangered Species Act.

<sup>2</sup> This column represents the activities potentially affected by the critical habitat designation in addition to those activities potentially affected by listing the species.

<sup>3</sup> Activities initiated by a Federal agency.

<sup>4</sup> Activities initiated by a private or other non-Federal entity that may need Federal authorization or funding.

Based upon our experience with the species and its needs, we conclude that any Federal action or authorized action that could potentially cause adverse modification of designated occupied critical habitat would currently be considered “jeopardy” under the Act. Accordingly, the designation of areas within the geographic range occupied by the piping plover will not likely have any incremental impacts on what actions may or may not be conducted by

Federal agencies or non-Federal persons that receive Federal authorization or funding. The designation of areas outside the geographic range already occupied by the species may have incremental impacts on what activities may or may not be conducted by Federal agencies or non-Federal persons that receive Federal authorization or funding. However, our analysis did not identify any significant incremental effects. Non-Federal persons that do not

have a Federal “sponsorship” of their actions are not restricted by the designation of critical habitat, although they continue to be bound by the provisions of the Act concerning “take” of the species.

(b) This rule will not create inconsistencies with other agencies’ actions. As discussed above, Federal agencies have been required to ensure that their actions do not jeopardize the continued existence of piping plovers

since the listing in 1985. The prohibition against adverse modification of critical habitat is not expected to impose any substantial additional restrictions to those that currently exist. Because of the potential for impacts on other Federal agency activities, we will continue to review this action for any inconsistencies with other Federal agency actions.

(c) This rule will not materially affect entitlements, grants, user fees, loan programs, or the rights and obligations of their recipients. Federal agencies are currently required to ensure that their activities do not jeopardize the continued existence of the species, and, as discussed above, we do not anticipate that the adverse modification prohibition (resulting from critical habitat designation) will have any significant incremental effects in areas of occupied habitat. The critical habitat designation may have some additional effects on the unoccupied areas of proposed critical habitat, but we expect these to be minor.

(d) OMB has determined that this rule may raise novel legal or policy issues and, as a result, this rule has undergone OMB review.

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

In the economic analysis, we determined that designation of critical habitat will not have a significant effect on a substantial number of small entities. As discussed under Regulatory Planning and Review above, this designation of critical habitat for the Great Lakes breeding population of the piping plover is not expected to have a significant economic impact. As indicated on Table 1 (see Critical Habitat Designation section), we designated property owned by Federal, State, Tribal, and local governments and private property.

Within these areas, the types of Federal actions or authorized activities that we have identified as potential concerns are:

(1) Regulation of activities affecting waters of the United States by the U.S. Army Corps of Engineers under section 404 of the Clean Water Act;

(2) Regulation of water flows, water delivery, and diversion by Federal agencies;

(3) Sale, exchange, or lease of lands owned by a Federal agency;

(4) Road construction and maintenance and right-of-way designation;

(5) Funding of low-interest loans to facilitate the construction of low-income housing by the Department of Housing and Urban Development;

(6) Hazard mitigation and post-disaster repairs funded by the Federal Emergency Management Agency;

(7) Promulgation of air and water quality standards under the Clean Air Act and the Clean Water Act and the cleanup of toxic waste and superfund sites under the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act by the U.S. Environmental Protection Agency;

(8) Issuance of Endangered Species Act section 10(a)(1)(B) permits by the Fish and Wildlife Service; and

(9) Activities funded, carried out, or authorized by any Federal agency.

Some of these activities sponsored by Federal agencies within the critical habitat areas are carried out by small entities (as defined by the Regulatory Flexibility Act) through contract, grant, permit, or other Federal authorization. As discussed above, these actions are largely required to comply with the listing protections of the Act, and the designation of critical habitat is not anticipated to have significant additional effects on these activities in areas of critical habitat occupied by the species. Designation of critical habitat in areas that are unoccupied by this species will not likely result in significant additional effects because only actions involving a Federal nexus will be affected.

For actions on non-Federal property that do not have a Federal connection (such as funding or authorization), the current restrictions concerning take of the species remain in effect, and this final determination will have no additional restrictions.

#### **Small Business Regulatory Enforcement Fairness Act (5 U.S.C. 804(2))**

In the economic analysis, we determined that designation of critical habitat will not cause (a) any effect on the economy of \$100 million or more, (b) any increases in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions, or (c) any significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises. Refer to the final economic analysis for a discussion of the effects of this determination.

#### **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.):

(a) This rule will not "significantly or uniquely" affect small governments. A Small Government Agency Plan is not required. Small governments will be affected only to the extent that any of their actions involving Federal funding or authorization must not destroy or adversely modify the critical habitat in areas where they have not previously undergone consultation to avoid jeopardizing the species.

(b) This rule will 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 designation of critical habitat imposes no obligations on State or local governments.

#### **Takings**

In accordance with Executive Order 12630, this rule does not have significant takings implications, and a takings implication assessment is not required. This determination will not "take" private property and will not alter the long-term value of private property. As discussed above, the designation of critical habitat affects only Federal agency actions. The rule will not increase or decrease the current restrictions on private property concerning take of the piping plover. Due to current public knowledge of the species protection, the prohibition against take of the species both within and outside of the designated areas, and the fact that critical habitat provides no incremental restrictions, we do not anticipate that property values will be affected by the critical habitat designation. While real estate market values may temporarily decline following designation, due to the perception that critical habitat designation may impose additional regulatory burdens on land use, we expect any such impacts to be short term. Additionally, critical habitat designation does not preclude development of HCPs and issuance of incidental take permits. Landowners in areas that are included in the designated critical habitat will continue to have the opportunity to utilize their property in ways consistent with the conservation of the piping plover.

#### **Federalism**

In accordance with Executive Order 13132, the 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, the Service requested information from and coordinated development of this critical habitat proposal with appropriate State

resource agencies in Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio, Pennsylvania, and New York, as well as during the listing process. We will continue to coordinate any future designation of critical habitat for the Great Lakes piping plover with the appropriate State agencies. The designation of critical habitat for the piping plover imposes few additional restrictions to those currently in place and, therefore, has little incremental impact on State and local governments and their activities. The designation may have some benefit to these governments in that the areas essential to the conservation of the species are more clearly defined, and the primary constituent elements of the habitat necessary for the conservation of the species are specifically identified. This definition and identification may assist these local governments in long-range planning (rather than waiting for case-by-case section 7 consultations to occur).

#### Civil Justice Reform

In accordance with Executive Order 12988, the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order. We designate critical habitat in accordance with the provisions of the Act. The determination uses standard property descriptions and identifies the primary constituent elements within the designated areas to assist the public in understanding the habitat needs of the Great Lakes breeding population of piping plover.

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

This rule does not contain any information collection requirements for which Office of Management and Budget approval under the Paperwork Reduction Act is required.

#### National Environmental Policy Act

We have determined that an Environmental Assessment and/or an Environmental Impact Statement as defined by the National Environmental Policy Act of 1969 need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act as amended. A notice outlining our reason for this determination was published in the **Federal Register** on October 25, 1983 (48 FR 49244). This final determination does not constitute a major Federal action significantly affecting the quality of the human environment.

