27. WATERFOWL HUNTING

Today's Item **Information** ☐ **Action** ☒

Adoption of proposed changes to the regular annual rulemaking for waterfowl hunting.

Summary of Previous/Future Actions

- Discussion hearing — Dec 9-10, 2015; San Diego
- Notice hearing — Feb 10-11, 2016; Sacramento
- **Today's Adoption hearing** — **Apr 13-14, 2016; Santa Rosa**

Background

At the FGC meeting in Feb, FGC authorized staff to publish notice with the following proposals in addition to providing generally recommended ranges and dates to allow for the U.S. Fish and Wildlife Service (USFWS) annually established federal regulation "frameworks".

DFW is proposing the following changes to Section 502:

- Increase the white goose daily bag limit from 15 to 20 in most zones. This change will also result in an increase in the total bag limit in respective zones.
- Increase the white goose daily bag limit from 15 to 20 in the Imperial County Special Management Area.
- Increase the age requirement to participate in Youth Waterfowl Hunting Days from 15 years of age and younger to 17 years of age and younger.

DFW is proposing the following changes to Section 507:

- Delete that part of subsection 507(a)(2) prohibiting the possession of a firearm while archery hunting migratory birds. Since there is no specific archery-only hunt or tag set aside for migratory birds, there is no reason to think individuals would take a bird with a firearm but pretend it was taken with archery equipment. Consequently, there is no reason to restrict archers from carrying firearms when taking migratory birds.
- This amendment also addresses a grammatical error, correcting "~~crossbows~~ bolts" to "<u>crossbow</u> bolts," which is necessary to improve the clarity of the regulation.

At this meeting the DFW will present the USFWS's annually established federal regulation frameworks. These frameworks describe the earliest that waterfowl hunting seasons can open, the maximum number of days hunting can occur, the latest that hunting seasons must close, and the maximum daily bag limit, among other things. States must set waterfowl hunting regulations within the federal frameworks.

Significant Public Comments (N/A)

Recommendation

FGC staff: Accept DFW's and USFWS recommendations.

DFW: Adopt the proposed regulation changes as presented in the ISOR as well as USFWS recommendations.

Exhibits

1. DFW presentation
2. Final environmental document
3. ISOR 502 (December 28, 2015), migratory waterfowl
4. ISOR 507 (December 28, 2015), migratory game birds
5. Waterfowl Federal Framework, dated March 28, 2016

Motion/Direction

Moved by _____ and seconded by _____ that the Commission certifies the final environmental document, adopts the proposed project, and adopts proposed changes to Sections 502 and 507, regarding migratory waterfowl regulations for the 2016-17 season.

2016-17 Waterfowl Hunting Recommendations

Melanie Weaver, Waterfowl Program Lead

Fish and Game Commission Meeting
April 14, 2016 Agenda Item 27

Frameworks

- Western Mallard Model for Ducks
  - Objective is sustainable harvest over long term
  - Updated annually w/breeding population
    - AK, OR and CA (BC & WA to be added)
  - Harvest rates (banded ducks)
- Federal frameworks for ducks are liberal (except Scaup)
- Geese:
  - Annual surveys
  - Annual harvest surveys

Waterfowl Status

- Continental Ducks (all species): record high
  - Mallard & Green-wings = record high
  - Pintail, Canvasback, Scaup = unchanged
- Pacific Flyway mallards:
  - CA record low, OR unchanged, down in AK
- All but 2 goose populations over objective

Recommendations

Proposed Changes

- White goose bag limit increased to 20/day
  - most zones
- Total goose bag limit increased to 30/day
  - most zones
- NE Zone: 3-way split for white geese
- Type C Wildlife Areas and public waters open during late season in NE Zone
- Youth Hunt age increased to 17 and younger

Ducks: Seasons and Bag Limits

- 100-105 day seasons
  - Varies by zone
- 7/day, no more than:
  - 7 mallards, 2 hens
  - 2 pintail
  - 2 canvasback
  - 2 redheads
  - 3 scaup/86 days

Ducks: Season Dates

- NE Zone: Oct 1 – Jan 13 (105 days)
  - Scaup: Oct 1 – Nov 27 (58 days) & Dec 17 – Jan 13 (28 days)
- BOS, SSJV, So CA Zones: Oct 22 – Jan 29 (100 days)
  - Scaup: Nov 5 – Jan 29 (86 days)
- CO River Zone: Oct 21 – Jan 29 (101 days)
  - Scaup: Nov 5 – Jan 29 (86 days)
  - Must match AZ regulations

Geese: Seasons and Bag Limits

- 100 – 107 day seasons
  - Varies by zone

- Generally 30/day
  - 20 white geese
  - 10 dark geese
  - Brant 2/day
  - Special Management Area regulations – no changes

NE Zone: Geese

- Regular Season
  - Dark geese: Oct 1 – Jan 8 (100 days)
  - White geese: Oct 1 – Dec 4(65 days) & Jan 7 – Jan 13 (7 days)
- Late Season
  - White geese: Feb 6 – Mar 10 (33 days)
  - Whitefronts: Mar 4 – Mar 8 (5 days)
- 30/day: 20 white/10 dark geese, no more than 2 Large Canada geese

Balance of State Zone: Geese

- Early Season Canada geese
  - Oct 1 – Oct 5 (5 days)
- Regular Season
  - Oct 22 – Jan 29 (100 days)
- Late Season
  - Whitefronts & white geese: Feb 11 – Feb 15 (5 days)
- 30/day: 20 white/10 dark geese

Other Zones: Geese

- SSJV Zone: Oct 22 – Jan 29 (100 days)
  - 30/day: 20 white/10 dark geese
- So CA Zone: Oct 22 – Jan 29 (100 days)
  - 23/day: 20 white/3 dark geese
- CO River Zone: Oct 21 – Jan 29 (101 days)
  - 10/day: 10 white/4 dark geese
  - CA must match AZ adjacent zone

And Lastly…

- North Coast SMA
  - Nov 7 – Jan 29 (84 days)
  - Feb 18 – Mar 10 (21 days)
- Sac Valley SMA
  - Oct 22 – Dec 21 (61 days)
- Imperial Valley SMA
  - Nov 5 – Jan 29 (86 days)
  - Feb 4 – Feb 19 (16 days)
- Youth Hunt Days (2)
  - NE Zone 14 days prior to season
  - All other zones 7 days after season
- Falconry – no change

Questions?

