

ECONOMIC ANALYSIS OF
CRITICAL HABITAT DESIGNATION
FOR THE SPECTACLED EIDER:

FINAL ADDENDUM

INTRODUCTION

In February 2000, the U.S. Fish and Wildlife Service (the Service) published a proposed rule to designate critical habitat for the spectacled eider (*Somateria fischeri*) under the Endangered Species Act of 1973, as amended (the Act). Because the Act also calls for an economic analysis of the critical habitat designation, the Service released a *Draft Economic Analysis of Critical Habitat Designation for the Spectacled Eider* (hereafter "*Draft Economic Analysis*")¹ for public review and comment in August 2000.

After public comments were collected, the Service made revisions to the proposed rule designating critical habitat for the spectacled eider. This Addendum addresses the implications of these revisions for the conclusions in the *Draft Economic Analysis*, and presents revised estimates of economic impacts when applicable. Many of the public comments received by the Service in response to the *Draft Economic Analysis* are also addressed in this Addendum. In addition, certain issues addressed in the *Draft Economic Analysis* are revisited in this Addendum. In summary, the revised estimates for the *Draft Economic Analysis* presented here result from:

- Changes to the area of the critical habitat designation;
- Public comments on the *Draft Economic Analysis* itself; and
- Additional research conducted after publication of the *Draft Economic Analysis*.

IMPLICATIONS FOR THE DRAFT ECONOMIC ANALYSIS

The following sections describe the implications of the final critical habitat designation for the spectacled eider on the *Draft Economic Analysis*.

1. Final Critical Habitat Area

The final critical habitat designation differs from the proposed critical habitat designation previously published in the Federal Register (65 FR 6114). The area of the final critical habitat now totals 100,988 km², a reduction of 82,066 km². The critical habitat areas reflected in the current

¹ Copies of the *Draft Economic Analysis of Critical Habitat Designation for the Spectacled Eider* are available from the Service through the field office in Anchorage, Alaska.

designation are below:

- Yukon-Kuskokwim Delta land (Y-K Delta-land): This critical habitat area has been reduced by approximately 40 percent. The original designation affected 75 entire townships, whereas the final designation includes 15 entire townships and portions of 27 townships. No Alaskan Native communities are within the extant boundaries of the final critical habitat, although Alaskan Native land holdings are included in the designation. A large portion of the land in this unit is part of the Yukon Delta National Wildlife Refuge. Originally referred to as Units 1, 3 and 4 in the *Proposed Rule to Designate Critical Habitat for the Spectacled Eider (Proposed Rule) (65 FR 6114)*, the final designation groups these units into two units: Central Yukon-Kuskokwim Delta (Central Y-K Delta) and Southern Yukon-Kuskokwim Delta (Southern Y-K Delta). Under the final designation, these areas are referred to as Units 1 and 2.
- Coastal waters of the Yukon-Kuskokwim Delta (Y-K Delta-marine): Originally part of proposed Units 1, 3, and 4, these waters have been removed from critical habitat designation.
- North Slope lands: Originally part of proposed Unit 5 of the critical habitat area, these lands have been removed from critical habitat designation.
- North Slope coastal waters: Originally part of proposed Unit 5 of the critical habitat area, these waters have been removed from critical habitat designation.
- Norton Sound: The size of this critical habitat area has been reduced from 17,502 km² to 10,586 km.² The jurisdiction of Norton Sound critical habitat remains both federal and state. This critical habitat area is listed as Unit 6 in the *Proposed Rule (65 FR 6114)*; under the final designation, this critical habitat area is referred to as Unit 3.
- Ledyard Bay: This critical habitat area has been reduced in size from 21,688 km² to 13,960 km.² The jurisdiction of the Ledyard Bay critical habitat remains both federal and state. This area is listed as Unit 7 in the *Proposed Rule (65 FR 6114)*; under the final designation, this critical habitat area is referred to as Unit 4.
- Wintering Area between St. Lawrence and St. Matthew Islands: This critical habitat area remains the same as the original proposal, totaling 73,650 km.² As noted in the *Draft Economic Analysis*, jurisdiction of the waters within this critical habitat area is approximately 99 percent Federal and one percent state. This area is listed as Unit 8 in the *Proposed Rule (65 FR 6114)*; under the final designation, this area is referred to as Unit 5.

