

NHTSA notes that the safety community in recent years has had considerable interest in the concept of crash event recorders. Such recorders can, in conjunction with the air bag and other sensors already provided on many vehicles, collect and record a variety of relevant crash data. These data include such things as vehicle speed, belt use, and crash pulse.

The additional and more accurate data about crashes that could be provided by crash event recorders would enable investigators to develop a significantly better understanding of how and why crashes occur. This information could then be used in a variety of ways to improve motor vehicle safety, e.g., the information could be used to improve vehicle designs, improve safety standards, and develop improved public education campaigns.

A more immediate safety benefit can occur if the occurrence of a crash is immediately and automatically communicated to local emergency services, thereby shortening the response time of the correct emergency services. NHTSA's Office of Vehicle Safety Research is currently testing, in the Buffalo, New York area, an Automated Collision Notification system that uses single point electronic crash sensors, a global positioning system receiver and a cellular phone to facilitate emergency services dispatch. This program has been the subject of recent press articles, copies of which are being placed in the docket.

The agency notes that on June 10, 1997, the National Transportation Safety Board (NTSB) adopted a series of recommendations concerning air bag safety and occupant restraint use which, among other things, called on NHTSA and the vehicle manufacturers "to develop and implement * * * a plan to gather better information on crash pulses and other crash parameters in actual crashes, utilizing current or augmented crash sensing and recording devices." The recommendations followed a public forum convened by the NTSB in March 1997.

Also, the Jet Propulsion Laboratory, in its April 1998 Advanced Air Bag Technology Assessment, included a recommendation that NHTSA study the feasibility of installing and obtaining crash data for safety analyses from crash recorders on vehicles.

The auto industry is already beginning to voluntarily install crash event recorders on some vehicles. For example, General Motors (GM) has had crash event recorders on some of its vehicles for several years and is planning to install more advanced

systems in the future. NHTSA notes that, as part of a recent investigation carried out by its Special Crash Investigations program, it was able to use information obtained from a GM vehicle equipped with a crash event recorder.

Persons who are interested in knowing more about GM's program for crash event recorders may wish to read a recent article on that subject that was published in the Detroit News. The agency is placing a copy of that article in the docket. Also, at the agency's invitation, GM made a presentation concerning its crash event recorders at NHTSA's September 17, 1998 quarterly meeting held to answer questions from the public and the regulated industries regarding the agency's vehicle regulatory and research program. Information presented by GM at this meeting is being placed in the docket.

While NHTSA believes that crash event recorders have the potential to provide valuable information for its vehicle regulatory program, the agency believes that a rulemaking to require such recorders is not now appropriate. First, as discussed above, the industry is already moving to voluntarily provide such recorders. Second, as the development and installation of these recorders, and decisions about what data should be recorded and how they should be retrieved, are in their infancy, NHTSA believes it is premature to consider regulating such devices. Given this context, such a rulemaking would not appear to be a good use of limited agency resources.

Moreover, there are a variety of issues related to the implementation of crash event recorders that may be better addressed, at least initially, outside the rulemaking context. In addition to deciding what specific crash data to record, other issues include, among other things, possible standardization of the means for retrieving the data, access to the data by the agency and crash investigators, and privacy issues.

The agency notes that the means for retrieving data from crash event recorders is currently proprietary. This means that the involvement of the vehicle manufacturer is necessary to retrieve the data. NHTSA has not had any difficulty obtaining cooperation from vehicle manufacturers to obtain data from crash event recorders. While the retrieval of such data would be facilitated if the means for retrieving it were standardized, a number of issues may need to be addressed in order to achieve such standardization, e.g., analysis of available alternative means for retrieval and consideration of privacy and related issues.

NHTSA introduced the topic of crash event recorders (these devices are also called event data recorders or EDRs) for action to the Motor Vehicle Safety Research Advisory Committee (MVSAC) during its April 29, 1998 meeting. MVSAC consists of 16 members representing governments, industry, academia, the medical community and public interest groups and functions to advise NHTSA about complex technical topics. MVSAC approved setting up a working group on EDRs under the Crashworthiness Subcommittee. The agency solicited names from the full committee and subcommittee for nomination to work on the working group. The first meeting of the working group took place in October, and others are planned for next year.

NHTSA believes that the approach of relying on the efforts of individual manufacturers to voluntarily introduce crash event recorders, coupled by the work of the MVSAC working group on this subject, is the best way to proceed at this time. The involvement of the MVSAC working group will ensure that issues relating to the implementation and use of crash event recorders receive the attention of a wide variety of experts, and that the agency obtains the benefit of hearing the views of those experts. Moreover, NHTSA will ensure that MVSAC considers topics of particular interest to the agency, including access to the data by the agency.

For the reasons discussed above, the agency is denying Mr. Bingham's petition for rulemaking.

Authority: 49 U.S.C. 30162; delegations of authority at 49 CFR 1.50 and 501.8.

Issued on: November 3, 1998.

James R. Hackney,

Acting Associate Administrator for Safety Performance Standards.

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DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 20

RIN 1018-AF25

Migratory Bird Hunting; Regulations to Increase Harvest of Mid-Continent Light Geese

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The Mid-continent lesser snow goose and Ross' goose population

has nearly quadrupled in the last 30 years. The Western Central Flyway lesser snow and Ross' goose population also has quadrupled in the last 23 years. Collectively, these central and eastern arctic and subarctic-nesting light goose populations are referred to as Mid-continent light geese (MCLG).