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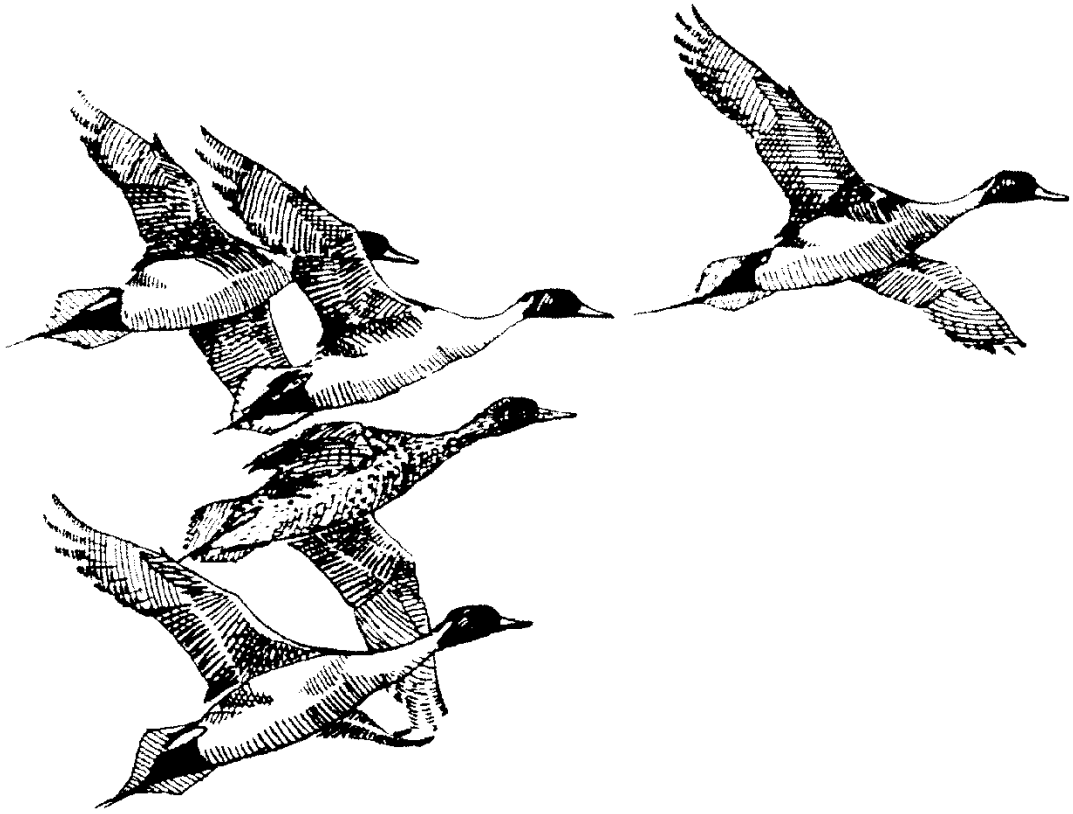
FINAL
ENVIRONMENTAL DOCUMENT
Section 502, Title 14
California Code of Regulations

MIGRATORY GAME BIRD HUNTING
(WATERFOWL, COOTS, MOORHENS)



April 14, 2016

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF FISH AND WILDLIFE

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CHAPTER 1 - SUMMARY

PROPOSED PROJECT AND ALTERNATIVES

The project discussed in this document (the proposed project) involves modifications to the current waterfowl hunting regulations for the 2016-17 waterfowl hunting season. Specifically, the Department is proposing to:

- Increase the white goose daily bag limit from 15 to 20 in the Northeastern, Balance of State, Southern San Joaquin Valley, and the Southern California zones, and the Imperial Special Management Area. As a result of increasing the white goose daily bag limit, the total daily bag limit for all geese will increase from 18 to 23 in the Southern California Zone and from 25 to 30 in the Northeastern, Balance of State, and Southern San Joaquin Valley zones.

- Increase the age requirement to participate in the Youth Waterfowl Hunting Days from 15 years of age and younger to 17 years of age and younger.

The U.S. Fish and Wildlife Service (Service) established the frameworks in late October. The Federal frameworks specify the outside dates, total number of hunting days, bag limits, shooting hours, and methods of take authorized for migratory game birds. States must set waterfowl hunting regulations within the federal frameworks. The Department of Fish and Wildlife (Department) will recommend specific season dates and bag limits to the Fish and Game Commission (Commission) that are within the federal frameworks.

The Commission may not select more liberal season dates or bag limits than those set by the Federal frameworks. Therefore, the decisions of the Commission and the recommendations of the Department to the Commission center on the question of whether to adopt the proposed changes or to consider more restrictive or protective State regulations to keep migratory game bird populations in California in a healthy and productive condition.

The Department is providing the Commission with a range of alternatives to the proposed project. Table 1 summarizes the Department findings that there are no significant long-term adverse impacts associated with the proposed project or any of the project alternatives considered for the 2016-17 waterfowl hunting regulations.

SUMMARY OF IMPACTS AND MITIGATION

Table 1. Summary of Alternatives and Their Impacts

Alternative	Description	Significant Impact	Mitigation
Proposed Project	Increase the white goose daily bag limit from 15 to 20 in the Northeastern, Balance of State, Southern San Joaquin Valley, and the Southern California zones, and the Imperial Special Management Area. As a result of increasing the white goose daily bag limit, the total daily bag limit for all geese will increase from 18 to 23 in the Southern California Zone and from 25 to 30 in the Northeastern, Balance of State, and Southern San Joaquin Valley zones. Increase the age requirement to participate in the Youth Waterfowl Hunting Days from 15 years of age and younger to 17 years of age and younger	No	N/A
Alternative 1. No Project	No change from the 2015-16 hunting regulations.	No	N/A
Alternative 2. Reduced Season Lengths, Timing and Bag Limits	Reduce season lengths, timing, and/or bag limits by up to 50 percent.	No	N/A
Alternative 3. Elimination of All Mechanical Decoys.	Eliminate mechanical decoys as a method of take.	No	N/A

The Department concludes that the regulated harvest of migratory game birds within the Federal guidelines does not result in a significant adverse impact to their

populations as analyzed in the 2006 Final Environmental Document for Migratory Game Bird Hunting of Waterfowl, Coots, and Moorhens (incorporated by reference, State Clearinghouse Number 2006042115, available at 1812 9th Street, Sacramento 95811). This is because the size of a wildlife population at any point in time is the result of the interaction between population (reproductive success and mortality rates) and its environment (habitat). Declines in habitat quality and quantity result in reduced carrying capacity, which results in corresponding declines in populations.

State and Federal roles in establishing waterfowl hunting regulations

Migratory birds are managed under the provisions of the Migratory Bird Treaty Act of July 3, 1918 (40. Stat. 755:16 U.S.C. 703 et seq.), Federal regulations [50 CFR 20 (K)(L)], as well as California statutes (Fish and Game Code sections 355 and 356) and regulations selected by the Commission.

The regulations governing the take of migratory game birds in California are selected by the Commission and forwarded to the Service each year. The regulations selected by the Commission must be within frameworks established by the Service through the following generalized three-step process:

1. The Service, with assistance from the states, assesses the status of migratory game bird populations.

2. The Service establishes regulatory frameworks;

3. The Commission makes and forwards season selections to the Service regarding regulations for California; and

4. The Service and the State publish the final regulations.

The Federal frameworks specify the outside dates, total number of hunting days, bag limits, shooting hours, and methods of take authorized for migratory game birds. Proposals selected by the Commission cannot be more liberal than the frameworks established by the Service (Fish and Game Code, Section 355).

In selecting hunting regulations, the Commission is governed by the State's Conservation of Wildlife Resources Policy (Fish and Game Code, Section 1801). This policy contains, among other things, objectives to maintain sufficient populations of wildlife resources in the State and to provide public hunting opportunities through regulated harvest where such harvest is consistent with maintaining healthy wildlife populations (Section 1801 California Fish and Game Code).

In August the Service provided notice to establish hunting regulations for the 2016-17 hunting season; see Federal Register 80 FR 47388-47398. The notice also solicits public comments and establishes the annual schedule for meetings.