2. Impacts of Critical Habitat Designation on Land Uses and Marine Activities

2.1 Fisheries

As stated in the *Draft Economic Analysis*, commercial fisheries exist within critical habitat units of the Y-K Delta (marine), Norton Sound and the Wintering Area between St. Lawrence and St. Matthew Islands (Wintering Area). In the final designation, the Y-K Delta (marine) unit has been removed, the Norton Sound critical habitat area has been reduced in size, and the Wintering Area remains unchanged. The following sections discuss the possible impacts of the final spectacled eider critical habitat designation on commercial fisheries.

Salmon: The *Draft Economic Analysis* stated that the only area that supports an existing commercial salmon fishery within the boundaries of the proposed critical habitat designation was the Y-K Delta (marine) unit. This area was removed from the final designation of critical habitat. Because this area has been removed from the final designation, additional consultations should not occur as a result of critical habitat designation for the spectacled eider in this area.

Public comments noted that the *Draft Economic Analysis* did not include possible impacts to salmon gillnetting activities in the Norton Sound unit. Salmon gillnetting does occur in this area, but is a state-managed fishery that does not have a clear Federal nexus associated with it.² The Service does oversee a subsistence fishery board that addresses concerns about subsistence fishing privileges. This role may create a Federal nexus with the Service. Although the board has federal authority to change fishing practices based on concern for subsistence fishing, the board has not made such a ruling since its creation. In addition, Service staff note that such a ruling is unlikely to occur in the areas designated as critical habitat for the spectacled eider.³ Therefore, the salmon fishery in Norton Sound is not likely to be impacted by critical habitat designation for the spectacled eider.

Crab: The *Draft Economic Analysis* describes a crab fishery in the Wintering Area unit, but estimates that little economic impact will result from critical habitat designation in this area (as discussed further below). This unit remains unchanged in the final designation.

The North Pacific Fishery Management Council indicates that there is also an active crab fishery in the Norton Sound unit of the designation.⁴ This area includes both Federal and state waters. While management of the crab fishery in state waters is delegated to the state, participation in this crab fishery requires a Federal permit. Therefore, a Federal nexus exists that would enable a Service consultation with the state on management of this fishery.

In the past, the Service has conducted semi-annual formal consultations with the National Marine Fisheries Service (NMFS) on the Bering Sea (Wintering Area) fisheries. The Service has recently concurred with NMFS's determination that activity in these fisheries is not likely to adversely affect spectacled eiders (after six years of fishery observation did not detect a single

² Biologist, Alaska Department of Fish and Game. Personal communication, November 20, 2000.

³ Biologist, U.S. Fish and Wildlife Service. Written communication, January 3, 2001.

⁴ Letter from North Pacific Fishery Management Council to The Service, Anchorage Field Office and Northern Alaska Ecological Services, June 21, 2000.

interaction between this fishery and spectacled eiders).⁵ The Service has cooperated with the North Pacific Fisheries Observer Training Center since 1993 to ensure that all fisheries observers are trained in seabird and sea duck identification. These observers are instructed to report all interactions between spectacled eiders and gear or vessels. To date, the Service is unaware of any spectacled eiders having been taken by these fisheries. In 1999, as a result of this lack of documented take, the Service discontinued formal consultations on this fishery, and began conducting only informal consultations on it. The Service does not anticipate that the designation of critical habitat will change the Service's approach to consultations on, or required activity modifications in, the crab fishery.