#### 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 Government" (59 FR 22951), Executive Order 13175, and the Department of the Interior's requirement at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a Government-to-Government basis. We believe that certain Tribal lands are essential for the conservation of the piping plover because they support essential populations and habitat. We

coordinated with the Bad River Band of Lake Superior Chippewa Indians in determining which Tribal lands constitute critical habitat, and have included that area in the critical habitat designation.

#### References Cited

A complete list of all references cited in this proposed rule is available upon request from the Fort Snelling Regional Office (see **ADDRESSES** section).

#### Author

The primary author of this notice is Laura J. Ragan (see **ADDRESSES** section).

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

Endangered and threatened species, Exports, Imports, Reporting and record keeping requirements, Transportation.

#### Regulations Promulgation

For the reasons given in the preamble, 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; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99–625, 100 Stat. 3500; unless otherwise noted.

2. In § 17.11(h) revise the first entry for "Plover, piping" under "BIRDS" 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            |  |   |        |             |                  |               |
| *                    | *                          | *  | *   | *      | *           |                  | *             |
| BIRDS                |                            |  |   |        |             |                  |               |
| *                    | *                          | *  | *   | *      | *           |                  | *             |
| Plover, piping ..... | <i>Charadrius melodus.</i> | U.S.A. Great Lakes northern Great Plains, Atlantic and Gulf coasts, PR, VI), Canada, Mexico, Bahamas, West Indies. | Great Lakes watershed in States of IL, IN, MI, MN, NY, OH, PA, and WI and Canada (Ont.).. | E      | 211         | 17.95(b)         | NA            |
| *                    | *                          | *  | *   | *      | *           |                  | *             |

3. Amend § 17.95(b) by adding critical habitat for the Great Lakes piping plover (*Charadrius melodus*) under paragraph (b) in the same alphabetical order as this species occurs in § 17.11 (h) to read as follows:

#### § 17.95 Critical habitat—fish and wildlife.

\* \* \* \* \*

##### (b) Birds.

\* \* \* \* \*

PIPING PLOVER (*Charadrius melodus*)—Great Lakes Breeding Population

1. Critical habitat units are depicted for St. Louis County, Minnesota; Douglas, Ashland, Marinette, and Manitowoc Counties, Wisconsin; Lake County, Illinois; Porter County, Indiana; Erie and Lake Counties, Ohio; Erie County, Pennsylvania; Oswego and

Jefferson Counties, New York; and Alger, Schoolcraft, Luce, Mackinac, Chippewa, Iosco, Presque Isle, Cheboygan, Emmet, Charlevoix, Leelanau, Benzie, Mason, and Muskegon Counties, Michigan, on the maps below.

2. i. The primary constituent elements required to sustain the Great Lakes breeding population of the piping plover are found on Great Lakes islands and mainland shorelines that support open, sparsely vegetated sandy habitats, such as sand spits or sand beaches, that are associated with wide, unforested systems of dunes and inter-dune wetlands. In order for habitat to be physically and biologically suitable for piping plovers, it must have a total shoreline length of at least 0.2 km (0.12 mi) of gently sloping, sparsely vegetated (less than 50 percent herbaceous and low woody cover) sand beach with a total beach area of at least 2 hectares (ha) (5 acres (ac)) and a low level of disturbance from human activities and from domestic animals. As the nesting season progresses, the level of disturbance tolerated by piping plovers increases. A lower level of disturbance is required at the beginning of the nesting period during nest site selection,

egg laying, and incubation. Beach activities that may be associated with a high level of disturbance include, but are not limited to, walking pets off leash, loud noise, driving ATVs, or significantly increased human presence. The level of disturbance is relative to the proximity to the nest, intensity, and frequency of these and other similar activities.

ii. Appropriately sized sites must also have areas of at least 50 meters (m) (164 feet (ft)) in length where the beach width is more than 7 m (23 ft), there is protective cover for nests and chicks, and the distance to the treeline (from the normal high water line to where the forest begins) is more than 50 m (164 ft). Beach width is defined as the distance from the normal high water line to the foredune (a low barrier dune ridge immediately inland from the beach) edge, or to the sand/vegetation boundary in areas where the foredune is absent. The beach width may be narrower than 7 m (23 ft) if appropriate sand and cobble areas of at least 7 m (23 ft) exist between the dune and the treeline. Protective cover for nests and chicks consists of small patches of herbaceous vegetation, cobble (stones larger than 1 cm (0.4 inches (in))

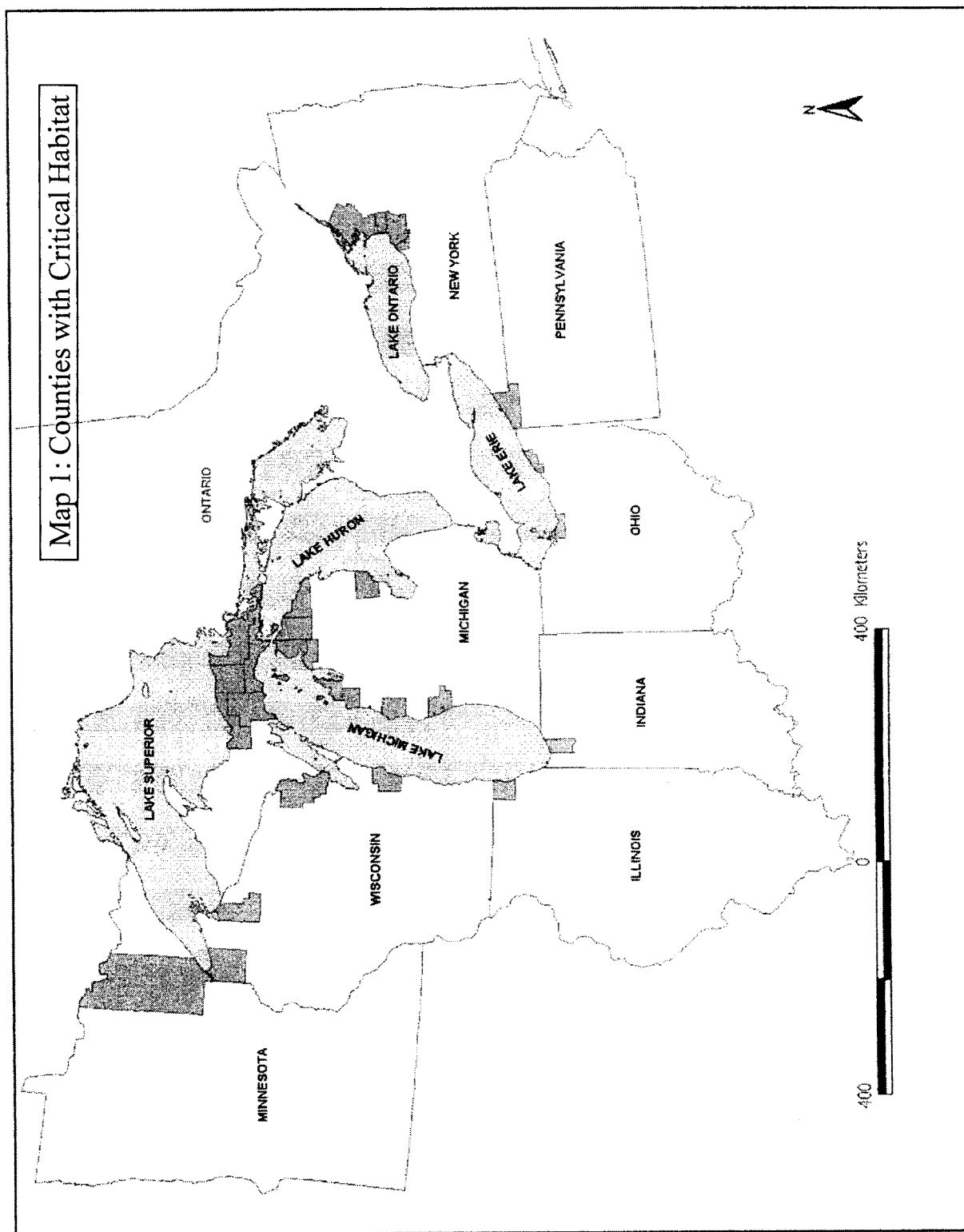
diameter), gravel (stones smaller than 1 cm (0.4 in) diameter), or debris such as driftwood, wrack, root masses, or dead shrubs.