The Department is recommending 2 changes to the existing hunting regulations. The frameworks for the 2016-17 season have been approved by the Flyway Councils and adopted by the Service Regulation's Committee meeting October 20-21, 2015. The proposed frameworks allow for a liberal duck season which includes a 107 day season, 7 daily duck limit including 7 mallards but only 2 hen mallards, 2 pintail, 2 canvasback, 2 redheads, and 3 scaup (during an 86 day season). The Department's proposals for the 2016-2017 hunting season for waterfowl, coots, and moorhens are based on these adopted Federal frameworks.

The 2016-17 Proposed Federal Frameworks Pertaining to California

Ducks, Mergansers, Coots, Common Moorhens, and Purple Gallinules
Hunting Seasons and Duck Limits: Concurrent 107 days. The daily bag limit is 7 ducks and mergansers, including no more than 2 female mallards, 2 pintail, 3 scaup (86-day season), 2 canvasback, and 2 redheads. The season on coots and common moorhens may be between the outside dates for the season on ducks, but not to exceed 107 days. Coot, Common Moorhen, and Purple Gallinule Limits: The daily bag limits of coots, common moorhens, and purple gallinules are 25, singly or in the aggregate. Possession limits for all species are triple the daily bag limit.

Outside Dates: Between the Saturday nearest September 24 (September 24) and the last Sunday in January (January 29).

Zoning and Split Seasons: Arizona, California, Idaho, Nevada, Oregon, Utah, Washington, and Wyoming may select hunting seasons by zones. Arizona, California, Idaho, Nevada, Oregon, Utah, Washington, and Wyoming may split their seasons into two segments. Colorado, Montana, and New Mexico may split their seasons into two segments.

Colorado River Zone, California: Seasons and limits shall be the same as seasons and limits selected in the adjacent portion of Arizona (South Zone).

Geese
Season Lengths, Outside Dates, and Limits

Canada geese and brant: Except as subsequently noted, 107-day seasons may be selected with outside dates between the Saturday nearest September 24 (September 24) and the last Sunday in January (January 29). In California, Oregon, and Washington, the daily bag limit is 4 Canada geese. For brant, Oregon and

Washington may select a 16-day season and California a 37-day season. Days must be consecutive. Washington and California may select hunting seasons for up to two zones. The daily bag limit is 2 brant and is in addition to other goose limits. In Oregon and California, the brant season must end no later than December 15.

White-fronted geese: Except as subsequently noted, 107-day seasons may be selected with outside dates between the Saturday nearest September 24 (September 24) and March 10. The daily bag limit is 10.

Light geese: Except as subsequently noted, 107-day seasons may be selected with outside dates between the Saturday nearest September 24 (September 24) and March 10. The daily bag limit is 20.

Split Seasons: Unless otherwise specified, seasons for geese may be split into up to 3 segments. Three-way split seasons for Canada geese and white-fronted geese require Pacific Flyway Council and U.S. Fish and Wildlife Service approval and a 3-year evaluation by each participating State.

California: The daily bag limit for Canada geese is 10.

Balance of State Zone (includes Southern San Joaquin Valley Zone): A Canada goose season may be selected with outside dates between the Saturday nearest September 24 (September 24) and March 10. In the Sacramento Valley Special Management Area, the season on white-fronted geese must end on or before December 28, and the daily bag limit is 3 white-fronted geese. In the North Coast Special Management Area, hunting days that occur after the last Sunday in January should be concurrent with Oregon's South Coast Zone.

Shooting Hours – From One-half hour before sunrise to sunset.

AREAS OF CONTROVERSY

A public scoping session regarding the preparation of environmental documents for hunting waterfowl was held on October 22, 2015, at the Wildlife Branch office located at 1812 9th Street, Sacramento. No areas of controversy regarding migratory bird hunting were identified at the meeting. However, members of the public have expressed concern regarding the following: 1) mechanical spinning wing decoys in the use of taking waterfowl during past hunting seasons. Specifically, since 2002 about 100 letters and or public testimony has been received by the Fish and Game Commission to ban mechanically spinning wing decoys while only about 12 letters of support or public testimony in favor of mechanically spinning wing decoys during the same time period (Department files); 2) the Commission has received numerous letters both supporting and opposing the continued hunting in Morro and Tomales

bays; and 3) opposition to the continued restrictions on bag limit and season length for white-fronted geese in the Sacramento Valley Special Management Area.

Concerns about the effect of climate change since the 2006 Final Environmental Document for Migratory Game Bird Hunting of Waterfowl, Coots, and Moorhens (incorporated by reference, State Clearinghouse Number 2006042115, available at 1812 9th Street, Sacramento 95811) was published led to a discussion of this topic in Appendix F.

ISSUES TO BE RESOLVED

As provided by existing law, the Commission is the decision-making body (lead agency) considering the proposed project, while the Department has responsibility for conducting management activities such as resource assessments, preparing management plans, operating public hunting opportunities and enforcing laws and regulations. The primary issue for the Commission to resolve is whether to change waterfowl hunting regulations, within the federal framework, as an element of waterfowl management. If such changes are authorized, the Commission will specify the areas, season lengths, and bag and possession limits and other appropriate special conditions.

FUNCTIONAL EQUIVALANCY

The California Environmental Quality Act (CEQA) requires all public agencies in the State to evaluate the environmental impacts of projects they approve, including regulations, which may have a potential to significantly affect the environment. CEQA review of the proposed project will be conducted in accordance with the Commission's certified regulatory program (CRP) approved by the Secretary for the California Resources Agency pursuant to Public Resources Code section 21080.5 (See generally Cal. Code Regs., tit. 14, §§ 781.5, and 15251, subd. (b).). The Department has prepared this Environmental Document (ED) which is the functional equivalent of an Environmental Impact Report, on behalf of the Commission in compliance with this requirement. The ED provides the Commission, other agencies, and the general public with an objective assessment of the potential effects.

In addition, pursuant to Section 15087 of the CEQA Guidelines, this environmental document is available for public review for 45 days. During the review period, the public is encouraged to provide written comments regarding the environmental document to the Department of Fish and Wildlife, Wildlife Branch, 1812 9th Street, Sacramento, California 95811. Comments must be received by the Department by 5:00 p.m. on December 28, 2015.