New information also indicates that NMFS is undertaking efforts to restore the king crab fishery of St. Matthew Island. Although St. Matthew Island is not included in the designation, it lies in close proximity to the Wintering Area unit. However, NMFS data indicate that boats operating in this fishery in previous years had not used areas included in the final critical habitat designation. In addition, the Service does not anticipate that the designation of critical habitat will change the Service's approach to consultations on or required activity modifications in the crab fishery. Therefore, it is extremely unlikely that critical habitat designation for the spectacled eider will have additional economic impacts on the crab fishery of St. Matthew Island.

Herring: Fishing for herring and herring roe occur in state-managed fishing areas in the Y-K Delta (marine) and the Norton Sound units of the proposed critical habitat designation for the spectacled eider. The fishery for herring is entirely state-run, and no federal nexus exists for this fishery.⁶ As the Y-K Delta nearshore marine waters have been removed from the designation, no economic impacts on herring fishing activities are anticipated as a result of critical habitat for the spectacled eider in this area. Although a small herring industry exists in the final Norton Sound unit, the lack of Federal nexus for the fishery will not change with the addition of critical habitat.⁷ Thus, no economic impacts on herring fishing activities are anticipated as a result of critical habitat designation for the spectacled eider.

Groundfish (including Pacific and black cod, yellowfin sole, rock sole, Alaska plaice, flathead sole): Groundfish fisheries exist in close proximity to the Wintering Area between St. Lawrence and St. Matthew Islands, but the Service has not designated any waters that overlap with these groundfish fisheries in the final designation of critical habitat for the spectacled eider. In addition, while recreational fishing for groundfish occurs in the Y-K Delta (marine) unit of the proposed critical habitat designation, this unit has been removed from the final designation. Thus, since no waters used for commercial groundfish fishing have been included in the final designation of critical habitat for the spectacled eider, no additional economic impacts are expected on these fisheries as a result of the designation.

Halibut: As stated in the *Draft Economic Analysis*, the only area where commercial halibut fishing regularly occurs in the proposed critical habitat area is in the Y-K Delta (marine) unit (see

⁵ Biologist, Alaska Department of Fish and Game. Written communication, January 3, 2001.

⁶ Biologist, Alaska Department of Fish and Game. Personal communication, November 20, 2000.

⁷ Biologist, Alaska Department of Fish and Game. Personal Communication, January 2, 2001.

below for information about fish processing activities). Because the Y-K Delta (marine) unit has been removed from the final designation, no additional economic impacts on halibut fishing activities are anticipated as a result of critical habitat designation for the spectacled eider in this area.

Pollock: The only area where commercial pollock fishing occurs in the proposed critical habitat area is in the Y-K Delta (marine) unit. Because the Y-K Delta (marine) has been removed from the designation, no additional economic impacts on pollock fishing activities are anticipated as a result of critical habitat designation for the spectacled eider.

Sea Snail: At the time of publication of the *Draft Economic Analysis*, no commercial sea snail fishery existed in the boundaries of the critical habitat designation. While this is still the case, recent research has revealed that ample resources exist to create a snail fishery within the critical habitat boundaries of Norton Sound. At this time, there are no parties exploiting or proposing to harvest snails in this area. Thus, there have not been any formal consultations for this potential fishery under the listing.

If a sea snail fishery is ultimately developed within three miles from shore, it would be state-managed, and thus no Federal nexus would exist. If an active snail fishery were to be developed in the Federal waters of Norton Sound (i.e., waters greater than three miles from shore), a Federal nexus would result via the need for a NMFS permit.⁸ However, at this time neither the size or shape of this potential fishery are known. In addition, it is not clear when such a fishery would be developed. Thus, at this time no estimate can be made of the economic impact of critical habitat designation on this fishery.

