

## 1. Introduction

This document describes three alternatives for revising the Comprehensive Conservation Plan (Conservation Plan) for management of Tetlin National Wildlife Refuge (Tetlin Refuge; Refuge) and assesses the effects of implementing each of the options. When this revised plan is finalized, it will replace the management direction for Tetlin Refuge described in the original Tetlin National Wildlife Refuge Final Comprehensive Conservation Plan/Environmental Impact Statement/Wilderness Review (1987 Tetlin Conservation Plan or 1987 Conservation Plan; USFWS 1987a) and associated Record of Decision (USFWS 1987b) adopted in 1987.

The U.S. Fish and Wildlife Service (Service) administers approximately 700,000 acres of land and water in eastern interior Alaska's Upper Tanana Valley as Tetlin Refuge (Figure 1-1). This chapter provides background information that establishes the framework used to develop this document, including (1) purpose of and need for the Conservation Plan; (2) an overview of the Refuge, including historical perspective and refuge establishment; purposes, vision, and goals of the Refuge; and the environmental setting; (3) the legal context of refuge management; and (4) the planning process, including identification of significant planning issues addressed in the Plan.

Figure 1-1. Alaska National Wildlife Refuges



## 1.1 Purpose of and Need for Action

The purpose of this planning action is to revise the Tetlin Conservation Plan originally developed and adopted in 1987. The Tetlin Conservation Plan provides broad policy guidance and establishes management direction for the Refuge. It defines long-term goals and objectives toward which refuge management activities are directed, and identifies which uses are appropriate and may be compatible with the purposes of the Refuge and mission of the National Wildlife Refuge System (Refuge System). Conservation plans are viewed as dynamic documents, requiring periodic review and updating.

Federal statute, specifically Section 304(g) of the Alaska National Interest Lands Conservation Act (ANILCA) of 1980 as amended, 16 U.S.C. 140hh-3233, 43 U.S.C. 1602-1784 (ANILCA), directs the Secretary of the Interior to prepare, and from time to time revise, a “. . . comprehensive conservation plan . . . for each refuge (in Alaska) . . .”

The Service is revising the Tetlin Refuge Conservation Plan to provide direction for management of the Refuge for the next 10-15 years. The revised plan is being developed in accordance with guidance found in ANILCA and other Federal laws, primarily the National Wildlife Refuge System Administration Act of 1966 as amended by the National Wildlife Refuge System Improvement Act of 1997, 16 U.S.C. 668dd-668ee (Refuge Administration Act); and the National Environmental Policy Act of 1969 as amended, 42 U.S.C. 4321-4347 (NEPA) as implemented by the Council on Environmental Quality’s (CEQ) Regulations for Implementing the Procedural Provisions of NEPA, 40 CFR 1500-1508. Revising the Conservation Plan allows the Service to:

- Update management direction related to national and regional policies and guidelines implementing Federal laws governing refuge management;
- Incorporate new scientific information on refuge resources; and
- Re-evaluate current refuge management direction based on changing public demands for use of the Refuge and its resources, including public use management direction in the Tetlin National Wildlife Refuge Final Public Use Management Plan and Environmental Assessment (USFWS 1997a) and associated Decision Notice and Finding of No Significant Impact (USFWS 1997b).

This document includes an Environmental Assessment of the Tetlin Refuge Conservation Plan. It describes current management and two alternatives for managing Tetlin Refuge, including the Service’s preferred alternative (Alternative B). Each alternative represents different options for addressing and resolving issues raised by the public and the Service. It includes an assessment of the effects on refuge resources of implementing each alternative and a description of the existing environment of the refuge, including land status, physical and biological resources, and human use of the refuge.

In addition to the preceding requirements, a comprehensive conservation plan also serves to:

- Ensure that the purposes of the Refuge and the mission of the Refuge System are being fulfilled;
- Ensure that national policy is incorporated into the management of the Refuge;
- Ensure that opportunities are available for interested parties to participate in the development of management direction;

- Provide a systematic process for making and documenting decisions about refuge resources;
- Establish broad management direction for refuge programs and activities;
- Provide continuity in refuge management;
- Provide a basis for budget and personnel requests; and
- Provide a basis for evaluating accomplishments.

## 1.2 Planning Context

The Tetlin Refuge is part of the National Wildlife Refuge System administered by the U.S. Fish & Wildlife Service. It must be managed in a manner that reflects national priorities and contributes to the mission and goals of the Service and entire Refuge System, as well as specific refuge goals and purposes.