iii. The dynamic ecological processes that create and maintain piping plover habitat are also important primary constituent elements. These geologically dynamic lakeside regions are controlled by processes of erosion, accretion, plant succession, and lake-level fluctuations. The integrity of the habitat components depends upon regular sediment transport processes, as well as episodic, high-magnitude storm events. By their nature, Great Lakes shorelines are in a constant state of change; habitat features may disappear, or be created nearby. The critical habitat boundaries reflect these natural processes and the dynamic character of Great Lakes shorelines.

3. Critical habitat does not include existing features and structures, such as buildings, marinas, paved areas, boat ramps, piers, bridges, lighthouses, and similar structures not containing one or more of the primary constituent elements.

**Note:** Maps follows:

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*Map of Units MN/WI-1, WI-1, WI-2, and WI-3*

MN/WI-1: St Louis County, Minnesota. From USGS 1:24,000 quadrangle map West Duluth, Minnesota (1953, photorevised 1969). Lands 500 m (1640 feet) inland from normal high water line on Interstate Island in T49N R14W S10

WI-1: Douglas County, Wisconsin. From USGS 1:24,000 quadrangle maps Parkland, Wisconsin (1954, photorevised 1975) and Superior, Wisconsin (1954, photorevised

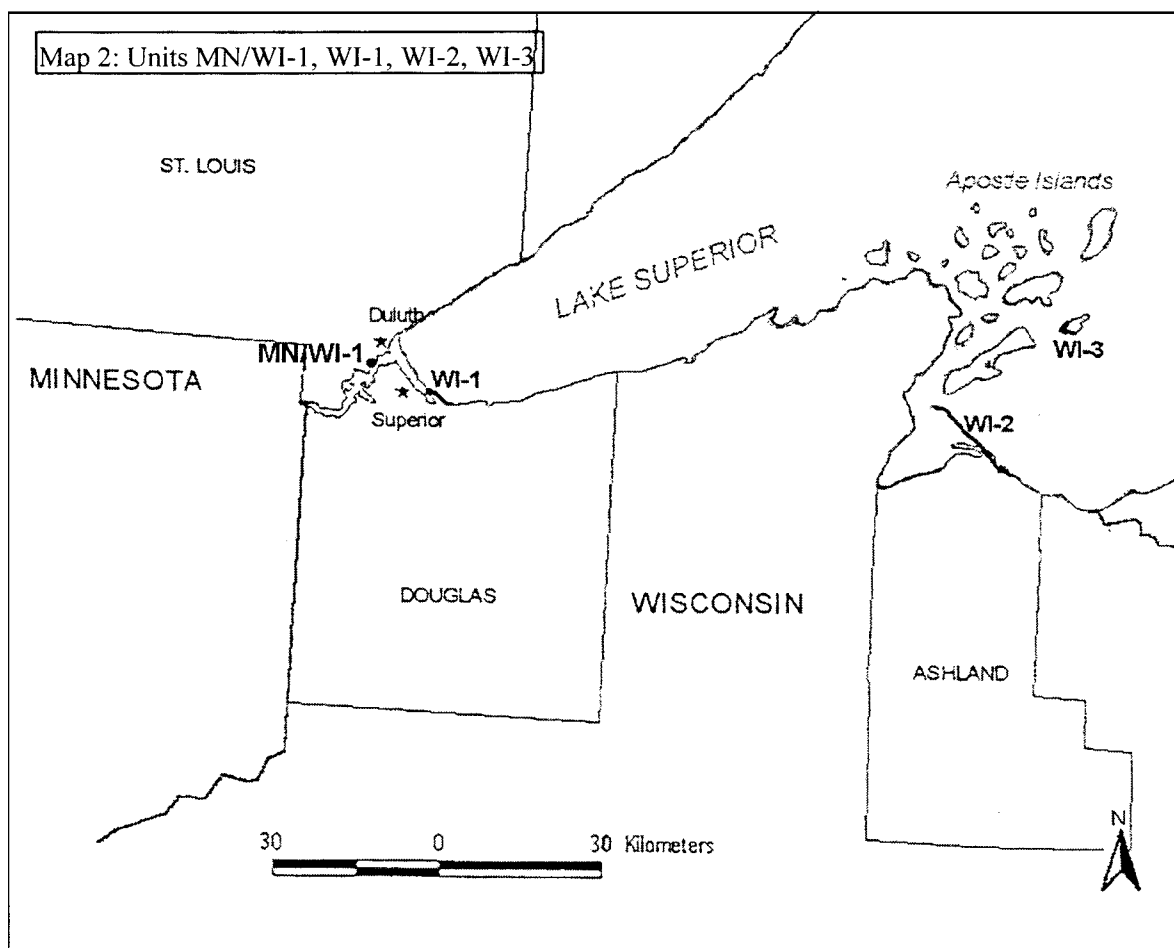
1983). Lands 500 meters (1640 feet) inland from normal high water line from the mouth of Dutchman Creek west-northwestward along the Lake Superior shoreline to the breakwall forming the Superior Front Channel opening to Lake Superior at the Douglas and St. Louis County line.

WI-2: Ashland County, Wisconsin. From USGS 1:24,000 quadrangle maps Cedar, Wisconsin (1964, photorevised 1975); Chequamegon Point, Wisconsin (1964, photorevised 1975); and Long Island, Wisconsin (1964). Lands 500 meters (1640

feet) inland from normal high water line from the southern boundary of T48N R3W, section 1 northwestward along the Lake Superior shoreline to Chequamegon Point Light.

WI-3: Ashland County, Wisconsin. From USGS 1:24,000 quadrangle map Michigan Island, Wisconsin (1963). Lands 500 meters (1640 feet) inland from normal high water line on Michigan Island within T51N R1W sections 28, 20, and 21.