2.2 Fish Processors

Public comments suggested that the *Economic Analysis* should address possible economic impacts of designating critical habitat for the spectacled eider on fish processing plants. The commenter points out that fish processing plants (both land-based and floating) may need permits to discharge fish processing effluents. Indeed, the Service is presently conducting a formal consultation with the Environmental Protection Agency (EPA) over the issuance of NPDES statewide general permits to floating fish processors.⁹ The Service reports that areas where floating fish processors generally operate are not included in the final critical habitat designation for the spectacled eider.¹⁰ However, many fish processors are highly mobile, and could set up operations anywhere. As evidenced by the ongoing consultation activity, floating fish processor activity is already being considered for consultation in the absence of critical habitat for the spectacled eider. Thus, it is unlikely that the designation of critical habitat for the spectacled eider will have any additional economic impacts on floating fish processors. No land-based fish processing plants are located within the final critical habitat designation, and areas with large populations do not occur within the designation. Thus, it is unlikely that the designation of critical habitat for the spectacled

⁸ Biologist, Fish and Wildlife Service. Personal communication, December 5, 2000.

⁹ Biologist, U.S. Fish and Wildlife Service, Fairbanks Field Office. Written communication, January 3, 2001.

¹⁰ Biologist, U.S. Fish and Wildlife Service, Fairbanks Field Office. Written communication. January 3, 2001.

eider will have any additional economic impacts on land-based fish processors.

2.3 Oil and Gas Exploration and Development

As a result of the removal of the critical habitat area in the lands and coastal waters of the North Slope, areas where oil and gas exploration and development have occurred have been excluded from the critical habitat designation. Oil and gas exploration and development under the jurisdiction of the Bureau of Land Management and the Minerals Management Service is no longer an activity that presently occurs, nor is reasonably foreseeable, within the boundaries of the designated critical habitat. Thus, critical habitat designation for the spectacled eider is not likely to impact oil and gas exploration and development in this region.

2.4 Wildlife Management and Marine Management (other than critical habitat)

With the removal of the Y-K Delta (marine) and North Slope (land and marine) units from the final designation, the scope of potentially affected wildlife and marine management activities has been reduced. However, these U.S. Fish and Wildlife Service, NMFS, and Alaska Department of Fish and Game (ADFG) activities still occur in all remaining units (Y-K Delta (land), Norton Sound, Ledyard Bay, and the Wintering Area). In addition, wildlife management and marine issues may involve the U.S. Army Corps of Engineers, EPA, HUD, DOE, Army, Coast Guard, or Air Force activities. Regular contact between agencies should ensure that consultations on the spectacled eider would already occur under the listing of the species (i.e., even in the absence of critical habitat designation), and thus no additional economic impact will be associated with the designation of critical habitat.

2.4 Maintenance and Air Traffic

U.S. Air Force maintenance and air traffic activities occur on two radar sites in the Y-K Delta (land) unit and four radar sites in the North Slope (land) unit. With the removal of the North Slope (land) unit from the final designation, these activities will not be affected by critical habitat designation for the spectacled eider. The two radar sites in the Y-K Delta unit have also been removed from the final designation. Thus, no additional economic impacts to maintenance and air traffic activities are expected as a result of the critical habitat designation for the spectacled eider.

2.5 Troop Training Exercises

Troop training activities were conducted on a number of U.S. Army local training areas included in four units of the proposed critical habitat designation. With the removal of the North Slope (land) unit from the final designation, activities in this area will not be affected by critical habitat designation for the spectacled eider. However, Army troop training activities in Norton Sound, Y-K Delta, and on St. Lawrence Island (Wintering Area) may still take place within the

extant boundaries of the final designation.

As stated in the *Draft Economic Analysis*, the Service conducts Section 7 consultations on army troop training activities each year. It is the Fish and Wildlife Service's experience that these exercises have no affect on spectacled eiders, due to the time of year that they are conducted, and the low-environmental-impact methods used to carry them out. The Service does not anticipate that designation of critical habitat will change the way in which these annual informal consultations are conducted. Nonetheless, the Service maintains that if consultations for these activities are required in the future, these consultations would have been required due to the listing of the spectacled eider, and not due to the designation of critical habitat. Thus, no additional economic impacts on troop training activities are expected as a result of the critical habitat designation for the spectacled eider.