### 1.2.1 The U.S. Fish & Wildlife Service

Part of the Department of the Interior, the Service is the principal Federal agency responsible for conserving, protecting, and enhancing the nation's fish, wildlife, plants, and their habitats. In addition to administering the Refuge System, the Service operates national fish hatcheries, fishery resource offices, and ecological services field stations. The Service also enforces Federal wildlife laws, administers the Endangered Species Act, manages migratory bird populations, restores nationally significant fisheries, conserves and restores wildlife habitat such as wetlands, and helps foreign governments with their conservation efforts. It oversees the Federal Aid in Wildlife Restoration program, which distributes to State fish and wildlife agencies hundreds of millions of dollars derived from excise taxes on fishing and hunting equipment.

The mission of the U.S. Fish & Wildlife Service is:

*working with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people (Service Manual 602FW 1.6W).*

### 1.2.2 The National Wildlife Refuge System

The National Wildlife Refuge System comprises more than 96 million acres of Federal lands, encompassing more than 545 national wildlife refuges, thousands of small wetlands, and other special management areas. Refuge System lands are located in all 50 states and the territories of the United States. Alaska contains 16 national wildlife refuges (Figure 1-1). These refuge lands contain a wide range of habitats with varied terrain including mountains, glaciers, tundra, grasslands, wetlands, lakes, woodlands, and rivers. Together, the 16 refuges comprise 76.8 million acres and constitute about 80 percent of the National Wildlife Refuge System.

Although the Refuge System was created to conserve fish, wildlife, plants, and their habitats, we also provide the public with opportunities to participate in compatible wildlife-dependent recreation, including fishing, hunting, wildlife observation and photography, environmental education and interpretation on Refuge System lands and to better appreciate the value of and need for fish and wildlife conservation.

The mission of the Refuge System is:

*to administer a national network of lands and waters for the conservation, management, and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans (Refuge Administration Act; 16 U.S.C. 668dd[a][2]).*

### **1.2.3 Principles for Managing the National Wildlife Refuge System**

The Refuge System Administration Act, as amended, states that each refuge shall be managed to fulfill both the mission of the Refuge System and the purposes for which the individual refuge was established. It requires that any use of a Refuge be compatible, which is defined as a use that will not materially interfere with or detract from fulfillment of the mission of the Refuge System or the purposes of the refuge. The determination of whether a use is compatible is based on sound professional judgment of the refuge manager and is subject to public review.

The 1997 amendments to the Refuge Administration Act identified a number of principles to guide management of the Refuge System, including:

- Conservation of fish, wildlife, and plants, and their habitats within the Refuge System;
- Maintenance of biological integrity, diversity, and environmental health of the Refuge System;
- Carrying out the mission of the Refuge System and the purposes of each refuge (except that, if a conflict exists, refuge purposes are protected first);
- Effective coordination, interaction, and cooperation with adjacent landowners and State fish and wildlife agencies;
- Maintenance of adequate water quantity and water quality to meet refuge and system purposes and acquisition of necessary water rights under State law;
- Recognition of hunting, fishing, wildlife observation and photography, and environmental education and interpretation as the priority general public uses of the Refuge System;
- Provision of opportunities for compatible priority wildlife dependent public uses within the Refuge System;
- Provision of enhanced consideration for priority wildlife dependent uses over other general public uses in planning and management within the Refuge System;
- Provision of increased opportunities for families to experience compatible wildlife-dependent recreation, particularly traditional outdoor activities such as fishing and hunting; and
- Monitoring of the status and trends of fish, wildlife, and plants within each refuge.

To maintain the health of individual refuges, and the National Wildlife Refuge System as a whole, managers must anticipate future conditions. Managers must endeavor to avoid adverse impacts and take positive actions to conserve and protect refuge resources. Effective management also depends on acknowledging resource relationships and acknowledging that refuges are parts of larger ecosystems. Refuge managers work together with partners, including other refuges, Federal and State agencies, tribal and other governments, Native organizations and entities, and nongovernmental organizations and groups, to protect, conserve, enhance, or restore all native fish, wildlife (including invertebrates), plants, and their habitats.

### 1.3 Legal and Policy Context and State Coordination

The Service manages national wildlife refuges under various legal and administrative requirements. Management of Tetlin Refuge is dictated, in large part, by ANILCA, which established the Refuge and the purposes for which it was established. However, numerous other laws, treaties, executive orders, and agreements with other parties (e.g., the State of Alaska) also guide management of the Refuge.

#### 1.3.1 Legal Guidance

Operation and management of refuges throughout the Refuge System are influenced by a wide array of laws, treaties, and executive orders and the regulations and policies developed to implement them. Among the most important are: ANILCA; the National Refuge System Administration Act as amended by the Refuge System Improvement Act; the Refuge Recreation Act; the Alaska Native Claims Settlement Act; and the Endangered Species Act. Brief descriptions of these and other pertinent legal documents that influence management of Tetlin Refuge are found in Appendix A.