**Note:** Map follows:



*Map of Units WI-4 and WI-5*

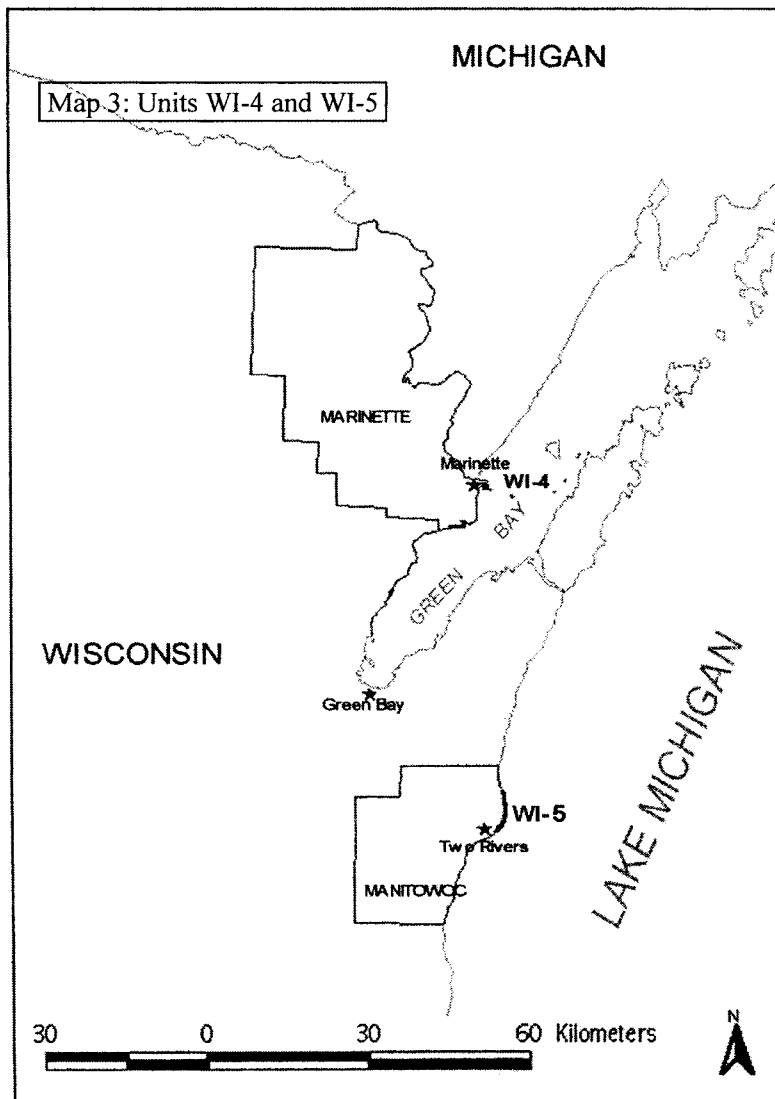
WI-4: Marinette County, Wisconsin. From USGS 1:24,000 quadrangle map Marinette East, Wisconsin (1963, photorevised 1969). Lands 500 m (1640 ft) inland from normal high water line from the end of Leonard Street at Red Arrow Park in T30N R24E

section 9 south-southeastward to the south end of Seagull Bar including nearshore sand bars.

WI-5: Manitowoc County, Wisconsin. From USGS 1:24,000 quadrangle map Two Rivers, Wisconsin (1978). Lands 500 m (1640 ft) inland from normal high water line from

the southwest property boundary of Point Beach State Forest near Neshotah Park in the city of Twin Rivers (T20N R25E section 31) northwestward along the Lake Michigan shoreline to the south boundary of section 9, T20N R25E, at Rawley Point.

**Note:** Map follows:



### Map of Units IL-1 and IN-1

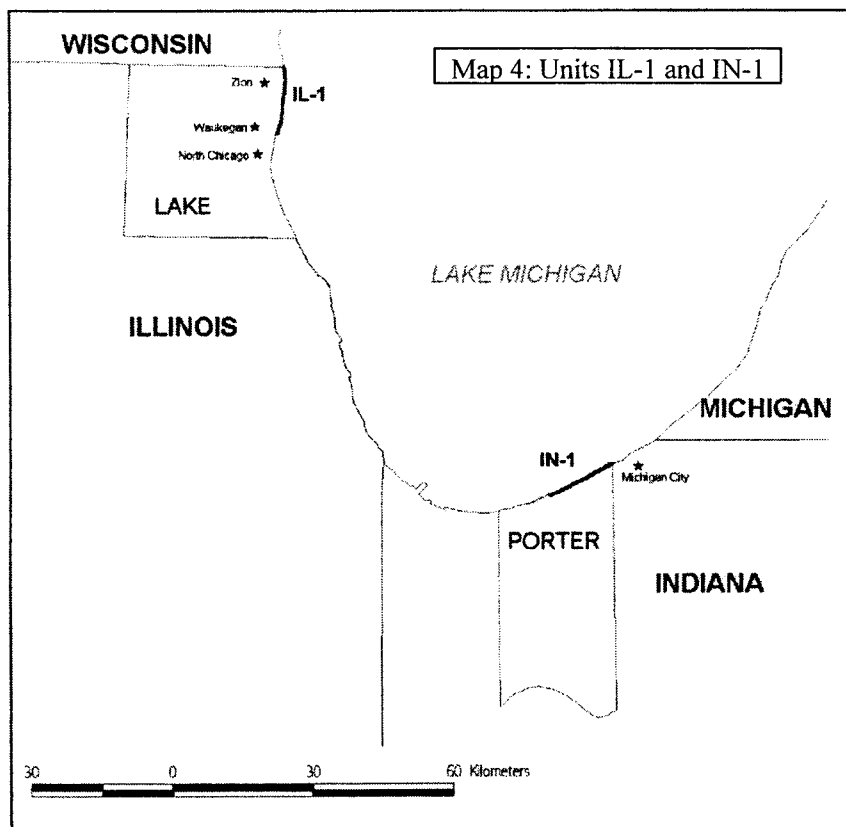
IL-1: Lake County, Illinois. From USGS 1:24,000 quadrangle maps Zion, Illinois (1993) and Waukegan, Illinois (1993). Lands 500 m (1640 ft) inland from normal high water line from 17th Street and the Lake Michigan shoreline in Illinois Beach State Park T46N R12E section 14 (Zion, Ill. quad) southward along the Lake Michigan shoreline

(excluding the portion of Lake Michigan shoreline from dividing line of T46N R12E sections 23 and 26 to 500 m (1,640 ft) south of the Illinois Beach State Park Lodge and Conference Center) to the Waukegan Beach breakwall at North Beach Park T45N R12E section 22 (Waukegan quad).

IN-1: Porter County, Indiana. From USGS 1:24,000 quadrangle maps Ogden Dunes,

Indiana (1991) and Dune Acres, Indiana (1991). Lands 500 m (1640 ft) inland from normal high water line from the western boundary of the Cowels Bog/Dune Acres Unit, (located east of the Port of Indiana and the NIPSCO Baily Generating Station) east-northeastward along the Indiana Dunes State Park to Kemil Road at Beverly Shores.