Due to high population growth rates, a decline in adult mortality, and an increase in winter survival, MCLG are now seriously injurious to their habitat and habitat important to other migratory birds which poses a serious threat to the short and long-term health and status of migratory bird populations. The U.S. Fish and Wildlife Service (Service or "we") believes that MCLG populations exceed long-term sustainable levels for their arctic and subarctic breeding habitats and the populations must be reduced. This proposed rule will authorize the use of additional hunting methods (electronic callers and unplugged shotguns) during a normal open light-geese hunting season when all other migratory bird hunting seasons are closed. We designed the program to increase MCLG harvest and to provide a biologically sound and cost effective and efficient method for the reduction and management of overabundant MCLG populations.

DATES: The comment period for this proposed rule closes January 8, 1999.

ADDRESSES: Comments should be mailed to Chief, Office of Migratory Bird Management, U.S. Fish and Wildlife Service, Department of Interior, ms 634—ARLSQ, 1849 C Street NW., Washington, D.C. 20240. The public may inspect comments during normal business hours in room 634—Arlington Square Building, 4401 N. Fairfax Drive, Arlington, Virginia.

FOR FURTHER INFORMATION CONTACT: Bob Blohm, Acting Chief, Office of Migratory Bird Management, U.S. Fish and Wildlife Service, (703) 358-1714.

SUPPLEMENTARY INFORMATION:

Background

Lesser snow and Ross' geese that primarily migrate through North Dakota, South Dakota, Nebraska, Kansas, Iowa, and Missouri, and winter in Arkansas, Louisiana, Mississippi, and eastern, central, and southern Texas and other Gulf Coast States are referred to as the Mid-continent population of light geese (MCP). Lesser snow and Ross' geese that primarily migrate through Montana, Wyoming, and Colorado and winter in New Mexico, northwestern Texas, and Chihuahua, Mexico are referred to as the Western Central Flyway population of light geese (WCFP). Ross' geese are often mistaken for lesser snow geese due to

their similar appearance. Ross' geese occur in both the MCP and the WCFP and mix extensively with lesser snow geese on both the breeding and wintering grounds. MCP and WCFP lesser snow and Ross' geese are collectively referred to as Mid-continent light geese (MCLG) because they breed, migrate, and winter in the "Mid-continent" or central portions of North America primarily in the Central and Mississippi Flyways. They are referred to as "light" geese due to their light coloration as opposed to "dark" geese such as the white-fronted or Canada goose.

MCLG breed in the central and eastern arctic and subarctic regions of Northern Canada. MCLG populations are experiencing high population growth rates and have substantially increased in numbers within the last 30 years. MCP light geese have more than tripled within 30 years from an estimated 800,000 birds in 1969 to approximately three million birds in 1998 and have grown an average of 5% per year for the last ten years (Abraham et al. 1996, USFWS 1998b). WCFP light geese have quadrupled in 23 years from 52,000 in 1974 to 216,000 in 1997 (USFWS 1997b), and have increased an average of 9% per year for the last ten years (USFWS 1998b). The above population estimates are not true population counts and likely underestimate the true population sizes. They were derived from an index which is used to detect population growth trends by sampling a portion of a population. Breeding colony estimates, actual population counts estimated from spring and summer surveys, suggest that the actual population sizes of MCLG may be in excess of five million breeding birds (D. Caswell pers. comm. 1998). For example, in one area northwest of Hudson Bay alone, the Queen Maud Gulf, estimates for breeding and non-breeding (failed to successfully nest) adult Ross' and lesser snow geese for 1998 are 1.29 million and 1.82 million birds, respectively (Alisauskas et al. 1998). These geese are in addition to the millions of geese estimated to be nesting along west Hudson and James Bays where the geese have precipitated severe habitat degradation and on Southampton and Baffin Islands where signs of habitat degradation are becoming evident. MCLG populations have exceeded the North American Waterfowl Management Plan (NAWMP) population objective levels in both the United States and Canada. NAWMP population objective levels are used to demonstrate that MCLG populations have increased

substantially over what is considered to be a healthy population level, not to suggest that MCLG be reduced to NAWMP population objective levels. Population management thresholds, however, are management thresholds that specify both an upper and lower population level objective.

Ross' geese (WCFP and MCP) currently exceed 200,000 birds (December index) and breeding colony estimates (actual counts of nesting birds) approached 400,000 birds in 1996 (Batt 1997) and exceeded 1 million birds in 1998; both estimates well exceed the recommended minimum population objective level for Ross' geese of 100,000 birds (USDOI et al. 1998). MCP lesser snow geese estimates currently exceed 2.8 million birds (December index); the lower and upper population management thresholds are 800,000 and 1.2 million birds, respectively (Central and Mississippi Flyway Councils 1982) with a recommended minimum population objective level of 1 million birds (USDOI et al. 1998). WCFP lesser snow goose estimates currently exceed 200,000 birds (December index) which exceeds the recommended minimum population objective level of 110,000 birds (USDOI et al. 1998). Although our intention is to significantly reduce these populations to relieve pressures on the breeding habitats, we feel that these efforts will not threaten the long-term status of these populations as we are confident reduction efforts will not result in the populations falling below the population goal and management objective levels indicated above. Evaluation and assessment mechanisms are in place to estimate population sizes and will be used to prevent the over-harvest of these populations.