The ANILCA provides key management direction for national wildlife refuges in Alaska. It sets forth the purposes for each refuge (refer to section 1.4.1), provides management direction, and requires development of comprehensive conservation plans. Additional provisions authorize studies and programs related to wildlife and wildland resources, access provisions, and recreation and economic uses.

This revised plan identifies and describes the wilderness values of Tetlin Refuge, as required by Section 304(g) of ANILCA. Although we have attempted to provide management direction for protecting those values, we have not recommended any refuge lands for wilderness designation.

A similar approach was taken with Wild and Scenic River reviews. Although there are no rivers within the Refuge recommended for designation under the Wild and Scenic Rivers Act of 1968, we determined that we would meet the intent of the Act by focusing our efforts on describing river values and providing direction for how the Refuge could be managed to protect those values.

Wilderness values and river-related values are discussed in Chapter 4, sections 4.4 and 4.5 of this Plan. Programs and actions to protect all refuge-related values are discussed in the alternatives section (chapter 2) and in the management directions chapter (chapter 3).

#### 1.3.2 Policy Guidance

Programmatic guidance and policy documents provide additional direction for management of national wildlife refuges throughout the Refuge System. These documents include the Fish & Wildlife Service Manual, Director's Orders, national and regional policy issuances, handbooks, Director's memorandums, and regional directives. Although it is not practical to provide information about all of these documents in this Plan, they are critical to management of Tetlin Refuge and the Refuge System as a whole. Much of the management direction described in chapter 2, and in other parts of this Plan, is derived from these programmatic and policy documents.

Appendix A provides a brief description of several of the national and regional management plans and programs that were considered during the development of this Plan. Other key

policies such as the compatibility and appropriate uses policies are described in later chapters as they provide guidance in this Plan.

### **1.3.3 Coordination with the State of Alaska**

The Alaska Department of Fish & Game (ADF&G) has primary responsibility for managing Alaska's fish and resident wildlife populations. On all refuge lands, the Service and ADF&G share a concern for all fish and wildlife resources and their habitats, and both are engaged in extensive fish and wildlife conservation, management, and protection programs. In 1982, the Service and ADF&G signed a Master Memorandum of Understanding (MMOU) that defines the cooperative management roles of each agency and sets the framework for cooperation between the two agencies (Appendix B). On November 14, 2006, the two agencies signed a memorandum recommitting to the spirit and letter of the MMOU.

The State of Alaska fishing, hunting, and trapping regulations generally apply to Federal public lands as well as State and private lands. If Service restrictions on fishing, hunting or trapping were needed, they would be done through a rule-making or through closure or restriction processes provided in 50 CFR 36.42, or through Federal Subsistence Board regulations in 50 CFR 100.10(d)(4). The State is divided into 26 game management units (GMUs); most GMUs are further divided into subunits. Management objectives are developed for populations within the GMUs. Tetlin Refuge is entirely within GMU 12, and ADF&G management objectives for big game and fish populations within this unit are described in chapter 4.

The Alaska Department of Natural Resources (ADNR) is also a key management partner. The ADNR manages all State-owned land, water, and surface and subsurface resources except for fish and wildlife. The ADNR Division of Mining, Land, and Water (Division) manages the State's water and land interests, including any within national wildlife refuges. These interests will become increasingly significant management issues in the next 10 to 15 years, especially in regard to water rights, navigable waters, ownership of submerged lands, and rights-of-way over refuge lands. The Division is responsible for development of plans for management of State lands (e.g., the Tanana Basin Area Plan for State Lands, adopted in 1985, updated in 1991 [ADNR 1991], and currently being revised). The ADNR Division of Forestry is an important partner with the refuge fire management program, and is the primary fire suppression provider for refuge lands.

The Alaska Department of Transportation and Public Facilities (ADOTPF) is responsible for maintenance and reconstruction of the Alaska Highway and associated pullouts and rest stops. Due to Tetlin Refuge's proximity to the Alaska Highway, ADOTPF is a valued partner in developing and maintaining most facilities for public access to the Refuge and for maintaining pullouts associated with refuge informational kiosks and interpretive panels along the Alaska Highway.

Additional information about key State programs is provided in Appendix B.