**Note:** Map follows:



### Map of Units MI-1 through MI-23

MI-1: Chippewa, Luce, and Alger Counties, Michigan. From USGS 1:24,000 quadrangle maps Whitefish Point, Michigan (1951); Vermilion, Michigan (1951); Betsy Lake North, Michigan (1968); Muskallonge Lake East, Michigan (1968); Muskallonge Lake West, Michigan (1968); and Grand Marais, Michigan (1968). Lands 500 m (1640 ft) inland from normal high water line within the junction of the southern boundary of T50N R5W section 6 (Whitefish Point quad) and including the shore of Lake Superior following the shoreline northeast to Whitefish Point, then following the Lake Superior shoreline westward around the point (Vermilion SE, Vermilion quads), crossing the Luce County line and continuing westward (Betsy Lake North, Betsy Lake Northwest) across the Alger County line (Grand Marais East) to Lonesome Point and the East Bay of the Sucker River (Grand Marais quad) and following the shoreline along the inner bay of Grand Marais Harbor past Carpenter Creek and ending at the shoreline north of the east end of the private road originating at the junction of Highway

58, Morris Road, and Veteran Road. The unit then continues from the breakwall north of the harbor, along the Lake Superior shoreline of Grand Marais near the former Coast Guard station (Grand Marais quad) westward along the Lake Superior shoreline to the Pictured Rocks National Lakeshore property boundary in T49N R14W section 1.

MI-2: Mackinac County, Michigan. From USGS 1:24,000 quadrangle map Pointe Aux Chenes, Michigan (1964, photorevised 1975). Lands 500 m (1640 ft) inland from normal high water line from the mouth of the Pointe Aux Chenes river following the Lake Michigan shoreline northwestward to the Hiawatha National Forest property boundary at the junction of T41N R5W sections 23 and 26.

MI-3: Schoolcraft and Mackinac Counties, Michigan. From USGS 1:24,000 quadrangle map Hughes Point, Michigan (1972). Lands 500 m (1640 ft) inland from normal high water line from the westernmost breakwall at the Port Inland Gaging Station following the Lake Michigan shoreline eastward along Hughes Point to the mouth of Swan Creek.

MI-4: Emmet County, Michigan. From USGS 1:24,000 quadrangle maps Big Stone

Bay, Michigan (1964, photoinspected 1975); Waugoshance Island, Michigan (provisional 1982); Bliss, Michigan (1982); Cross Village, Michigan (1982). Lands 500 m (1640 ft) inland from normal high water line from the junction of the northeast corner of T39N R5W section 28 (Big Stone Bay quad) and Lake Michigan shoreline westward along the shoreline around and including Temperance and Waugoshance islands and any nearshore sandbars (Waugoshance Island quad), along the southern side of Waugoshance Point following the shoreline southeastward to Big Sucker Creek, continuing southward and southwestward along Sturgeon Bay Point (Bliss quad) and continuing southward along the Lake Michigan shoreline to the southwest boundary of T37N R6W section 5.

MI-5: Emmet County, Michigan. From USGS 1:24,000 quadrangle map Forest Beach, Michigan. Lands 500 m (1640 ft) inland from normal high water line from the junction of Lake Michigan shoreline and the northwest boundary of T36N R6W section 30 south-southeastward along Lake Michigan shoreline to the junction of the shoreline and the southeast corner of T35N R6W section 9.

MI-6: Emmet County, Michigan. From USGS 1:24,000 quadrangle map Harbor Springs, Michigan. Lands 500 m (1640 ft) inland from normal high water line from the mouth of Tannery Creek north along Lake Michigan shoreline of Little Traverse Bay crossing the northern property boundary of Petoskey State Park to include the shoreline of Mononaqua Beach within T35N R5W sections 22 and 21.

MI-7: Charlevoix County, Michigan. From USGS 1:24,000 quadrangle maps Ironton, Michigan (1983) and Charlevoix, Michigan (1983). Lands 500 m (1640 ft) inland from normal high water line within T34N R8W section 14.

MI-8: Charlevoix County, Michigan. From USGS 1:24,000 quadrangle map Charlevoix, Michigan (1983). Lands 500 m (1640 ft) inland from normal high water line from the junction of the line separating T34N R8W section 31 and T33N R8W section 6 with the Lake Michigan shore then extends southwestward along the shoreline and including Fisherman's Island to the Fisherman's Island State Park property boundary at the end of Lakeshore Drive where it meets the line between T33N R9W sections 12 and 1.

MI-9: Charlevoix County, Michigan. From USGS 1:24,000 quadrangle maps Garden Island West, Michigan (1980) and Beaver Island North (1986). Lands 500 m (1640 ft) inland from normal high water line from Indian Point (Garden Island West quad) T39N R10W section 20 southward along the west Lake Michigan shoreline of Beaver Island including Donegal Bay and McCauley Point and ending at the junction of the dividing line of T39 N R10W and T38N R10W and the Lake Michigan shoreline (Beaver Island North quad).

MI-10: Charlevoix County, Michigan. From USGS 1:24,000 quadrangle map Beaver Island North (1986). Lands 500 m (1640 ft) inland from normal high water line from the junction of Lake Michigan and the northwest corner of T38N R11W section 25 southward along the Lake Michigan shoreline to the junction of the Lake Michigan shoreline and the dividing line between T39N and T38N R11W.

MI-11: Charlevoix County, Michigan. From USGS 1:24,000 quadrangle map High Island (1986). Lands 500 m (1640 ft) inland from normal high water line within T39N R11W sections 27 and 32 and T38N R11W section 5.

MI-12: Leelanau County, Michigan. From USGS 1:24,000 quadrangle maps Northport, Michigan (provisional 1983) and Northport NW, Michigan (provisional 1983). Lands 500 m (1640 ft) inland from normal high water line from the intersection of the Lake Michigan shoreline and the line between T32N R11W section 12 and T32N R10W section 7—excluding lands covered by the

Magic Carpet Woods Association HCP, approximately 2,600 feet of frontage on Cathed Bay within the east half of the southwest quarter and the west half of the southeast quarter of Section 14, T32N, R11W in Leelanau Township—then following the shoreline southwestward and past Cathed Point in T32N R11W section 15 (Northport quad) southwestward along the Lake Michigan shoreline to the intersection of the shoreline with the southern boundary of T32N R11W section 16 north of Christmas Cove (Northport NW quad).

MI-13: Leelanau County, Michigan. From USGS 1:24,000 quadrangle map South Fox Island (provisional 1986). Lands 500 m (1640 ft) inland from normal high water line within T34N R13W sections 15, 16, and 21 and T35R13W section 30.

MI-14: Leelanau County, Michigan. From USGS 1:24,000 quadrangle map North Manitou Island (provisional 1983). Lands 500 m (1640 ft) inland from normal high water line within T31N R14W sections 22, 23, 27 and 28 on North Manitou Island.

