may not exclude an area if the Service determines that doing so would result in extinction of the species. Pursuant to 50 CFR 424.19, the Service will consider the economic and other relevant impacts of designating of critical habitat for the coastal population of the western snowy plover.

Economic Analysis

The economic analysis is designed to provide information to assist in making determinations about areas which may be excluded from critical habitat. It is conducted by examining how a designation of critical habitat for the snowy plover would be expected to affect the use of Federal lands as well as non-Federal activities authorized or funded by Federal agencies. Activities on private or state-owned lands that do not involve Federal permits, funding or other Federal actions would not be restricted by a designation of critical habitat.

The economic analysis distinguishes between economic effects caused by the listing of the snowy plover as threatened and those that would be caused by the proposed designation of critical habitat. Furthermore, if a proposed action would otherwise have been limited or prohibited by another statute or regulation, such as the Clean Water Act, those economic effects would not be attributable to either listing or critical habitat designation under the Endangered Species Act.

Economic effects are the costs or benefits to society of precluding or limiting specific land uses in areas being considered for designation as critical habitat. Economic effects are categorized as either efficiency or distributional. Economic efficiency effects are those consequences of critical habitat designation that cause changes in national income. Economic distribution effects pertain to regional changes that may have offsetting effects elsewhere in the national economy. Efficiency effects are used primarily to determine whether an action is economically sound and whether expected benefits exceed costs. Distributional effects are used to evaluate regional and local economic impacts.

Consultation Under Section 7 of the Endangered Species Act

Section 7 of the Act (16 USC 1536), requires Federal agencies to insure that activities they fund, authorize, or carry out are not likely to jeopardize the continued existence of listed species or result in destruction or adverse modification of critical habitat. Jeopardy is defined at 50 CFR 402.02 as any

action reasonably expected to reduce appreciably the likelihood of both the survival and recovery of the species in the wild by reducing its reproduction, numbers, or distribution. Destruction or adverse modification of critical habitat is defined at 50 CFR 402.02 as any direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of the species.

Under section 7, a Federal agency must consult with the Service if it determines that an action may affect a listed species or its critical habitat. During consultation, the Service reviews the agency's proposed action and prepares a biological opinion as to whether that action is likely to jeopardize the continued existence of the species or destroy or adversely modify its critical habitat.

In cases where species are listed without critical habitat, the Service determines only whether the proposed action is likely to jeopardize the continued existence of the species. In cases where critical habitat has been designated, the Service also determines whether the proposed action is likely to destroy or adversely modify critical habitat. The additional requirement for Federal agencies to avoid destruction and adverse modification of critical habitat may result in incremental restrictions on agency actions beyond those required to avoid jeopardy or for other statutory or regulatory purposes.

The incremental restrictions arising from section 7 consultations on destruction or adverse modification are the only way that designating critical habitat produces an economic impact. To isolate that incremental impact, total economic effects of limitations on a proposed action within critical habitat must be apportioned between a species listing (jeopardy, take prohibitions, etc.) and critical habitat designation (destruction or adverse modifications).

If the action is found to jeopardize the continued existence of the species or destroy or adversely modify its critical habitat, the Service is required to provide, to the extent possible, reasonable and prudent alternatives to the proposed action. By definition, reasonable and prudent alternatives allow the proposed action to go forward while removing the conditions that jeopardize the species or destroy or adversely modify its critical habitat. For the snowy plover, the Service believes that reasonable and prudent alternatives developed as part of consultation will allow most activities to continue, subject to some limitations. Such alternatives might include fencing or seasonal closure of certain areas to

human uses, as well as changes in beach erosion control or dredging plans.

Determination of whether an action will result in jeopardy and/or adverse modification is dependent upon a number of factors, such as the type of project, its size, location, and duration. In many cases, sufficient management actions will permit agencies to avoid adverse modification with little or no effect on their activities. The Service believes that, in the case of the snowy plover, the large majority of economic impacts as a result of section 7 consultation will occur as a result of listing, through the application of the jeopardy standard and incidental take prohibitions.

Framework of Analysis

The economic analysis examines the costs and benefits of precluding or limiting specific land uses within areas designated as critical habitat. It is cast in a "with" critical habitat versus a "without" critical habitat framework and seeks to measure the net change in the various categories of benefits and costs when the critical habitat designation is imposed on the existing baseline.

National and Regional Effects

The economic effects of critical habitat designation consist of those affecting national income and those that are important on a local or regional level.

National economic (efficiency) costs represent changes in national income (the total value of goods and services). They are measured as changes in consumer surplus and producer surplus (economic rent). Economic efficiency analysis seeks to maximize national income from a given resource base. Gains and losses in recreation values, increased costs imposed on management agencies or development projects, loss of earnings by displaced labor or capital assets, and changes in revenue from user fees (beach user fees, etc.) are typical national economic costs of critical habitat designation. The economic cost of designating critical habitat includes any additional costs that would be imposed, regardless of whether they are incurred by a Federal agency, a state agency or the private sector so long as they stem from a section 7 consultation regarding destruction or adverse modification of the habitat proposed to be designated.

Regional economic (distributional) impacts represent transfers between people, groups, or geographic regions, with no net effect on the national total. Distributional impacts relate to equity and fairness considerations and deal