CHAPTER 2 - THE PROPOSED ACTION

The proposed project being considered consists of the following modifications to existing migratory game bird hunting regulations:

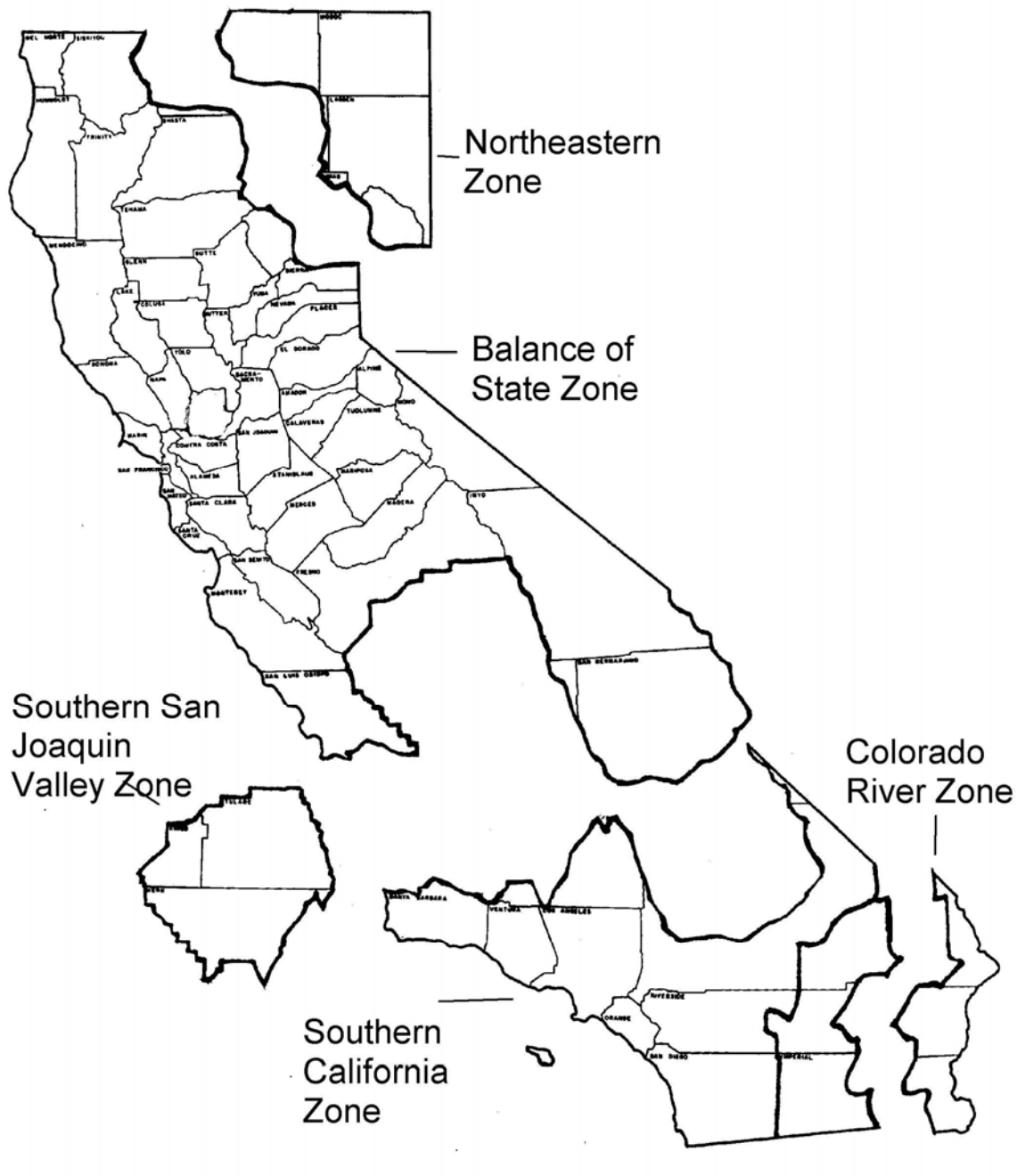
1. Increase the white goose daily bag limit from 15 to 20 in the Northeastern, Balance of State, Southern San Joaquin Valley, and the Southern California zones, and the Imperial Special Management Area. As a result of increasing the white goose daily bag limit, the total daily bag limit for all geese will increase from 18 to 23 in the Southern California Zone and from 25 to 30 in the Northeastern, Balance of State, and Southern San Joaquin Valley zones.

2. Increase the age requirement to participate in the Youth Waterfowl Hunting Days from 15 years of age and younger to 17 years of age and younger.

Table 2. Proposed Changes to Season Dates and Bag Limits for 2016-17.

Species by Zone	Daily Bag Limit	Possession limit	Season Length
COOTS AND MOORHENS			
Northeastern CA	no change	no change	no change
So. San Joaquin Valley	no change	no change	no change
So. California	no change	no change	no change
Colorado River	no change	no change	no change
Balance of State	no change	no change	no change
DUCKS			
Statewide	no change	no change	
EXCEPTIONS			
Mallard (max.)	no change	no change	no change
Mallard Hen (max.)	no change	no change	no change
Pintail (max.)	no change	no change	no change
Redhead (max.)	no change	no change	no change
Scaup (max.)	no change	no change	no change
Canvasbacks (max.)	no change	no change	no change
Northeastern Calif.	no change	no change	no change
So. San Joaquin Valley	no change	no change	no change
Southern California	no change	no change	no change
Colorado River	no change	no change	no change
Balance of State	no change	no change	no change
GEESE			
Northeastern Calif.		no change	no change
EXCEPTIONS			
Large Canada Geese (max.)	no change	no change	
White-Front (max.)	no change	no change	no change
Small Canada Geese (max.)	no change	no change	
White Geese (max.)	20	no change	no change
So. San Joaquin Valley	no change	no change	no change
EXCEPTIONS			
Large Canada Geese (max.)	no change	no change	
White-Front (max.)	no change	no change	
Small Canada Geese (max)	no change	no change	
White Geese (max.)	20	no change	
Southern Calif.	no change	no change	no change
EXCEPTIONS			
Large Canada Goose (max.)	no change	no change	
White-Front Geese (max.)	no change	no change	
Small Canada Geese (max)	no change	no change	
White Geese (max.)	20	no change	
Colorado River	no change	no change	no change
EXCEPTIONS			
White Geese (max.)	no change	no change	
Dark Geese (max.)	no change	no change	
Balance of State	no change	no change	no change
EXCEPTIONS			
Large Canada Geese (max.)	no change	no change	
White-Front (max.)	no change	no change	
Small Canada Geese (max)	no change	no change	
White Geese (max.)	20	no change	
Special Management Areas	**Species**		**Season**
North Coast	no change		no change
Humboldt Bay South Spit	no change		no change
Sacramento Valley (West)	no change		no change
Morro Bay	no change		no change
Martis Lake	no change		no change
North Coast Brant	no change		no change
Balance of State Brant	no change		no change
Imperial County	20		no change

Figure 1. Waterfowl Zones in California



BACKGROUND AND EXISTING CONDITIONS

Background

Waterfowl, coots and moorhens are migratory game birds that use varied habitat types in different geographical areas of North America. Many individuals of these species reproduce in other states and countries and migrate in the fall and winter to California, although there are substantial resident populations of some species.

There are 36 species of migratory game birds from two of the taxonomic families that occur in California, listed below. Migratory game birds are defined by convention and law as belonging to the following taxonomic families (USDI 1988a:1):

Anatidae (ducks, geese, brant, and swans);
Columbidae (doves and pigeons);
Gruidae (cranes);
Rallidae (rails, coots, and gallinules);
Scolopacidae (woodcock and snipe);
Corvidae (crows).

The two families discussed in this ED are *Anatidae* and *Rallidae*. These families are combined herein due to similarities in basic life-history characteristics. These characteristics include: (1) the use of California as a migration and wintering area (Palmer 1976, Bellrose 1980, Zeiner *et al*. 1990); (2) the use of seasonal wetlands as roosting and foraging habitats (Bellrose 1980, Heitmeyer and Raveling 1988, USDI 1988a:31-56); and (3) for most duck species, similarities in nesting areas, habitat types, age at reproduction, and clutch sizes (Palmer 1976, Bellrose 1980, USDI 1988). Some differences among the species in these families exist. Geese and some duck species breed at an older age than do most ducks (Palmer 1976, Bellrose 1980). Deepwater and estuarine habitats are more important to some species (Palmer 1976, Bellrose 1980), and the use of dry and wet agricultural fields are more important to other species (Bellrose 1980, Zeiner *et al*. 1990).