The rapid rise of MCLG populations has been influenced heavily by human activities (Sparrowe, 1998, Batt 1997). The greatest attributable factors are:

- (1) The expansion of agricultural areas in the United States and prairie Canada that provide abundant food resources during migration and winter;
- (2) The establishment of sanctuaries along the Flyways specifically to increase bird populations;
- (3) A decline in harvest rate; and
- (4) An increase in adult survival rates.

Although all of these factors contributed to the rapid rise in MCLG populations, the expansion of agriculture in prairie Canada and the United States is considered to be the primary attributable factor (Sparrowe 1998, Abraham and Jefferies 1997). Today, MCLG continue to exploit soybean, rice, and other crops during the winter primarily in the Gulf Coast States and are observed less frequently

in the natural coastal marshes they historically utilized. Similarly, MCLG migrating through the Mid-latitude and northern United States and prairie Canada during spring migration exploit cereal grain crops consisting of corn, wheat, barley, oats and rye (Alisauskas et al. 1988). For example, an estimated 1 to 2 million MCLG stage in the Rainwater Basin in Nebraska from mid-February to mid-March and primarily feed on corn left over from harvesting (USFWS 1998a). These crops provide MCLG with additional nutrients during spring migration assuring that MCLG arrive on the breeding grounds in prime condition to breed. Increased food subsidies during spring migration over the last 30 years has resulted in higher reproductive potential and breeding success (Ankney and McInnes 1978, Abraham and Jefferies 1997). Consequently, more geese survived the winter and migration and were healthier as they returned to their breeding grounds in Canada.

This is not intended to criticize the conservation efforts accomplished by the implementation of conservation-oriented agricultural practices. Such efforts have benefitted numerous wildlife species. It is merely to point out that MCLG have exploited these artificial resources which has resulted in an increase in survival.

Foraging Behavior of MCLG

The feeding behavior of MCLG is characterized by three foraging methods. Where spring thawing has occurred and above-ground plant growth has not begun, lesser snow geese dig into and break open the turf (grub) consuming the highly nutritious below-ground biomass, or roots, of plants. Grubbing continues into late spring. Lesser snow geese also engage in shoot-pulling where the geese pull the shoots of large sedges, consume the highly nutritious basal portion, and discard the rest, leaving behind large unproductive, and potentially unrecoverable areas (Abraham and Jefferies 1997). A third feeding strategy utilized by many species is grazing which in some cases, stimulates plant growth. Both lesser snow geese and Ross' geese graze. Due to their shorter bill size, Ross' geese are able to graze shorter stands of grass.

Grubbing, grazing, and shoot-pulling are natural feeding behaviors and at lower population levels have had positive effects on the ecosystem. For example, at lower numbers, geese fed on the tundra grasses and actually stimulated growth of plant communities resulting in a positive feedback loop between the geese and the vegetation. However, the rapidly expanding

numbers of geese, coupled with the short tundra growing season, disrupted the balance and has resulted in severe habitat degradation in sensitive ecosystems. The Hudson Bay Lowlands salt-marsh ecosystem, for example, consists of a 1,200 mile strip of coastline along west Hudson and James Bays, Canada. It contains approximately 135,000 acres of coastal salt-marsh habitat. Vast hypersaline areas devoid of vegetation degraded by rapidly increasing populations of MCLG have been observed and documented extensively throughout the Hudson Bay Lowlands (Abraham and Jefferies 1997). Rockwell et al. (1997a) observed the decline of more than 30 avian populations in the La Pérouse Bay area due to severe habitat degradation. These declines and other ecological changes represent a decline in biological diversity and indicate the beginning of collapse of the current Hudson Bay Lowlands salt-marsh ecosystem. Much of the degraded habitat is unlikely to recover (Abraham and Jefferies 1997). In badly degraded areas, less than 20% of the vegetation within an enclosure has recovered after 15 years of protection from MCLG (Abraham and Jefferies 1997). Recovery rates of degraded areas are further slowed by the short tundra growing season and the high salinity levels in the exposed and unprotected soil.

Long-term research efforts have indicated signs of "trophic cascade" in La Pérouse Bay, Cape Henrietta Maria, and Akimiski Island (R. Rockwell pers. comm. 1998). Trophic cascade is essentially the collapse of an existing food chain indicating that the ecosystem is unable to support its inhabitants. Impacts associated with trophic cascade are indicative that MCLG populations have exceeded the carrying capacity of much of their breeding habitat. Impacts such as a decline in biological diversity and physiological stress, malnutrition, and disease in goslings have been documented and observations of such impacts are increasing. Additional observations in areas north of Hudson Bay on Southampton and Baffin Islands, northwest in the Queen Maud Gulf region, and south off the west coast of James Bay on Akimiski Island also suggest similar habitat degradation patterns from expanding colonies of MCLG. Batt (1997) reported the rapid expansion of existing colonies and the establishment of new colonies in the central and eastern arctic. In 1973, for example, Canadian Wildlife Service data indicated that approximately 400,000 light geese nested on West Baffin Island. In 1997, approximately

1.8 million breeding adults were counted. Similar colony expansions have been reported for the Queen Maud Gulf region and Southampton Island. Rapid colony expansion must be halted and the populations must be reduced to prevent further habitat degradation and to protect the remaining habitat upon which numerous wildlife species depend.