## 1.4 Refuge Purposes, Vision, and Goals

### 1.4.1 Purposes of Tetlin National Wildlife Refuge

Section 302(4)(B) of ANILCA states:

“The purposes for which the Tetlin National Wildlife Refuge is established and shall be managed include—

- (i) to conserve fish and wildlife populations and habitats in their natural diversity including, but not limited to, waterfowl, raptors and other migratory birds, furbearers, moose, caribou (including participation in coordinated ecological studies and management of the Chisana caribou herd), salmon and Dolly Varden;
- (ii) to fulfill the international treaty obligations of the United States with respect to fish and wildlife and their habitats;
- (iii) to provide, in a manner consistent with the purposes set forth in subparagraphs (i) and (ii), the opportunity for continued subsistence uses by local residents;
- (iv) to ensure, to the maximum extent practicable and in a manner consistent with the purposes set forth in paragraph (i), water quality and necessary water quantity within the refuge; and
- (v) to provide, in a manner consistent with subparagraphs (i) and (ii), opportunities for interpretation and environmental education, particularly in conjunction with any adjacent State visitor facilities.”

### 1.4.2 Refuge Vision Statement

Service Planning Policy (Service Manual 602 FW 3.4G) directs each national wildlife refuge to develop a vision statement for the refuge during the comprehensive conservation planning process. A vision statement is “[a] concise statement of what the planning unit (refuge) should be, or what we hope to do, based primarily upon the Refuge System mission and specific refuge purposes, and other mandates (Service Manual 602 FW 1.6Z).” The following statement provides this vision for Tetlin Refuge.

*Through collaboration with a diverse network of partners and through the highest principles of conservation, Tetlin National Wildlife Refuge will foster a strong land ethic, scientific leadership, and opportunities for people to discover meaningful relationships with nature in a dynamic and changing landscape. Management will focus on the Refuge’s natural character, biological integrity, and scientific values as driven by biological and physical processes. As stewards of Tetlin Refuge, we will strive to achieve the purposes of the Refuge and the mission of the National Wildlife Refuge System, maintain ecosystem integrity, provide for subsistence opportunities, and facilitate wildlife-dependent recreation. As a result, Tetlin Refuge will perpetuate its unique history and continuing role as a vital passageway for fish, wildlife, plants, people, and cultures.*

### 1.4.3 Refuge Goals

Refuge goals are based on the purposes of Tetlin Refuge and the refuge vision statement. They reflect the contribution of the Refuge to the Refuge System as well as other key management responsibilities that stem from law and policy. The Conservation Plan resulting from this planning process must work toward meeting all of these goals.

**Goal A:** Conserve fish and wildlife populations representative of the natural diversity of the Upper Tanana Valley and the boreal forest ecosystem.

**Goal B:** Conserve plant populations and habitats representative of the natural diversity of the Upper Tanana Valley and the boreal forest ecosystem.

**Goal C:** Recognizing the position of Tetlin Refuge along three major flyways, conserve migratory birds and their habitats to fulfill our international responsibilities under the Migratory Bird Treaty Act.

**Goal D:** Contribute to the protection and preservation of the cultural heritage of the Upper Tanana Valley.

**Goal E:** Integrate fire management with other refuge programs so that it can efficiently support refuge habitat goals and objectives as well as provide an appropriate level of wildland fire protection for human life, private property, and identified cultural and natural resources.

**Goal F:** Through partnerships with agencies and institutions in the United States and Canada, continue to coordinate research and monitoring efforts to expand our understanding of the underlying ecological mechanisms related to fire and how these mechanisms effect change in vegetation and animal populations within the Upper Tanana Valley and the boreal forest ecosystem.

**Goal G:** Provide subsistence opportunities for rural residents, compatible with other refuge purposes.

**Goal H:** Maintain the integrity and environmental health of waters and aquatic habitats within the Upper Tanana River drainage.

**Goal I:** Enhance understanding and appreciation of Tetlin Refuge’s purposes, special values, and management goals, and promote stewardship of natural and cultural resources through comprehensive environmental education and interpretation programs and visitor services facilities.

**Goal J:** Provide compatible wildlife-dependent recreation opportunities for people to explore, enjoy, and learn about the dynamic landscape and natural diversity of Tetlin Refuge.

**Goal K:** Enhance stewardship of natural resources through strong local, State, tribal, national, and international partnerships.

**Goal L:** Improve collaboration and communication with and support for local resource users and the communities of the Upper Tanana Valley through development of a “Good Neighbor Policy” that is sensitive to social, political, cultural, and economic needs within the local area.

## **1.5 Refuge Overview**

### **1.5.1 Historical Perspective and Refuge Establishment**

Beginning with the first clearly demonstrated human occupation between 10,000 and 11,000 years ago, the Upper Tanana Valley became one of the most concentrated areas of



prehistoric settlement in Interior Alaska<sup>1</sup>. Because the Valley was not glaciated during the most recent ice age, it remained an important corridor for migratory birds, wildlife, and people.