Individuals and populations of migratory birds spend parts of the year in different geographical areas. Due to this geographic distribution and migratory nature, management for these species is based on geographic units, or flyways, (USDI 1975, USDI 1988a:63) comprised of several states (Figure 2).

These units, or flyways, incorporate populations that are generally discrete from populations in other units. Therefore, an analysis of the environmental effects of

Figure 2. Administrative Waterfowl Flyways

the proposed project in California must consider the status of the affected species at a flyway level.

Adaptive Harvest Management

In March 1995 (60 FR 15642 -15648), the Service implemented a general harvest strategy for setting duck framework regulations and the process will be used again in 2015 (80 FR 19851-19863). The regulatory process for migratory birds has evolved since the early 1900s from one that included little or no monitoring of populations and the establishment of regulations based on traditions, to today's more data-driven process (Johnson *et al*. 1993). The current process, known as Adaptive Harvest Management (AHM)(USFWS 2014a) establishes explicit harvest objectives and a single regulatory package is selected from a limited array of options. This single package is evaluated based on mathematical models, with the goal of ensuring that duck populations are healthy over the long-term while providing hunting opportunity consistent with the long-term health while learning more about the effect of hunting mortality on population parameters (See Final Environmental Document for Migratory Game Bird Hunting August 2006, incorporated by reference, State Clearinghouse Number 2006042115, available at 1812 9th Street, Sacramento 95811)

AHM balances hunting opportunities with the desire to achieve the duck population goals identified in the North American Waterfowl Management Plan (NAWMP). Currently, a set of four regulatory options, each containing flyway-specific season lengths, bag limits, and dates are being used. The selection of a specific option is recommended each year from a decision matrix based on mid-continent mallard breeding populations and habitat conditions in the current year, although the State continues to have the option to establish more restrictive regulations.

For the Pacific Flyway, the proposed regulatory packages vary primarily in season length (closed, 60, 86, or 107 days) and total duck bag limit (either four or seven ducks per day). Species- (e.g. mallard) and sex- (e.g. mallard) specific limits are contained within the AHM packages. Additionally, prescriptive regulation processes for pintail, canvasback and scaup have been adopted by the Service that determine daily bag limits depending on breeding population size, habitat conditions, and the season length established through the AHM process (see below).

In March 2008, the Pacific Flyway Council recommended that the Service set duck season frameworks in the Pacific Flyway based on a separate modeling approach that uses data from western mallards rather than mallards from the mid-continent region. This is because most of the mallards harvested in the Pacific Flyway originate from within the Flyway. The Service adopted the separate mallard model in August 2008 and plans to continue the use of that approach in 2015 (80 FR 19851-19863).

The western mallard approach uses the same regulatory packages as currently in use under continental AHM. Instead of a harvest objective constrained by the population goal in the NAWMP plan, the harvest objective for western mallards is based on a "shoulder approach", or a proportion of maximum sustained yield. Current modeling suggests that western mallards have been harvested at about 80% of their maximum potential, compared to about 90% for mid-continent mallards under the continental AHM approach.

As in mid-continent AHM, daily bag limits and season length will be set based on the status of the mallard breeding population. Bag limits for other species, including those for which individual harvest strategies have been adopted (pintail, canvasbacks, scaup) are based on mid-continent AHM and will be used in the Pacific Flyway. The State continues to have the option to establish more restrictive regulations.

Pintail Harvest Strategy

In 1997 a prescribed harvest strategy was developed (62 FR 39721 and 50662) with several modifications since inception. The harvest strategy was revised in 2002 when Flyway-specific harvest models were updated (67 FR 40131). In 2002 and 2003, the Service set pintail regulations that deviated from the strict prescriptions of the harvest strategy (i.e., partial season), but remained true to the intent of the strategy (67 FR 53694 and 59111; 68 FR 50019 and 55786). In 2004, the harvest strategy was modified to include a partial season option (69 FR 43696 and 52971). In adopting those changes, the USFWS and others called for review of the pintail strategy (69 FR 57142) and consideration of technical modifications that could be made to improve it. As a result of this review, the strategy was revised in 2006 to include updated flyway-specific harvest models, an updated recruitment model, and the addition of a procedure for removing bias in the breeding population size estimate based on its mean latitude (71 FR 50227 and 55656). Pursuant to requests from flyways and other stakeholders, a compensatory model was added to the strategy in 2007 (72 FR 18334, 31791, and 40198) as an alternative to the existing additive harvest model, and this update made the harvest strategy adaptive on an annual basis. The current strategy was developed in 2010 (75 FR 32873) and designed to maximize long-term cumulative harvest, which inherently requires perpetuation of a viable population. Hunting will be allowed when the observed breeding population is above 1.75 million birds (based on the lowest observed breeding population size since 1985 of 1.79 million birds in 2002).

The adaptive management protocol considers a range of regulatory alternatives for pintail harvest management that includes a closed season, 1-bird daily bag limit, or 2-bird daily bag limit. The maximum pintail season length depends on the general duck season framework (characterized as liberal, moderate, or restrictive and varying by Flyway) specified by mallard AHM.

An optimal pintail regulation is calculated under the assumption of a liberal mallard season length in all Flyways. However, if the season length of the general duck

season determined by mallard AHM is less than liberal in any of the Flyways, then an appropriate pintail daily bag limit would be substituted for that Flyway. Thus, a shorter season length dictated by mallard AHM would result in an equivalent season length for pintails, but with increased bag limit if the expected harvest remained within allowable limits.

Canvasback Harvest Strategy

Since 1994 the Service has followed a harvest strategy that if canvasback population status and production are sufficient to permit a harvest of 1-bird daily bag limit nationwide for the entire length of the regular duck season, while still attaining a projected spring population objective of 500,000 birds. In 2008 (73 FR 43290), the strategy was modified to incorporate the option for a 2-bird daily bag limit for canvasbacks when the predicted breeding population the subsequent year exceeds 725,000 birds. A partial season would be permitted if the estimated allowable harvest was within the projected harvest for a shortened season. If neither of these conditions can be met, the harvest strategy calls for a closed season.

Scaup Harvest Strategy

The scaup population has experienced a significant long-term decline. The 2007 population estimate was the third lowest on record. Recent population estimates have been more than 30 percent below the 55 year average with the biggest decline occurring over the last 25 years. There is evidence that the long-term scaup decline may be related to changes in scaup habitat. Several different ideas have been proposed to explain the decline, including a change in migration habitat conditions and food availability, effects of contaminants on scaup survival and reproduction and changing conditions on the breeding grounds possibly related to warming trends in portions of northern North America. Hunting has not been implicated as a cause of the past scaup decline, but the Service is committed to ensuring that harvest levels remain commensurate with the ability of the declining population to sustain harvest. In 2008 the Service implemented a new scaup harvest strategy (73 FR 43290) that used restrictive, moderate, and liberal regulatory alternatives. The scaup harvest strategy prescribes optimal harvest levels given an observed breeding population size and an explicit harvest management objective; maximize 95% of long-term cumulative harvest.