Breeding Habitat Status

MCLG breeding colonies occur over a large area encompassing eastern and central portions of Northern Canada. Habitat degradation by MCLG has been most extensively studied in specific areas where colonies have expanded exponentially and exhibit severe habitat degradation. The Hudson Bay Lowlands salt-marsh ecosystem, for example, lies within a 135,000 acre narrow strip of coastline along west Hudson and James Bays and provides important stopover sites for numerous migratory bird species. Of the 135,000 acres of habitat in the Hudson Bay Lowlands, 35% is considered to be destroyed, 30% is damaged, and 35% is overgrazed (Batt 1997). Habitats currently categorized as "damaged" or "overgrazed" are moving and will continue to move into the "destroyed" category if goose populations continue to expand. Accelerated habitat degradation has occurred on Southampton and Baffin Islands and appear to be following the same pattern as documented in the Hudson Bay Lowlands. Current research efforts are underway to confirm observations of habitat degradation by MCLG in other areas.

Migration and Wintering Habitat Conditions and Degradation

There is no evidence to suggest that wintering habitat for MCLG is threatened or that it may limit population growth. Presently, there are approximately 2.25 million acres of rice fields in Texas, Louisiana, and Arkansas, in addition to the millions of acres of cereal grain crops in the Midwest. Consequently, food availability and suitable wintering habitat are not limiting MCLG during the migration and wintering portions of the annual cycle.

Summary of Environmental Consequences of Taking No Action

At each site they occupy, MCLG will continue to degrade the plant communities until food and other resources are exhausted, forcing yet more expansion. The pattern has been, and will continue to be, that as existing nesting colonies expand, they exploit successively poorer quality habitats,

which are less able to accommodate them and which become degraded more quickly. Eventually, the coastal salt-marsh communities surrounding Hudson Bay and James Bay will become remnant with little chance of recovery as long as MCLG populations remain high and for some time after it declines from natural causes, if they do. The functioning of the whole coastal ecosystem, from consolidation of sediments by colonizing plants to provision of suitable habitats for invertebrate and vertebrate fauna, will be detrimentally and possibly irrevocably altered. Similar conditions will likely come to prevail at selected non-coastal areas where MCLG have occupied most of the suitable nesting habitats. As many as 30 other avian species, including American wigeon, Northern shoveler, stilt sandpiper, Hudsonian godwit, and others, that utilize those habitats have declined locally, presumably due to habitat degradation by MCLG. Other species, such as Southern James Bay Canada geese, a species of management concern, that breed on nearby Akimiski Island and numerous other waterfowl species that migrate and stage with MCLG, have been and will continue to be negatively impacted. Arctic mammalian herbivores will also be impacted as the vegetative communities upon which they depend become depleted.

We expect that MCLG populations will continue to grow at least 5% annually, resulting in more severe and widespread ecological impacts. Although several factors influence population dynamics, the greatest single factor in the populations' increase is high and increasing adult survival rates (Rockwell et al. 1997b). Therefore, removing adults from the populations is the most effective and efficient approach in reducing the populations. Experts feel that breaking eggs and other non-lethal techniques have been determined to be ineffective in significantly reducing the populations within a reasonable time to preserve and protect habitat (Batt 1997).

We have attempted to curb the growth of MCLG populations by increasing bag and possession limits and extending the open hunting season length for light geese to 107 days, the maximum allowed by the Migratory Bird Treaty. However, due to the rapid rise in MCLG numbers, low hunter success, and low hunter interest, harvest rate (the percentage of the population that is harvested), has declined despite evidence that the number of geese harvested has increased (USFWS 1997). The decline in harvest rate indicates that the current management strategies

are not sufficient to stabilize or reduce population growth rates.

We realize that current MCLG management policies need to be re-examined and believe that alternative regulatory strategies designed to increase MCLG harvest, implemented concurrently with habitat management and other non-lethal control measures, have the potential to be effective in reducing MCLG populations to levels that the remaining breeding habitat can sustain. We prefer to implement alternative regulatory strategies designed to increase MCLG harvest afforded by the Migratory Bird Treaty and avoid the use of more drastic population control measures. More direct population control measures such as trapping and culling programs may be necessary if the current proposed action is not successful. Should the proposed action be unsuccessful in five years, we will consider more direct population control measures to reduce MCLG.

We restrict the scope of this proposed rule to Mid-continent populations of light geese (MCLG): Mid-continent and Western Central Flyway lesser snow geese (*Chen caerulescens caerulescens*) and Ross' geese (*C. rossii*) and the United States portions of the Central and Mississippi Flyways (primarily Alabama, Arkansas, Colorado, Illinois, Iowa, Kansas, Louisiana, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming) where they migrate, stage, or winter. Evidence exists to support the conclusion that MCLG migrate, stage, and winter in these areas and breed in the arctic and subarctic areas that are experiencing severe habitat degradation.

We are concurrently proposing an additional but separate population reduction strategy. In addition to this proposed rule to amend 50 CFR part 20, we are also proposing to amend 50 CFR part 21 to authorize the use of a conservation order to increase take of MCLG. The conservation order will be in the nature of an order authorizing States to implement actions to harvest MCLG, by shooting in a hunting manner, inside or outside of the regular open migratory bird hunting season frameworks when all migratory bird hunting seasons are closed. This proposal is also in the nature of a proposed rule and the notice and request for comments appears in this issue of the **Federal Register**.