MI-15: Leelanau County, Michigan. From USGS 1:24,000 quadrangle maps Glen Arbor, Michigan (1983); Glen Haven, Michigan (1983); and Empire, Michigan (1983). Lands 500 m (1640 ft) inland from normal high water line from Crystal Run in T29N R14W section 14 (Glen Arbor quad) south-southwestward and westward along the Lake Michigan shoreline, then west-northwestward to Sleeping Bear Point (Glen Haven quad) and southwestward and south to the southern Sleeping Bear Dunes National Lakeshore property boundary in T28N R15W section 13 (Empire quad).

MI-16: Benzie County, Michigan. From USGS 1:24,000 quadrangle maps Empire, Michigan (1983); Beulah, Michigan (provisional 1983); and Frankfort, Michigan (1983). Lands 500 m (1640 ft) inland from normal high water line from Esch Road in T27N R15W section 1 (Empire quad) south-southwestward along the shoreline of Lake Michigan at Platte Bay (Beulah quad), then westward along the shoreline of Lake Michigan to Platte River Point (Frankfort quad) continuing west-southwestward to the Sleeping Bear Dunes National Lakeshore property boundary at Sutter Road in T27N R16W section 26. Continuing from the junction of Lake Michigan shoreline and Point Betsie Natural Area property boundary in T27N R16W section 33 southward along the Lake Michigan shoreline to include all shoreline within T26N R16W section 4.

MI-17: Mason County, Michigan. From USGS 1:24,000 quadrangle maps Manistee NW, Michigan (provisional 1923) and Hamlin Lake, Michigan (1982). Lands 500 m (1640 ft) inland from normal high water line from the mouth of Cooper Creek T20N R18W section 13 (Manistee NW quad) south-southwestward following the Lake Michigan

shoreline along Big Sable Point (Hamlin Lake quad) to the mouth of the Big Sable River T19N R18W section 19.

MI-18: Muskegon County, Michigan. From USGS 1:24,000 quadrangle map Muskegon West (1972, photoinspected 1980) and Dalton (1983). Lands 500 m (1640 ft) inland from normal high water line from the north breakwall of the canal joining Muskegon Lake and Lake Michigan (Muskegon West quad) north along the Lake Michigan shoreline to the northern Muskegon State Park property boundary at the shoreline (Dalton quad).

MI-19: Chippewa County, Michigan. From USGS 1:24,000 quadrangle maps Albany Island, Michigan (1964, photoinspected 1976) and DeTour Village, Michigan (1964). Lands 500 m (1640 ft) inland from normal high water line from the State Forest boundary in T41N R3E section 11 (Albany Island quad) and follows the Lake Huron shoreline east south eastward around and including St. Vital Point and then north to the mouth of Joe Straw Creek in T41N R3E section 12 (De Tour Village quad).

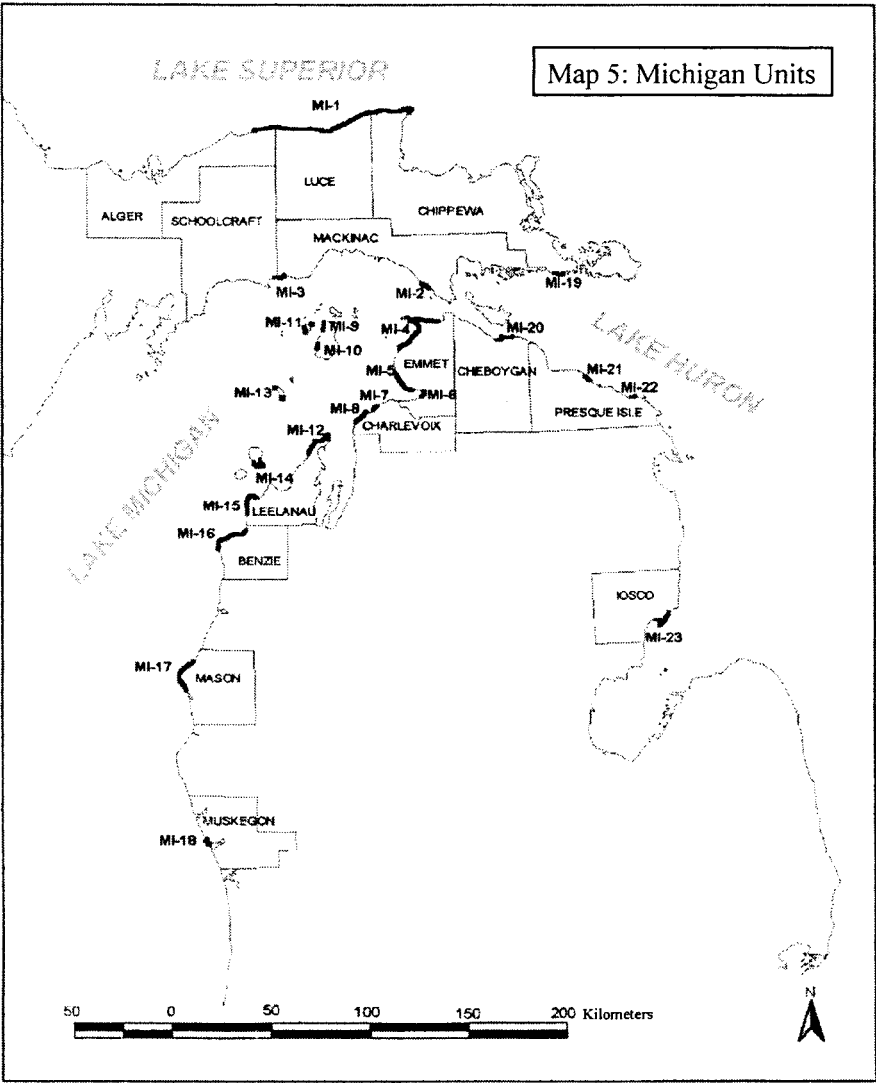
MI-20: Cheboygan County, Michigan. From USGS 1:24,000 quadrangle maps Cheboygan, Michigan (1982) and Cordwood Point, Michigan (1982). Lands 500 m (1640 ft) inland from normal high water line from the junction of the Lake Huron shoreline and the western boundary of T38N R1W section 22 (Cheboygan quad) eastward along the Lake Huron shoreline of Grass Bay, continuing to the western boundary of T38N R1E section 20 (Cordwood Point quad).

MI-21: Presque Isle County, Michigan. From USGS 1:24,000 quadrangle maps Roger's City, Michigan (1971) and Moltke, Michigan (1971). Lands 500 m (1640 ft) inland from normal high water line within T35N R5E section 6 and T36N R5E section 31 (Roger's City quad) continuing northwestward to the junction of Nagel Rd and Forty Mile Road at the junction of T36N R4E section 25 and T36N R5E section 30 (Moltke quad).

MI-22: Presque Isle County, Michigan. From USGS 1:24,000 quadrangle map Thompson's Harbor, Michigan (1971). Lands 500 m (1640 ft) inland from normal high water line from Black Point to Grand Lake Outlet including shoreline within T34N R7E sections 10, 11, 14, and 15.

MI-23: Iosco County, Michigan. From USGS 1:24,000 quadrangle map East Tawas, Michigan (1989). Lands 500 m (1640 ft) inland from normal high water line from the Tawas Sate Park boundary at the U.S. Coast Guard Station on the east side of Tawas Point southward along the Lake Huron shoreline including offshore sand spits and along the tip of the point and northeastward including all shoreline in T22N R8E section 34.