Despite Euro-American influences associated with fur trading and gold mining beginning in the 1870s, the region remained substantially unaltered culturally or physically until the 1940s. With the beginning of World War II and construction of the Alaska Highway, the Upper Tanana Valley became the only overland travel route to Alaska from the continental 48 states. The Alaska Highway, Tok Cut-off Highway and the nearby Taylor Highway (built soon after), continue to have a profound effect on the Upper Tanana Valley.

On December 2, 1980, President Jimmy Carter signed into law the Alaska National Interest Lands Conservation Act. This act, among other things, established the Tetlin National Wildlife Refuge.

### **1.5.2 Refuge Environment**

The external boundaries of Tetlin National Wildlife Refuge encompass approximately 934,000 acres; approximately 700,000 acres of those lands are refuge lands. The remaining lands belong to Native Corporations, the State of Alaska, or private individuals. The Refuge is located northeast of the Alaska Range, adjacent to the U.S.- Canada border in the headwaters of the Tanana River. It is bordered to the south by Wrangell-St. Elias National Park and Preserve, Canada to the east, and the Alaska Highway along its northeast border. The Refuge lies within the Nabesna/Chisana River Basin, in the Upper Tanana Valley. The large, flat basin of the Upper Tanana River Valley is filled with sediments deposited in glacial moraines and outwash plains, creating a landscape dominated by lakes, ponds, and wetland tundra. Most of the Refuge is rolling lowlands; however, the Mentasta Mountains in the southwest corner are rugged, glacier-carved peaks reaching elevations of 8,000 feet.

Tetlin Refuge is one of the most diverse interior refuges in Alaska. The vegetation is a complex mixture of spruce forests, mixed woodlands, shrub lands, and tussock peatlands that are interspersed with innumerable streams, ponds, lakes and other wetlands. The landscape provides valuable habitat for a wide variety of fish and wildlife species, including 14 fish species, nearly 200 bird species, 44 mammal species, and one amphibian species, that are known to use the Refuge for at least part of each year (see species list in Appendix C).

## **1.6 Special Values of the Refuge**

Section 304(g) of ANILCA directs the Secretary of the Interior to identify and describe “special values of the refuge, as well as any other archaeological, cultural, ecological, geological, historical, paleontological, scenic, or wilderness values of the refuge.” The following special values have been identified for Tetlin Refuge.

### **1.6.1 Migratory Corridor**

Because the Upper Tanana Valley was not glaciated during the last ice age, animals, plants, and people have passed through this area for at least 10,000 years, traveling from Asia, the Arctic, and other areas of Alaska to the rest of the North American continent. Today, the Upper Tanana Valley, including what is now Tetlin Refuge, continues to serve as one of the

---

<sup>1</sup> Interior Alaska is that portion of the State between the Alaska Mountain Range and the Brooks Mountain Range.

most significant migratory bird corridors in the world, being located along three major flyways. The extensive wetlands, rivers, ponds and forests of the Refuge provide resting and breeding habitat for hundreds of thousands of migratory birds. Spectacular migrations of lesser sandhill cranes and both tundra and trumpeter swans occur each spring and fall. Up to 200,000 cranes, approximately one-half of the mid-continental population, migrate through this corridor.

The northeast side of the Refuge borders the Alaska Highway, which is the primary surface transportation corridor for people traveling to and from Alaska. The Refuge's proximity to the Alaska Highway gives many residents and travelers the opportunity to experience the wildlife, scenery, and other resource values of the refuge. The Refuge, which is the northernmost part of the largest contiguous network of public land and protected areas on earth, provides numerous travelers entering Alaska via the Alaska Highway their first exposure to public lands in Alaska.

### **1.6.2 Waterfowl**

Tetlin Refuge supports one of the highest densities of breeding waterfowl found in Alaska (USFWS 1987a), and annually produces 35,000 to 65,000 ducklings to flight stage. Tetlin Refuge provides habitat for 143 breeding and 43 migrating bird species, and serves as a major migration corridor during spring and fall. The Refuge and the Upper Tanana Valley also support about 10 percent of the continental population of trumpeter swans. This importance of the Valley has been formally recognized by the National Audubon Society through its designation as an Important Bird Area.

### **1.6.3 Bird Diversity**

As the easternmost interior refuge in Alaska, coupled with its location within a major bird migration corridor, Tetlin Refuge supports bird species that are rare or absent elsewhere in the State. Some of these species (that nest on the Refuge) include blue-winged teal, ring-necked duck, osprey, sharp-tailed grouse, and red-winged blackbird. The American coot, sora, and brown-headed cowbird, which are regularly found on the Refuge, are rare or absent throughout most of Alaska. The Tetlin Flats area also provides habitat for the largest concentration of nesting ospreys in Alaska (Hughes and Wright 1990). Bald eagles are common nesters along the major rivers and shorelines of the larger lakes on the Refuge, and cliffs provide nesting platforms for peregrine falcons.