We do not expect this proposed action (amendment to 50 CFR part 20) implemented alone to achieve our management objective which is to reduce MCLG populations such that the

December index falls within 800,000 and 1.2 million birds. The success of this strategy will hinge upon State participation, hunter participation, and hunter effectiveness. If a State does not participate, then its hunters will not be able to participate decreasing the program's potential. We do not expect some States to participate in this proposed action due to the infeasibility of implementing the action when all other migratory bird hunting seasons are closed. MCLG migrate through northern and Mid-latitude States in the fall, however, the geese typically do not reach some of those States prior to 10 March during spring migration. For those States to be able to utilize this proposed action, they would have to close all other migratory bird hunting seasons in the fall, which is highly unlikely. Conversely, many migratory bird hunting seasons in the southern States close prior to 10 March. Therefore, it is much more feasible for southern States to implement this proposed action by establishing a light-geese only season when all other migratory bird seasons are closed. We are proposing the second action (conservation order) referred to above in order to maximize the program's potential and obtain our management objective within a reasonable time-frame to avoid the use of more direct population control programs. The second proposed action, a conservation order, will allow northern States to participate in this effort and enable them to harvest MCLG during spring migration, particularly after 10 March. Harvest projections for this proposed action (amendment to 50 CFR part 20) are rolled into the harvest projections for the second proposed action (conservation order) and are not in addition to the harvest projections for the second proposed action.

Proposed Revision to 50 CFR 20

We propose to revise 50 CFR part 20.21 with the intent to increase harvest of Mid-continent light geese during the open hunting season (MCLG) by authorizing the use of electronic callers and unplugged shotguns during a light goose only season when all other migratory bird hunting seasons are closed. This is in an effort to reduce overabundant MCLG populations that have become seriously injurious to other migratory bird populations and to habitat essential to migratory bird populations. Conditions under the proposed regulation require that participating States inform all hunters acting under the authority of the proposed amendment of the conditions

that apply to the utilization of this proposed amendment.

Under the authority of this proposed rule, States could develop and initiate aggressive harvest management strategies by offering hunters additional hunting methods to harvest MCLG with the intent to increase harvest of MCLG. By operating under an existing program, a regular light-geese only season, affected States would not have to create a new program to implement the proposed action, which would significantly reduce administrative burden to the State and Federal governments. In order to minimize or avoid negative impacts to non-target species and to eliminate confusion regarding enforcement of the restrictions associated with this proposed action, States may only implement this proposed action when all other migratory bird hunting seasons are closed. Although we expect this proposed action to facilitate other protection and recovery efforts, we do not expect this proposed action (amendment to 50 CFR part 20) implemented alone to achieve our management objective. Therefore, we are concurrently proposing an additional but separate population reduction strategy (discussed above) to work in concert with this proposed action to obtain our management objective. We feel the overall strategy will result in biologically sound and more cost-effective and efficient overabundant MCLG population management and could preclude the use of more drastic, direct population control measures such as trapping and culling programs. Although the desired goal is to significantly reduce overabundant MCLG populations, we believe that this proposed action will not threaten the long-term health and status of MCLG populations or threaten the status of other species that could be impacted through the implementation of this proposed action. Evaluation and monitoring strategies are in place to assess the overall impacts of this proposed action on MCLG harvest and impacts to non-target species that may be affected by the implementation of this proposed action.

Summary of Environmental Consequences of Proposed Action

MCLG Populations and Associated Habitats

We project that we will harvest two million MCLG over the next three years without the use of this proposed action based on current MCLG harvest trends. Under certain assumptions, our most liberal estimate indicates that we can

expect to harvest an additional one million MCLG within three years of implementation of this proposed action bringing the total harvest to three million MCLG within three years of implementation of this proposed action. Once the December index falls within 800,000 to 1.2 million birds, the proposed amendments to 50 CFR part 20 will be revoked. The impact is expected to be regional within the Central and western Mississippi Flyway States. MCLG winter in the southern States in the Flyways substantially longer than northern or Mid-latitude States. Therefore, the opportunity to harvest more MCLG is greatest in those States. Additional hunting methods authorized by a State under the authority of this proposed rule, will facilitate a hunter's ability to harvest more MCLG and will facilitate other efforts to increase adult mortality and therefore decrease numbers of MCLG.

Although we can expect the additional hunting methods to be effective, there is no precedent to guide us in determining to what degree they will be effective. It is equally difficult to ascertain to what degree the public will utilize the new methods, which will influence its effectiveness. However, with certain assumptions, we may project an increase in harvest using existing harvest data.

Several assumptions must be established before projecting the effect of the proposed action on harvest. We are assuming that all affected States will act under the authority of this proposed rule and allow the additional methods authorized in this proposed action, that current MCLG hunter numbers will not decrease, and that the new hunting methods authorized in this proposed action, if used, will increase hunter effectiveness and overall harvest. We do not assume that all MCLG hunters will use the new hunting methods and of those that do, we do not assume that all will increase their effectiveness. We are assuming that 25% of the current MCLG hunters will use the new hunting methods and increase his/her effectiveness in harvesting MCLG.