**Note:** Map follows:



*Map of Units OH-1 and OH-2*

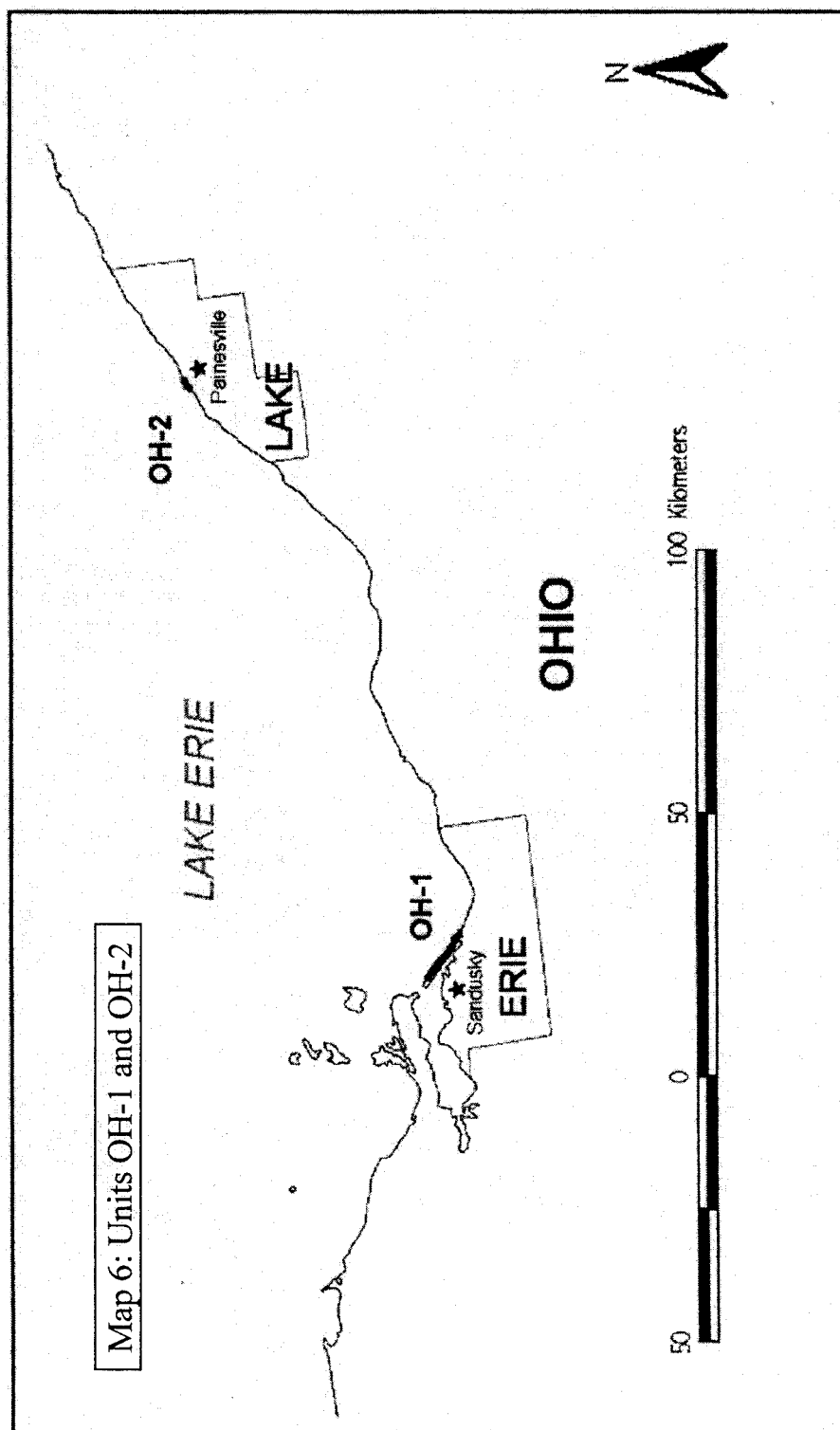
OH-1: Erie County, Ohio. From USGS 1:24,000 quadrangle maps Huron, Ohio (1969) and Sandusky, Ohio (1969, photorevised 1975). Lands 500 m (1640 ft) inland from normal high water line from the mouth of Sawmill Creek (Huron quad) northwestward along the Lake Erie shoreline

to the western property boundary of Sheldon Marsh State Natural Area in T6N R23W (Sandusky quad) at the point where the Cedar Point causeway turns west and south toward Sandusky.

OH-2: Lake County, Ohio. From USGS 1:24,000 quadrangle map Mentor, Ohio (1963, revised 1992). Lands 500 m (1640 ft)

inland from normal high water line from the eastern boundary line Headland Dunes Nature Preserve westward along the Lake Erie shoreline to the western boundary of the Nature Preserve and Headland Dunes State Park.