2.6 Oil Spill Planning and Marine Transportation

U.S. Coast Guard boat permitting activities, as well as oil spill planning and response activities, occur in marine units of the proposed and final critical habitat designations for the spectacled eider. While several marine units have been removed from the final designation, Coast Guard boat permitting and oil spill response activities in the Norton Sound, Ledyard Bay and the Wintering Area units have the potential to be affected by critical habitat designation. While the Service is not aware of the U.S. Coast Guard having previously considered the spectacled eider in their permitting and oil spill contingency planning and response efforts, the Service does not foresee any formal consultation on this issue that would not otherwise already be necessitated by virtue of the species being listed.

The Service received comments from Applied Ocean Services regarding the lack of attention the *Draft Economic Analysis* gave to the economic dependence that coastal communities have on marine transportation and maritime commerce. These comments focused on communities near Norton Sound, Ledyard Bay, and the Wintering Area. No formal consultations have occurred for either marine transportation or marine commerce in these areas under the listing. However, the Service maintains that should consultations occur in the future, they would have already been required due to the listing of the spectacled eider.

Commenters noted that fuel distribution at the city of St. Michael, on the coast of Norton Sound, could be affected by the critical habitat designation. There have not been any formal consultations for fuel distribution activities by private parties in the past. However, the Service maintains that should consultations occur in the future, they would be required under the listing and would not result from the designation of critical habitat for the spectacled eider.¹¹

Because oil spill planning and marine transportation activities already require consultations under the listing of the spectacled eider, no additional consultations or ensuing project modification are anticipated as a result of critical habitat designation. Thus, no additional economic impacts on oil spill planning and marine transportation activities are expected as a result of the critical habitat

¹¹ Biologist, Fish and Wildlife Service. Personal communication, December 5, 2000.

designation for the spectacled eider.

2.7 Coal Mining Activities

Commenters noted that non-commercial coal mining activities occurring on lands adjacent to Ledyard Bay, and that these activities may be affected by the critical habitat designation. These activities are limited to residents who collect coal for their personal use; no commercial coal mining activity exists in the area. A Federal nexus does not exist for these activities, and there have not been any formal consultations for these activities in the area in the past.¹² Although coal mining resources exist in this area, no plans for development have been submitted. If present use patterns continue, critical habitat will not affect coal mining in this area. Any changes in non-commercial coal mining activity are speculative, and therefore cannot reasonably be quantified in this analysis.

2.8 Community Expansion/Public Works Projects

In the *Draft Economic Analysis*, ten communities were cited as having the potential for a federal nexus for activities on lands proposed for critical habitat. These activities involved county expansion or public works project funding. Nine of these communities were located on the North Slope (land) unit, which has been removed from the final designation of critical habitat. The tenth community, Hooper Bay, was also excluded from the Y-K Delta unit in the final designation. Therefore, critical habitat for the spectacled eider, as defined in the final rule, does not include lands on which these potentially affected activities would occur. For this reason, no additional economic impacts are expected.

3. Small Business Impacts

Some commenters state that the Service failed to adequately address the requirements of the Small Business Regulatory Enforcement Fairness Act in the *Draft Economic Analysis*. The Regulatory Flexibility Act, as amended by the Small Business Regulatory Enforcement Fairness Act, generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. The Service maintains that the final rule designating critical habitat for the spectacled eider will not have a significant economic impact on a substantial number of small entities, and as a result, the Service has not prepared either an initial or final regulatory flexibility analysis.

4. Third Party Claims

¹² Biologist, Fish and Wildlife Service. Personal communication, December 5, 2000.

Some commenters state that the *Draft Economic Analysis* did not consider the cost of handling third party challenges. That is, some commenters believe that third parties may use the designation of critical habitat as a legal tool to halt or otherwise influence activities within the designated area. The Service recognizes that it is possible that third parties may elect to sue the Service over future decisions regarding whether or not an activity adversely modifies critical habitat. However, this economic analysis does not address the potential economic implications of third party lawsuits because of the unknown scope of such lawsuits.