We determined, based on a linear regression analysis of historical harvest data, that harvest number has increased approximately 31,600 MCLG per year for the last ten years. A simple linear regression of the harvest data represents our most conservative estimate because the analysis does not take into account other factors that influence harvest such as the recent regulation changes for light geese. A more complex analysis demonstrates that harvest number has actually increased at a faster rate since the bag and possession limits for light

geese have been increased (USFWS 1998c). Today, more MCLG are harvested with fewer hunters and hunter participation and light goose hunting is increasing. Therefore, conservatively, we projected that harvest will increase 31,600 per year for the next 5 years.

In 1997–98, 602,800 MCLG were harvested in the affected States (AR, CO, IL, IA, KS, LA, MS, MO, MT, NE, NM, ND, OK, SD, TX, and WY). Combined with our projection that harvest will increase by 31,600 per year without any changes to hunting regulations, we can expect to harvest 634,400 MCLG in the 1998–1999 regular light goose season in those affected States. Under the assumptions stated above, we can expect to harvest an additional 301,300 MCLG through the implementation of this proposed action during a light-geese only season bringing the total projected harvest to 935,700 MCLG in the first year of implementation of this proposed action. These figures are based on increasing harvest number. Therefore, we expect this projected harvest to increase annually. We expect to harvest 1.1 million MCLG in the second year of implementation and 1.2 million in the third year of implementation.

Central and Mississippi Flyway Council management guidelines suggest that MCLG populations should rest between approximately 800,000 and 1.2 million birds based on the December index (USFWS 1998b, Central and Mississippi Flyway Councils 1982). Batt (1997) estimate that the populations should be reduced by 50% by 2005. Based on the December index, that would suggest a reduction from approximately three million birds to approximately 1.5 million birds in the December index; a figure which coincides with the management guidelines determined by the Central and Mississippi Flyway Council. Therefore, our efforts will focus on a goal similar to those documented. It is important to understand that the December index is not a population count. It is simply used to detect population growth trends by sampling a portion of a population. The reduction of MCLG will be carefully analyzed and assessed on an annual basis using the December index and other surveys to ensure that the populations are not over-harvested.

We expect an increase in harvest to facilitate other efforts, such as habitat management on the wintering grounds and increased harvest of MCLG by Canadian aboriginals, to decrease MCLG numbers and relieve pressures on the breeding grounds. There is no evidence

to suggest that the use of additional hunting methods during a light-geese only season will result in an over-harvest of MCLG. Once the December index reflects a number within the management guidelines mentioned above (approximately 800,000–1.2 million), the proposed action will be revoked and the methods authorized will no longer be allowed. It is improbable that the use of the additional methods will threaten the long-term status of MCLG populations because we will monitor the MCLG populations and act accordingly to avoid it by modifying or revoking the proposed action.

Other Species

An increase in harvest, and subsequently a decrease in MCLG numbers, is expected to relieve pressures on other migratory bird populations that utilize MCLG breeding and wintering grounds and other areas along the migration routes. It is expected to reduce the possibility that other species will be forced to seek habitat elsewhere or abandon unsuitable degraded habitat altogether, which could potentially result in decreased reproductive success of affected populations. We expect a decrease in MCLG populations to contribute to increased reproductive success of adversely impacted populations. Further, we expect that by decreasing the numbers of MCLG on wintering and migration stopover areas, the risk of transmitting avian cholera to other species will be reduced which will reduce the threat of a widespread avian cholera outbreak. We do not expect the proposed action to result in an increased intake of non-target species. The proposed action will only be allowed when all other migratory bird hunting seasons are closed.

Socioeconomic

Any action taken has economic consequences. Continued inaction is likely to result in ecosystem failure of the Hudson Bay Lowlands salt-marsh ecosystem and potentially other ecosystems as MCLG populations expand and exploit new habitats. Without more effective population control measures to curb the populations, the populations of MCLG are expected to continue increasing and become more and more unstable as suitable breeding habitat diminishes. As population densities increase, the incidence of avian cholera among MCLG and other species is likely to increase throughout the Flyways, particularly at migration stopover sites. Losses of other species such as pintails, white-fronted

geese, sandhill cranes, and whooping cranes, from avian cholera may be great. This may result in reduced hunting, birdwatching, and other opportunities. It may also result in the season closures of adversely impacted migratory game birds such as white-fronted geese, sandhill cranes, and pintails. Goose damage to winter wheat and other agricultural crops will continue and worsen. Habitat damage in the Arctic will eventually trigger density-dependent regulation of the population which likely will result in increased gosling mortality and may cause the population to decline precipitously. However, it is not clear when such population regulation will occur and what habitat, if any, will remain to support the survivors. Such a decline may result in a population too low to permit any hunting, effectively closing MCLG hunting seasons. The length of the closures will largely depend on the recovery rate of the breeding habitat which likely will take decades. Although the overall impact of closures of light-geese seasons in the Central and Mississippi Flyways that could result from continued degradation of the breeding habitat is small on a national scale, it would be concentrated where large flocks of geese stage and winter. As hunter services tend to be performed by people with low incomes, the impact of a closure would fall disproportionately on low income groups near goose concentrations. We expect the proposed action to reduce the risk of light-geese season closures in the Central and Mississippi Flyways and avoid a \$70 million loss in output and reduce the possibility of increased agricultural loss. We expect special MCLG population control efforts to create additional take opportunities which is expected to add \$18 million in output to local economies.