### **1.6.4 Glacial Dunes**

Composed of wind-blown glacial flour (or loess) that stabilized during the late Wisconsin glacial period to post-glacial times (12,400-6,200 years before present), the parabolic dunes southeast of Northway and at Big John Hill are geologic formations uncommon elsewhere in interior Alaska.

### **1.6.5 Scottie Creek Historic and Cultural Resources**

This area in the southeastern portion of the Refuge has the highest density of historic and prehistoric archaeological resources documented for any area managed by the Refuge. Dating of materials recovered from nearby Beaver Creek in the Yukon indicate this portion of the Upper Tanana Valley has been inhabited for more than 10,000 years (Clark 2001). A limited number of archaeological investigations, interviews with local residents, past surveys, reports, and other documentation have established the significance of this area since prehistoric times for fishing, hunting, gathering, trapping, trading, and travel throughout the Upper Tanana

Valley. Local residents still express a strong and deeply personal relationship to this area through shared memories and continued subsistence use. Based upon the area's long and important history within the region, future archaeological survey efforts could further establish its historic and cultural significance to our understanding of early human settlement and migratory patterns of fish and wildlife throughout North America.

## 1.7 Legal and Administrative Planning Requirements

The Alaska National Interest Lands Conservation Act (ANILCA) provides direction for preparing and revising comprehensive conservation plans for each refuge in Alaska. Section 304(g)(2) of ANILCA specifies that prior to developing a plan for any refuge, we must identify and describe:

- “(A) the populations and habitats of the fish and wildlife resources of the refuge;
- (B) the special values of the refuge, as well as any other archeological, cultural, ecological, geological, historical, paleontological, scenic, or wilderness values of the refuge;
- (C) areas within the refuge suitable for use as administrative sites or visitor facilities, or for visitor services, as provided for in sections 1305 and 1306 of this Act;
- (D) present and potential requirements for access with respect to the refuge, as provided for in Title XI [of ANILCA]; and
- (E) significant problems which may adversely affect the populations and habitats of fish and wildlife identified and described under subparagraph (A).”

Section 304(g)(3) of ANILCA states each comprehensive conservation plan shall:

- “(A) be based upon the identifications and the descriptions required to be made under paragraph 2 [Section 304(g)(2) above]—
  - (i) designate areas within the refuge according to their respective resources and values;
  - (ii) specify the programs for conserving fish and wildlife and the programs relating to maintaining the values referred to in paragraph (2)(B) [listed above], proposed to be implemented within each such area; and
  - (iii) specify the uses within each such area which may be compatible with the major purposes of the refuge; and
- (B) set forth those opportunities which will be provided within the refuge for fish and wildlife- oriented recreation, ecological research, environmental education, and interpretation of refuge resources and values, if such recreation, research, education, and interpretation is compatible with the purposes of the refuge.”

In preparing the plans, we are required to ensure adequate interagency coordination and public participation. Specifically, interested and affected parties such as State agencies, Native corporations, local residents, and political subdivisions must be provided meaningful opportunities to present their views. Furthermore, prior to adopting a plan, we must issue notice of its availability in the *Federal Register*, make copies available in regional offices of the Fish and Wildlife Service throughout the U.S., and provide an opportunity for public review and comment.

## **1.8 The Planning Process for Tetlin Refuge**

This section describes the process used to develop this Draft Conservation Plan and environmental assessment (EA). The process is consistent with the planning requirements specified in Section 304(g) of ANILCA; the Refuge System Administration Act, as amended; the Service's planning policy (602 FW 1 and 3); the National Environmental Policy Act (42 U.S.C. 4321-4347); and the Council on Environmental Quality's Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (40 CFR 1500-1508). The Service is using an eight-step planning process to revise the Tetlin Refuge Conservation Plan:

- 1) Design the planning process (also called preplanning).
- 2) Initiate public involvement and scoping.
- 3) Determine significant issues.
- 4) Develop and analyze alternatives.
- 5) Prepare draft conservation plan and environmental assessment.
- 6) Prepare and adopt a final plan and finding of no significant impact.
- 7) Implement the plan and monitor and evaluate it.
- 8) Review and revise the plan.

### **1.8.1 Design the Planning Process (Preplanning)**

In late 2004, the Service began reviewing the Tetlin Refuge Conservation Plan to determine if it should be revised or a new plan prepared. The Service found that, in most cases, on-the-ground management actions were meeting refuge objectives. However, some management direction needed to be updated. New laws (such as the Refuge System Improvement Act), new regulations and policies, and other changes (such as Federal management of subsistence on Alaska refuges) needed to be incorporated in the Conservation Plan. For these reasons, the Service decided that a revision of the Tetlin Refuge Conservation Plan was necessary.