Service Changes in the Timing of Annual Migratory Bird Hunting Adoption

Historically, the Service published preliminary federal frameworks in mid-August and states adopted hunting regulations in early August based on the decisions of the Service Regulation Committee (SRC) in late July. The Service then published final frameworks, which contained the state-selected seasons in September. Beginning with the 2016 hunting seasons (79 FR 56864) a new schedule is now used for setting annual migratory bird hunting regulations. The new schedule will establish migratory

bird hunting seasons much earlier than the historic system. Under the new process, proposed hunting season frameworks for a given year will be developed in early fall of the prior year. Those frameworks will be finalized in October, thereby enabling the state agencies to select their seasons by late April and the Service will publish final frameworks in early summer.

Biological data (spring and summer surveys) for the following year will not be available in the fall, when the Flyway Councils and the Service will be developing hunting regulations for the next year. Thus, regulation development will be based on predictions derived from long-term biological information and established harvest strategies (as described above). This process will continue to use the best science available and will balance hunting opportunities with long-term migratory game bird conservation, while fulfilling all administrative requirements. Existing individual harvest strategies have been modified using either data from the previous year(s) or model predictions to fit this new schedule. Many existing regulatory prescriptions used for Canada Goose, Sandhill Cranes, Mourning Doves, and American Woodcock currently work on this basis. Uncertainty associated with these population status predictions has been accounted for and incorporated into the decision-making process. The Service concluded (Boomer, *et al.* 2015) that this uncertainty should not result in a disproportionately higher harvest rate for any stock, nor substantially diminish harvest opportunities, either annually or on a cumulative basis.

There will be a one-time overlap in the regulatory processes for the 2015-16 and 2016-17 hunting seasons. The regulatory schedule for the 2016-17 seasons began in mid-June 2015 with the first SRC meeting. Flyway technical committees and Councils met in September 2015 following the release of the 2015 population status reports (breeding population surveys) and harvest reports in mid-August and the 2015 AHM report in early September. After Flyway Council meetings, the SRC and Flyway Council Consultants will meet October 20-21, 2015 to review information on the status of migratory birds and consider recommendations for the 2016–17 seasons. Proposed season frameworks, a 30-day public comment period, and final season frameworks will then follow with ultimate publication of all 2016-17 migratory game bird hunting seasons in late May to mid-June of 2016.

Existing Conditions

Northeastern Zone: In that portion of California lying east and north of a line beginning at the intersection of Interstate 5 with the California-Oregon line; south along Interstate 5 to its junction with Walters Lane south of the town of Yreka; west along Walters Lane to its junction with Easy Street; south along Easy Street to the junction with Old Highway 99; south along Old Highway 99 to the point of intersection with Interstate 5 north of the town of Weed; south along Interstate 5 to

its junction with Highway 89; east and south along Highway 89 to Main Street in Greenville; north and east to its junction with North Valley Road; south to its junction of Diamond Mountain Road; north and east to its junction with North Arm Road; south and west to the junction of North Valley Road; south to the junction with Arlington Road (A22); west to the junction of Highway 89; south and west to the junction of Highway 70; east on Highway 70 to Highway 395; south and east on Highway 395 to the point of intersection with the California-Nevada state line; north along the California-Nevada state line to the junction of the California-Nevada-Oregon state lines west along the California-Oregon state line to the point of origin.

Ducks: From the second Saturday in October extending for 105 days, 7/day which may include 7 mallards, 2 hen mallard, 2 pintail, 2 canvasback, 2 redheads, 3 scaup during the 86-day season. Possession limit triple the daily bag.

Geese: From the second Saturday in October extending for 100 days, 25/day, up to 15 white geese and up to 10 dark geese, but not more than 2 Large Canada geese. Possession limit triple the daily bag.

Coots and Moorhens: Concurrent with Duck Season. 25/day. Possession limit triple the daily bag.

Youth Hunting Days: The Saturday fourteen days before the opening of waterfowl season extending for 2 days. To participate in these youth hunts hunters must be 15 years of age or younger and must be accompanied by a non-hunting adult 18 years of age or older.

Falconry Take of Ducks: Open concurrently with duck season extending for 105 days. 3/day. Possession limit triple the daily bag.

Southern San Joaquin Valley Zone: All of Kings and Tulare counties and that portion of Kern County north of the Southern California Zone.

Ducks: From the fourth Saturday in October extending for 100 days, 7/day which may include, 7 mallards, 2 hen mallards, 2 pintail, 2 canvasback, 2 redheads, 3 scaup during the 86-day season. Possession limit triple the daily bag.

Geese: From the fourth Saturday in October extending for 100 days, 25/day, up to 15 white geese and up to 10 dark geese. Possession limit triple the daily bag.

Coots and Moorhens: Concurrent with Duck Season, 25/day. Possession limit triple the daily bag.

Youth Hunting Days: The Saturday following the closing of waterfowl season extending for 2 days. To participate in these youth hunts hunters must be 15 years of age or younger and must be accompanied by a non-hunting adult 18 years of age or older.

Falconry Take of Ducks: Ducks only, concurrent with duck season and February 1-3, 2016. 3/day. Possession limit triple the daily bag.

Southern California Zone: In that portion of southern California (but excluding the Colorado River zone) lying south and east of a line beginning at the mouth of the Santa Maria River at the Pacific Ocean; east along the Santa Maria River to where it crosses Highway 166 near the City of Santa Maria; east on Highway 166 to the junction with Highway 99; south on Highway 99 to the crest of the Tehachapi Mountains at Tejon Pass; east and north along the crest of the Tehachapi Mountains to where it intersects Highway 178 at Walker Pass; east on Highway 178 to the junction of Highway 395 at the town of Inyokern; south on Highway 395 to the junction of Highway 58; east on Highway 58 to the junction of Interstate 15; east on Interstate 15 to the junction with Highway 127; north on Highway 127 to the point of intersection with the California-Nevada state line.

Ducks: From the fourth Saturday in October extending for 100 days, 7/day which may include, 7 mallards, 2 hen mallards, 2 pintail, 2 canvasback, 2 redheads, 3 scaup during the 86-day season. Possession limit triple the daily bag.

Geese: From the fourth Saturday in October extending for 100 days, 18/day, up to 15 white geese, up to 3 dark geese. Possession limit triple the daily bag.

Coots and Moorhens: Concurrent with duck season, 25/day. Possession limit triple the daily bag.

Youth Hunting Days: The Saturday following the closing of waterfowl season extending for 2 days. To participate in these youth hunts hunters must be 15 years of age or younger and must be accompanied by a non-hunting adult 18 years of age or older.

Falconry Take of Ducks: Concurrent with duck season and February 1–5, 2016. 3/day. Possession limit triple the daily bag.

Colorado River Zone: In those portions of San Bernardino, Riverside, and Imperial counties lying east of the following lines: Beginning at the intersection of Highway

95 with the California-Nevada state line; south along Highway 95 to Vidal Junction; south through the town of Rice to the San Bernardino-Riverside county line on a road known as “Aqueduct Road” in San Bernardino County; south from the San Bernardino-Riverside county line on road known in Riverside County as the “Desert Center to Rice Road” to the town of Desert Center; east 31 miles on Interstate 10 to its intersection with the Wiley Well Road; south on this road to Wiley Well; southeast along the Army-Milpitas Road to the Blythe, Brawley, Davis Lake intersections; south on the Blythe-Brawley paved road to its intersection with the Ogilby and Tumco Mine Road; south on this road to Highway 80; east seven miles on Highway 80 to its intersection with the Andrade-Algodones Road; south on this paved road to the intersection of the Mexican boundary line at Algodones, Mexico.