Public Comment Received

On April 6, 1998, we issued in the **Federal Register** (63 FR 16819) a notice of intent announcing that we would develop a draft Environmental Assessment to examine alternative regulatory strategies to reduce MCLG populations. This notice invited public comment on possible regulatory alternatives. The notice also advised the public that the draft Environmental Assessment along with a proposed rule would be published in the **Federal Register** later this year for public review and comment.

As a result of this invitation for public comment, 247 comments consisting of 1 from a Federal agency, 8 from State wildlife agencies, 7 from private organizations, 1 from a Flyway Council,

115 from private citizens, and 115 from people who signed a petition were received. Comments were generally dichotomized by two key points of concern.

To summarize, 186 comments were supportive of our intent to examine alternative regulatory strategies designed to increase MCLG harvest to reduce the MCLG population. These commenters agreed that there was a problem and that the resolution should entail reduction by lethal means and supported the use of additional hunting methods to increase harvest of MCLG. Comments in support of such action were received from 1 Federal agency, 8 State wildlife agencies, 1 Flyway Council, 5 private conservation agencies, 94 private citizens, and 77 from people who signed a petition. Conversely, 59 comments received were in opposition to the Service's intent to reduce MCLG populations by use of lethal means either because they believe it is not scientifically justified to reduce the populations or attempts to do so would be inhumane. Instead, these commenters offered two non-lethal recommendations to reduce the populations: (1) Hazing adults off nests and (2) eggging (destroying nests) on the breeding grounds. Comments in support of no action or non-lethal action were received from 2 private animal welfare agencies, 19 private citizens, and 38 from people who signed a petition. Additionally, 2 comments were received in support of reducing the populations by use of lethal means, however, recommended use of Federal and State wildlife agency programs such as trapping and culling.

Service Response: We are also opposed to the inhumane treatment of any birds and we do not believe that authorizing additional hunting methods or by providing additional opportunities to increase harvest of MCLG is inhumane. We also prefer non-lethal control activities, such as habitat modification, as the first means of resolving this issue. However, habitat modification and other harassment tactics do not always work satisfactorily and lethal methods are sometimes necessary to increase the effectiveness of non-lethal management methods. Further, MCLG breed in remote locations in the arctic and subarctic regions of Northern Canada. Implementing control activities in those areas is cost-prohibitive and dangerous. Instead, we feel that providing States with additional opportunity and means to increase MCLG harvest while implementing non-lethal control measures concurrently is the most efficient and feasible short-term

solution. We will continue to work jointly with the Canadian Wildlife Service to reduce MCLG in both the United States and in Canada.

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NEPA Considerations

We have prepared a draft Environmental Assessment (EA), as defined under the authority of the National Environmental Policy Act of 1969, in connection with this proposed regulation. The EA is available for public review at the above address.

Endangered Species Act Consideration

Section 7(a)(2) of the Endangered Species Act (ESA), as amended (16 U.S.C. 1531–1543; 87 Stat. 884) provides that “Each Federal agency shall, in consultation with the Secretary, insure that any action authorized, funded, or carried out * * * is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of (critical) habitat * * *.” Consequently, we initiated Section 7 consultation under the ESA for this proposed rulemaking. Completed results of our consultation under Section 7 of the ESA may be inspected by the public in, and will be available to the public from, the Office of Migratory Bird Management at the above address.

Regulatory Flexibility Act, Executive Order 12866, and Executive Order 12630

The economic impacts of this proposed rulemaking will fall disproportionately on small businesses

because of the structure of the waterfowl hunting related industries. The proposed regulation benefits small businesses by avoiding ecosystem failure to an ecosystem that produces migratory bird resources important to American citizens. The Regulatory Flexibility Act of 1980 (5 U.S.C. 601 *et seq.*) requires the preparation of flexibility analyses for rules that will have a significant effect on a substantial number of small entities. Data are not available to estimate the number of small entities affected, but it is unlikely to be a substantial number on a national scale. We expect the proposed action to reduce the risk of light-geese season closures in the Central and Mississippi Flyways subsequently avoiding a \$70 million loss in output and reducing the possibility of increased agricultural loss. We expect special MCLG population control efforts to create additional take opportunities which is expected to add \$18 million in output to local economies. We have determined that a Regulatory Flexibility Act Analysis is not required. Migratory bird regulations are recognized as exempt from takings implication assessment under E.O. 12630. This rule was not subject to review by the Office of Management and Budget under E.O. 12866.

Paperwork Reduction Act and Information Collection

This regulation does not require any additional information collection under the Paperwork Reduction Act. The information collection is covered by an existing Office of Management and Budget approval number. The information collections contained in § 20.20 have been approved by OMB under 44 U.S.C. 3501 *et seq.* and assigned clearance number 1018–0015 for the administration of the Migratory Bird Harvest Information Survey (50 CFR 20.20). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Unfunded Mandates

We have determined and certify, in compliance with the requirements of the Unfunded Mandates Act (2 U.S.C. 1502 *et seq.*) that this proposed rulemaking will not impose a cost of \$100 million or more in any given year on local or State government or private entities. This rule will not “significantly or uniquely” affect small governments. No governments below the State level will be affected by this rule. A Small Government Agency Plan is not required. This rule will not produce a Federal mandate of \$100 million or

greater in any year, i.e., it is not a "significant regulatory action" under the Unfunded Mandates Reform Act.