The Service then identified all relevant laws, regulations, policies, and other direction that would have to be considered during revision of the Conservation Plan. These are discussed in the legal and planning context sections earlier in this chapter, and additional detail can be found in Appendix A. The Service also reviewed data available on refuge resources and uses and identified some areas in which additional work was required.

### **1.8.2 Initiate Public Involvement and Scoping**

This step informed people that the conservation plan revision process was beginning and that we were soliciting input on what should be addressed in the revision. Formal scoping began with publication of the Notice of Intent to revise the Tetlin Refuge Conservation Plan and prepare an EIS, which was published in the *Federal Register* on December 7, 2004 (Vol. 69 No. 234, pp. 70704-70705).

In January 2005, a newsletter announcing the revision and seeking comments was mailed to 1,900 individuals and organizations. Copies of the newsletter were sent to all post office box holders in Northway, Tetlin, Tok, Mentasta Lake, Tanacross, and Dot Lake. Additional copies were mailed to organizations and individuals on the Tetlin Refuge mailing list. The newsletter contained information about the Refuge, described issues identified by the refuge staff, and

provided an opportunity for the public to identify other issues that should be addressed during revision of the Conservation Plan.

Public meetings to gather input were held in communities adjacent to Tetlin Refuge and in Delta Junction. Eighteen people attended the meetings, and 33 individuals or organizations provided written or oral comments. Potential issues identified by the public included public access, visitor facilities, fire management, protection of wildlife populations, habitat conservation and protection of the Refuge's primitive, natural condition. Following analysis of the comments, we determined that an Environmental Impact Statement (EIS) was not needed and that an environmental assessment (EA) would fulfill all requirements of NEPA. A Notice explaining the decision to conduct the environmental analysis for the revision of the Tetlin Conservation Plan with an EA rather than an EIS was published in the *Federal Register* on July 25, 2006 (Vol. 71, No. 142, pp. 42116-42117).

### **1.8.3 Determine Significant Planning Issues**

The planning team reviewed the issues raised by the public, refuge staff, and other Service divisions during the comment period to determine the significant planning issues to be addressed in the revised Comprehensive Plan. Significant planning issues are those issues where multiple approaches to resolving the issue will be evaluated as part of the planning process. Section 1.8 provides more detail on the process used to identify the significant planning issues and what those issues are.

### **1.8.4 Develop and Analyze Alternatives**

Following determination of the significant planning issues in early March 2005, the planning team developed three preliminary alternatives for management of the Refuge. These preliminary alternatives were presented to tribal councils, State agencies, and local government agencies in the affected area with comments, suggestions and questions solicited. No comments were received and refuge staff made only minor revisions to the preliminary alternatives during this review. These alternatives were then presented to the regional director and other members of Service leadership at briefings in late March and early April 2005 for their concurrence. The final set of alternatives is presented in chapter 2 with analysis of the environmental effects displayed in chapter 4 of this document.

### **1.8.5 Prepare Draft Plan and Environmental Assessment**

The purpose of this step is to produce the document you are currently reading. This document describes three alternatives (including current management) for managing Tetlin Refuge over the next 15 years. It includes an analysis of the potential impacts of implementing each alternative and describes how the Service determined its preferred alternative (Alternative B). Also included is a description of management common to all the alternatives—management that would remain the same no matter which alternative is implemented. A public review and comment period of no less than 60 days is now underway. During this period, the Service may hold public meetings in Fairbanks, Northway, Tetlin, Tok, and other villages near the Refuge, as necessary.

## **1.9 Prepare and Adopt a Final Plan**

The planning team will review and analyze all comments received on the Draft Conservation Plan, modify the draft as needed, and develop the Final Revised Conservation Plan. A Finding of No Significant Impact (FONSI) will be approved by the regional director.

Following approval, a Notice of Availability will be published in the *Federal Register*, and the Plan and FONSI will be distributed.

### **1.9.1 Implement Plan, Monitor, and Evaluate**

After the FONSI and Final Comprehensive Plan are distributed, refuge staff will begin implementing any management changes called for in the revised plan. A critical component of management is monitoring—measuring resource and social conditions to make sure that progress is being made toward meeting refuge purposes, goals, and objectives. Monitoring includes determining if the Refuge is implementing the plan and if actions being taken are effective in meeting the objectives. The Refuge will use an adaptive management approach, which means that information gained from monitoring will be used to evaluate and, as needed, modify refuge objectives.