**Note:** Map follows:



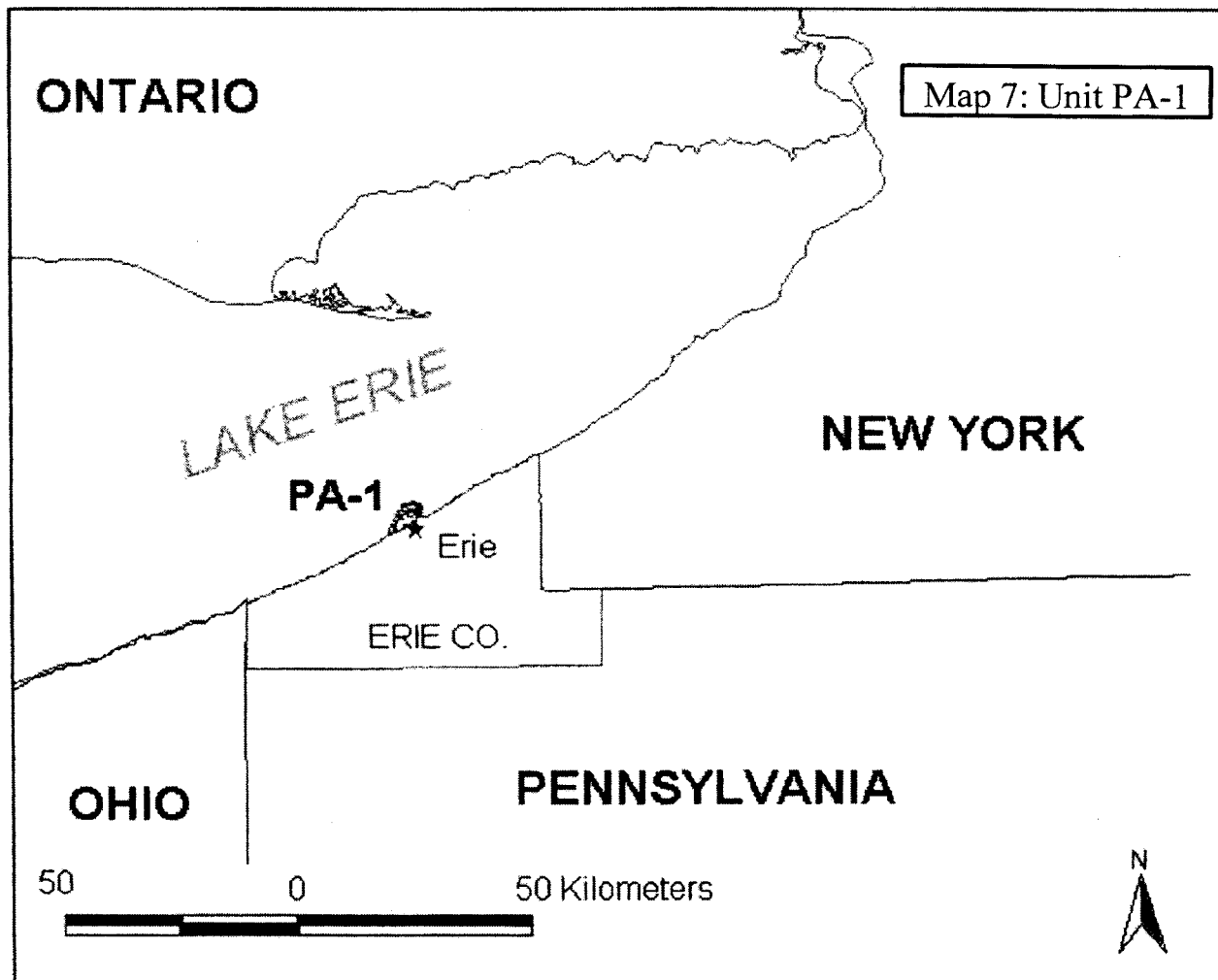
*Map of Unit PA-1*

PA-1: Erie County, Pennsylvania. From USGS 1:24,000 quadrangle map Erie North, Pennsylvania (1957, revised 1969 and 1975, photoinspected 1977). Lands 500 m (1640 ft) inland from normal high water line from the

lighthouse north of Peninsula Drive on the north side of Presque Isle (located at approximately 042 degrees 09' 57.41" N and 080 degrees 06' 57.57" W) eastward along the Lake Erie shoreline around the tip of Presque Isle peninsula to the southern terminus of the hiking trail on the southeast side of Gull

Point (located at approximately 042 degrees 10' 3.13" N and 080 degrees 04' 29.56" W). It includes any new beach habitat that may accrete along the present shoreline portion of the unit.

**Note:** Map follows:



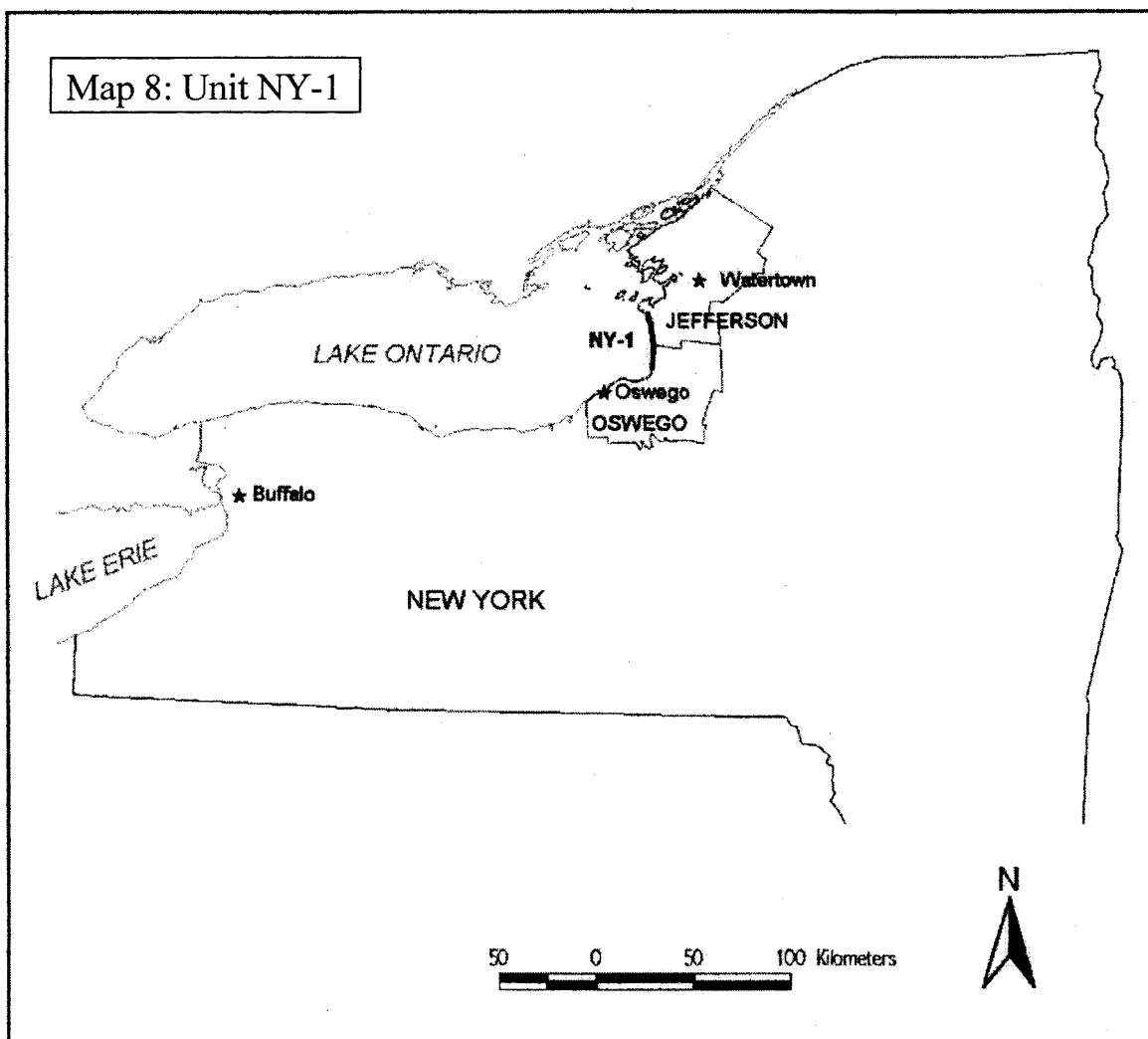
*Map of Unit NY-1*

NY-1: Oswego County, New York. From USGS 1:24,000 quadrangle maps Pulaski, New York (1956), Ellisburg, New York

(1958), and Henderson, New York (1959). Lands 500 m (1640 ft) inland from normal high water line from the mouth of the Salmon River (Pulaski quad) northward along the Lake Ontario shoreline to the Oswego

County-Jefferson County line (Ellisburg quad) and northward to the Eldorado Road (Henderson quad).

**Note:** Map follows:



\* \* \* \* \*

Dated: April 30, 2001.

**Joseph E. Doddridge,**  
*Acting Assistant Secretary for Fish and  
Wildlife and Parks.*

[FR Doc. 01-11205 Filed 5-2-01; 12:41 pm]

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