Civil Justice Reform—Executive Order 12988

The Department, in promulgating this proposed rule, has determined that these regulations meet the applicable standards provided in sections 3(a) and 3(b)(2) of Executive Order 12988. This rule has been reviewed by the Office of the Solicitor. Specifically, this rule has been reviewed to eliminate errors and ambiguity, has been written to minimize litigation, provides a clear legal standard for affected conduct, and specifies in clear language the effect on existing Federal law or regulation. It is not anticipated that this rule will require any additional involvement of the justice system beyond enforcement of provisions of the Migratory Bird Treaty Act of 1918 that have already been implemented through previous rulemakings.

Public Comment Invited

The policy of the Department of the Interior is, whenever practical, to afford you the opportunity to participate in the rulemaking process. Accordingly, interested persons may submit written comments, suggestions, or objections regarding this proposal to the location identified in the address section above. Comments must be received on or before (Insert 60 days from the date of publication of this notice). Following review and consideration of the comments, we intend to issue a final rule.

Executive Order 12866 requires each agency to write regulations that are easy to understand. We invite your comments on how to make this rule easier to understand including answers to questions such as the following: (1) Are the requirements in the rule clearly stated? (2) Does the rule contain technical language or jargon that interferes with its clarity? (3) Does the format of the rule (grouping and order of sections, use of headings, paragraphing, etc.) aid in or reduce its clarity? (4) Would the rule be easier to understand if it were divided into more (but shorter) sections? (A "section" appears in bold type and is preceded by the symbol "§" (50 CFR 21.60) (5) Is the description of the rule in the SUPPLEMENTARY INFORMATION section of the preamble helpful in understanding the rule? What else could we do to make the rule easier to understand?

Send a copy of any comments that concern how we could make this rule easier to understand to "Office of Regulatory Affairs, Department of the

Interior, room 7229, 1849 C Street, NW, Washington, DC 20240. You may also e-mail the comments to this address: Exsec@ios.doi.gov.

List of Subjects in 50 CFR Part 20

Exports, Hunting, Imports, Reporting and recordkeeping requirements, Transportation, Wildlife.

For the reasons given in the preamble, we hereby propose to amend part 20 of subchapter B, chapter I, title 50 of the Code of Federal Regulations, as set forth below:

The authority citation for part 20 continues to read as follows:

Authority: 16 U.S.C 703–712; and 16 U.S.C. 742 a–j.

PART 20—[AMENDED]

§ 20.21 [Amended]

1. Revise paragraphs (b) and (g) of § 20.21 *Hunting methods* to read as follows:

* * * * *

(b) With a shotgun of any description capable of holding more than three shells, unless it is plugged with a one-piece filler, incapable of removal without disassembling the gun, so its total capacity does not exceed three shells. *Provided that* during a light-goose only season when all other migratory bird hunting seasons are closed, nothing in this paragraph (b) prohibits the taking of lesser snow and Ross' geese in Alabama, Arkansas, Colorado, Illinois, Iowa, Kansas, Louisiana, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas and Wyoming with a shotgun that is capable of holding more than three shells. This exception is subject to an annual assessment by the Service based on harvest data collected from the previous year to determine the effectiveness of this section in meeting the management goals and objectives associated with the reduction of Mid-continent light goose (lesser snow and Ross' geese) populations. The Service will annually publish the determination of that assessment in the **Federal Register**.

* * * * *

(g) By the use or aid of recorded or electrically amplified bird calls or sounds, or recorded or electrically amplified imitations of bird calls or sounds. *Provided that* during a light goose only season when all other migratory bird hunting seasons are closed, nothing in this paragraph (g) prohibits the taking of lesser snow and Ross' geese in Alabama, Arkansas, Colorado, Illinois, Iowa, Kansas,

Louisiana, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, Texas, South Dakota, and Wyoming with recorded or electrically amplified bird calls or sounds or recorded or electrically amplified imitations of bird calls or sounds. This exception is subject to an annual assessment by the Service based on harvest data collected from the previous year to determine the effectiveness of this regulation in meeting the management goals and objectives associated with the reduction of Mid-continent light goose (Mid-continent lesser snow and Ross' geese) populations. The Service will annually publish the determination of that assessment in the **Federal Register**.

* * * * *

Dated: October 30, 1998.

Donald J. Barry,

Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 98–29953 Filed 11–5–98; 8:45 am]

BILLING CODE 4310–55–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Parts 20 and 21

RIN 1018–AF05

Migratory Bird Permits; Establishment of a Conservation Order for the Reduction of Mid-Continent Light Goose Populations

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The Mid-continent lesser snow goose and Ross' goose population has nearly quadrupled in the last 30 years. The Western Central Flyway lesser snow and Ross' goose population also has quadrupled in the last 23 years. Collectively, these central and eastern arctic and subarctic-nesting light goose populations are referred to as Mid-continent light geese (MCLG).

Due to high population growth rates, a decline in adult mortality, and an increase in winter survival, MCLG are now seriously injurious to their habitat and habitat important to other migratory birds which poses a serious threat to the short and long-term health and status of migratory bird populations. The U.S. Fish and Wildlife Service (Service or "we") believes that MCLG populations exceed long-term sustainable levels for their arctic and subarctic breeding habitats and the populations must be reduced. This proposed rule proposes the addition of a new subpart to 50 CFR