### **1.9.2 Review and Revise Plan**

Service policy directs that the Refuge review the Conservation Plan annually to assess the need for change. The Service revises the plan when important new information becomes available, when ecological conditions change, or when the need to do so is identified during a review. If major changes are proposed, public meetings may be held and a new environmental assessment (or an environmental impact statement) may be necessary. Consultation with appropriate State agencies and others would occur during any future revisions. Full review and revision of the plan will occur every 15 years, more often if necessary. The Service will continue to inform and involve the public through appropriate means (such as reporting on activities at village meetings and via updates or other mailings) throughout the implementation and monitoring process.

## **1.10 Significant Planning Issues**

Five significant planning issues were identified for consideration during revision of the Tetlin Refuge Conservation Plan. These issues reflect problems or opportunities that the Refuge can address in a variety of ways. The alternatives described in chapter 2 comprise different options for addressing these issues. The environmental analysis presented in chapter 4 discusses the probable effects that implementing these options would have on the environment.

As described previously in this chapter, several issues were identified from public and agency comments during the scoping process. Many of these issues are currently addressed through existing laws, regulations, or policies or do not lend themselves to more than one course of action. Management direction to address these issues will remain unchanged through all of the alternatives.

The following discussion briefly describes each of the five significant planning issues (issues are not in any particular order). It is important to note that significant issues may be raised by only a few people familiar with a specific area or problem (either by the public or by staff) or they may be of national interest and generate a number of comments from across the country. The Service's role in identifying and analyzing the issues is to objectively consider a wide range of approaches that could be taken to address each issue.

### **1.10.1 Issue 1. Visitor services role of Tetlin Refuge in the Upper Tanana Valley.**

Currently, Tetlin Refuge offers comprehensive interpretive and environmental education programs and supports a wide range of wildlife-dependent recreation opportunities. In

addition, the Refuge is increasing its capacity to provide public outreach and recreational opportunities along the Alaska Highway (e.g., at the Seaton Roadhouse site) and with the Alaska Public Lands Information Center in Tok.

As a result of our management actions, we expect changes to occur that will affect public use of the Upper Tanana Valley. We anticipate increased recreation demand as summer tourist travel increases; increased participation in subsistence activities; and changes in visitation patterns resulting from improved transportation systems (e.g., Taylor Highway paving project, Alaska railroad extensions) and major development projects (e.g., proposed Alaska natural gas pipeline). Given these potential changes, the Refuge needs to evaluate and consider alternatives to its long-term management direction for providing compatible wildlife-dependent public use opportunities.

#### **1.10.2 Issue 2. Public use facilities and access.**

Both the Refuge and the public recognize access and associated facilities as appropriate and necessary in providing opportunities for existing compatible wildlife-dependent public uses within the Refuge. The Refuge currently provides, or is implementing existing plans to provide, a variety of public facilities along the Alaska Highway. These include: interpretive visitor centers, highway pullouts, hiking trails, interpretive walking trails, parking areas, campgrounds, wildlife viewing blinds, and boat launches. In addition, the Refuge continues to make remote administrative cabins available for public use. The public continues to express desire for additional public use opportunities along the Alaska Highway and in remote backcountry areas of the refuge. The Refuge will consider a range of options for improving and/or increasing opportunities for compatible wildlife-dependent public use of the refuge and enhancing visitor experiences.

#### **1.10.3 Issue 3. Management of fire to protect resources and property.**

The public continues to express a growing concern that current fire management policies do not provide adequate protection for various resources and private property within and adjacent to the Refuge. The Refuge recognizes fire as a natural and necessary process in the Upper Tanana Valley; however, the protection of life, health, property, and natural and cultural resources must also be considered in its fire management decisions. Within the framework of national, departmental, and Service wildland fire policy and the Alaska Interagency Wildland Fire Management Plan, the Refuge needs to explore the full range of fire management options available, including natural fire, prescribed fire, and chemical and mechanical fuels treatments in order to reduce the threat that fires on the Refuge pose to resources and private property.

#### **1.10.4 Issue 4. Habitat management.**

The original 1987 Conservation Plan for Tetlin Refuge contains management direction for burning a specified number of acres annually on the Refuge in order to maintain or improve waterfowl nesting habitat and moose browse production. The Refuge needs to reconsider this management direction, given the existing natural fire regime and the potential effects of large-scale prescribed burning on the ecological health and diversity of the Upper Tanana Valley. The Refuge will evaluate a range of alternatives for applying prescribed fire and natural fire as wildlife habitat management tools within the Refuge.

**1.10.5 Issue 5. Fisheries Management.**

The original 1987 Conservation Plan for Tetlin Refuge includes a variety of activities aimed at reintroducing fish stocks and enhancing recreational fishing opportunities within the Refuge. Most of these management strategies and policies were developed with limited supporting data and insufficient impact assessments. In light of regional and national policies now in place, the Refuge will re-evaluate these management activities.