Ducks: From the third Friday in October extending for 101 days, 7/day which may include 7 mallards, 2 hen mallards or Mexican-like ducks, 2 pintail, 2 canvasback, 2 redheads, 3 scaup during the 86-day season. Possession limit triple the daily bag.

Geese: From the third Friday in October extending for 101 days, 10/day, up to 10 white geese, up to 4 dark geese. Possession limit triple the daily bag.

Coots and Moorhens: Concurrent with Duck Season, 25/day, 25 in possession.

Youth Hunting Days: The Saturday following the closing for waterfowl season. To participate in these youth hunts hunters must be 15 years of age or younger and must be accompanied by a non-hunting adult 18 years of age or older.

Falconry Take of Ducks: Ducks only. Concurrent with duck season and from January 25 – 28, 2016. 3/day. Possession limit triple the daily bag.

*Balance of State Zone***:** That portion of the state not included in Northeastern California, Southern California, Colorado River or the Southern San Joaquin Valley zones.

Ducks: From the fourth Saturday in October extending for 100 days, 7/day which may include 7 mallards, 2 hen mallards, 2 pintail, 2 canvasback, 2 redheads, 3 scaup during the 86-day season. Possession limit triple the daily bag.

Geese: Early Season: Large Canada only from the Saturday closest to October 1 for a period of 5 days EXCEPT in the North Coast Management Area where Large Canada geese are closed during the early season. Regular Season: Dark and white geese from the fourth Saturday in October extending for 100 days EXCEPT in the Sacramento Valley Special Management Area where the white-fronted goose season will close after December 21. Late Season: White-fronted

geese and white geese from the second Saturday in February extending for a period of 5 days EXCEPT in the Sacramento Valley Special Management Area where the white-fronted geese is closed. During the Late Season, hunting is not permitted on wildlife areas listed in Sections 550 – 552 EXCEPT on Type C wildlife areas in the North Central Region. 25/day, up to 15 white geese and up to 10 dark geese, but not more than 3 white-fronted geese in the Sacramento Valley Special Management Area. Possession limit triple the daily bag. Possession limit triple the daily bag.

Coots and Moorhens: Concurrent with Duck Season, 25/day. Possession limit triple the daily bag.

Youth Hunting Days: The Saturday following the closing of waterfowl season extending for 2 days. To participate in these youth hunts hunters must be 15 years of age or younger and must be accompanied by a non-hunting adult 18 years of age or older.

Falconry Take of Ducks: Open concurrently with duck season and February 6–7, 2016. 3/day. Possession limit triple the daily bag.

North Coast Special Management Area: All of Del Norte and Humboldt counties.

All Canada Geese: From the second Sunday in November extending for a period of 85 days (Regular Season) and from the third Saturday in February extending for a period of 20 days (Late Season). During the Late Season, hunting is only permitted on private lands with the permission of the land owner under provisions of Section 2016. Up to 10/day Canada geese of which only 1 may be a Large Canada goose, EXCEPT during the Late Season the bag limit on Large Canada geese is 0/day. Possession limit triple the daily bag.

Falconry Take of Ducks: Geese only. Concurrent with Small Canada goose season. 3/day. Possession limit triple the daily bag.

Humboldt Bay South Spit (West Side) Special Management Area: Beginning at the intersection of the north boundary of Table Bluff County Park and the South Jetty Road; north along the South Jetty Road to the South Jetty; west along the South Jetty to the mean low water line of the Pacific Ocean; south along the mean low water line to its intersection with the north boundary of the Table Bluff County Park; east along the north boundary of the Table Bluff County Park to the point of origin.

All species: Closed during brant season

Sacramento Valley (West) Special Management Area: Beginning at the town of Willows; south on Interstate 5 to the junction with Hahn Road; east on Hahn Road

and the Grimes-Arbuckle Road to the town of Grimes; north on Highway 45 to its junction with Highway 162; north on Highway 45-162 to the town of Glenn; west on Highway 162 to the point of beginning.

White-fronted geese: Closed after Dec 21, 3/day. Possession limit triple the daily bag.

*Morro Bay Special Management Area***:** Beginning at a point where the high tide line intersects the State Park boundary west of Cuesta by the Sea; northeasterly to a point 200 yards offshore of the high tide line at the end of Mitchell Drive in Baywood Park; northeasterly to a point 200 yards offshore of the high tide line west of the Morro Bay State Park Boundary, adjacent to Baywood Park; north to a point 300 yards south of the high tide line at the end of White Point; north along a line 400 yards offshore of the south boundary of the Morro Bay City limit to a point adjacent to Fairbanks Point; northwesterly to the high tide line on the sand spit; southerly along the high tide line of the sand spit to the south end of Morro Bay; easterly along the Park boundary at the high tide line to the beginning point.

All species: Open in designated areas only

Martis Creek Lake Special Management Area: The waters and shoreline of Martis Creek Lake, Placer and Nevada counties.

All species: Closed until Nov 16

*Northern Brant Special Management Area***:** Del Norte, Humboldt and Mendocino Counties.

Black Brant: From November 8 extending for 37 days. Possession limit triple the daily bag.

Balance of State Brant Special Management Area: That portion of the state not included in the Northern Brant Special Management Area.

Black Brant: From November 9 extending for 37 days. Possession limit triple the daily bag.

Imperial County Special Management Area: Beginning at Highway 86 and the Navy Text Base Road; south on Highway 86 to the town of Westmoreland; continue through the town of Westmoreland to Route S26; east on Route S26 to Highway 115; north on Highway 115 to Weist Rd.; north on Weist Rd. to Flowing Wells Rd.; northeast on

Flowing Wells Rd. to the Coachella Canal; northwest on the Coachella Canal to Drop 18; a straight line from Drop 18 to Frink Rd.; south on Frink Rd. to Highway 111; north on Highway 111 to Niland Marina Rd.; southwest on Niland Marina Rd. to the old Imperial County boat ramp and the water line of the Salton Sea; from the water line of the Salton Sea, a straight line across the Salton Sea to the Salinity Control Research Facility and the Navy Test Base Road; southwest on the Navy Test Base Road to the point of beginning.

White geese: From the first Saturday in November extending for a period of 86 days (Regular Season) and from the first Saturday in February extending for 16 days (Late Season). During the Late Season, hunting is only permitted on private lands with the permission of the land owner under provisions of Section 2016. Up to 15 geese. Possession limit triple the daily bag.

Proposed Changes and Analysis

- Increase the white goose daily bag limit from 15 to 20 in the Northeastern, Balance of State, Southern San Joaquin Valley, and the Southern California zones, and the Imperial Special Management Area. As a result of increasing the white goose daily bag limit, the total daily bag limit for all geese will increase from 18 to 23 in the Southern California Zone and from 25 to 30 in the Northeastern, Balance of State, and Southern San Joaquin Valley zones.

- Increase the age requirement to participate in the Youth Waterfowl Hunting Days from 15 years of age and younger to 17 years of age and younger.

The bag limit increase for white geese: Both Ross' geese and lesser snow geese populations in the Pacific Flyway are about 1,000,000 birds and are above their population goals (100,000 and 200,000 respectively). The Canadian Wildlife Service has proposed to designate both populations as overabundant because of the rapid population growth since 2003 and concern for the potential impacts to the breeding grounds in the Western Canadian Arctic. The Service and Pacific Flyway recognized that reducing the population is needed and in 2013 increased the daily bag limit to 20 in the federal frameworks. CA increased the daily bag limit to 15 in 2015 and would like to increase the bag limit to 20 as allowed in federal frameworks. Achieving a population reduction through hunting alone is not likely given the low numbers of hunters.

The age requirement change to participate in the federal Youth Waterfowl Hunting Days is administrative in nature. Many states in the Pacific Flyway have a youth license and define youth as 17 or younger. Allowing individuals 17 years of age and younger to participate in the special youth hunting season would align with most

states current definition of youth in the Pacific Flyway. States would still have the option to adopt an age restriction younger than 17 if they so choose. Youth hunters will still be required to have an adult accompany them on their hunts to maintain the mentoring aspect. Youth hunters 16 years old and older will also be required to adhere to federal duck stamp requirements. The special youth season may help recruit non-hunters and novice hunters into the sport. Youth only hunts can be very exciting for young hunters, and allowing them to participate for several more years may increase the likelihood of their participation in hunting-related activities in the future. In the long-term, participation of youth in this special season may result in support for waterfowl and wetland conservation by fostering a more knowledgeable public, continued support for waterfowl hunting, and continued support for the protection and enhancement of wetland ecosystems.

POLICY CONSIDERATIONS

The legislature formulates laws and policies regulating the management of fish and wildlife in California. The general wildlife conservation policy of the State is to encourage the conservation and maintenance of wildlife resources under the jurisdiction and influence of the State (Section 1801, Fish and Game Code). The policy includes several objectives, as follows:

1. To provide for the beneficial use and enjoyment of wildlife by all citizens of the State;
2. To perpetuate all species of wildlife for their intrinsic and ecological values, as well as for their direct benefits to man;
3. To provide for aesthetic, educational, and non-appropriative uses of the various wildlife species;
4. To maintain diversified recreational uses of wildlife, including hunting, as proper uses of certain designated species of wildlife, subject to regulations consistent with public safety, and a quality outdoor experience;
5. To provide for economic contributions to the citizens of the State through the recognition that wildlife is a renewable resource of the land by which economic return can accrue to the citizens of the State, individually and collectively, through regulated management. Such management shall be consistent with the maintenance of healthy and thriving wildlife resources and the public ownership status of the wildlife resource;
6. To alleviate economic losses or public health and safety problems caused by wildlife; and
7. To maintain sufficient populations of all species of wildlife and the habitat necessary to achieve the above-state objectives.

With respect to migratory game birds, Sections 355 and 356 of the Fish and Game Code provides that the Commission may adopt migratory game bird hunting regulations as long as they are within the federal frameworks.

The Department has concluded that the proposed project will not have a significant adverse effect on the environment. No mitigation measures or alternatives to the proposed project are needed.

POTENTIAL FOR SIGNIFICANT EFFECTS

Previous reviews of other potential environmental effects were analyzed extensively in previous environmental documents. The analysis of these fifteen factors regarding migratory game bird hunting were examined in the prior year environmental document (incorporated by reference, August 2006, State Clearinghouse Number 2006042115, available at 1812 9th Street, Sacramento 95811) and certified by the Fish and Game Commission. The modifications proposed are to increase hunter opportunity and reduce depredation of some goose populations that winter in California. The Department concludes that the proposed project and existing hunting regulations will not cause significant adverse effects on the factors analyzed in the 2006 FED and summarized below.

EFFECTS OF HABITAT DEGRADATION

Breeding Areas

The 2006 analysis was presented on page 100 (incorporated by reference, August 2006 Final Environmental Document, SCH#2006042115, available at 1812 9th Street, Sacramento 95811). The primary impacts on breeding waterfowl from agriculture are the cultivation or tillage of nesting cover (Higgins 1977, Kirsch 1969, Milonski 1958). A secondary effect of the agricultural process is the tillage of lands right up to the edges of ponds or other water sources, which effectively eliminates brood rearing habitat. These activities in the prairies are especially prevalent in years of drought where farmers are able to intensively farm all of a wetland basin.

In the primary duck production areas of Canada, there is greater opportunity during drought periods for intensive farming and greater demand for available forage for cattle. Unfortunately, waterfowl must compete for the same resources. Agriculture does not generally impact breeding habitats for the majority of goose populations, because most goose nesting occurs in undeveloped areas of the arctic.

Wintering Areas

The 2006 analysis was presented on page 101 (incorporated by reference, August 2006 Final Environmental Document, SCH#2006042115, available at 1812 9th Street, Sacramento 95811). Wetland habitats in California have been reduced from an estimated five million acres to less than 450,000 acres at present. Most of these wetlands have been converted to agricultural uses, but urban developments have also reduced the wetland acreage in California. In the critically important Central Valley,

about 70 percent of the remaining acreage is in private ownership and managed primarily as duck hunting clubs.

Some of the agricultural areas continue to provide habitat of value to waterfowl through the availability of waste grains and the provision of nesting cover. However, certain agricultural activities, such as fall plowing, can reduce food availability for waterfowl.

Habitat conversions by humans have reduced the habitat available for waterfowl. These conversions take place over a period of time, such that substantial habitat losses during the period of the proposed project are not likely to occur and act in a cumulative manner with the hunting of waterfowl, coots and moorhens in California that would result in significant adverse effects to the environment.

EFFECTS OF DISEASES, PESTICIDES, AND OTHER CONTAMINANTS

The 2006 analysis was presented on page 101 (incorporated by reference, August 2006 Final Environmental Document, SCH#2006042115, available at 1812 9th Street, Sacramento 95811). Diseases, pesticides and other contaminants will likely cause the death of waterfowl, coots, moorhens, and common snipe in California. Even though some losses to disease can be in the tens of thousands of individual birds, these losses are small relative to the populations present in the State. Accordingly, the Department concludes that the combination of the proposed project and existing regulations and potential losses to diseases and other contaminants will not result in a significant adverse impact to waterfowl, coot and moorhen populations in California in 2016-17.

EFFECTS OF ILLEGAL HARVEST

The 2006 analysis was presented on pages 110 (incorporated by reference, August 2006 Final Environmental Document, SCH#2006042115, available at 1812 9th Street, Sacramento 95811). The Department currently has a staff of about 350 game wardens stationed throughout the State. The Department analyzed waterfowl-related citations to estimate the extent of waterfowl mortality occurring as a result of illegal take of waterfowl in California. The level of illegal harvest is difficult to determine (USDI 1988a:29-30). In an attempt to model the possible extent of illegal harvest, the Service compared known survival rates of mallards against known hunting mortality (USDI 1988a). Estimated average annual survival rates are 66 percent and estimated hunting mortality is 18 percent (based on recoveries of banded birds), all other forms of mortality would thus equal 16 percent of the population. Since other mortality factors are known to exist (disease, predation, starvation, weather), it would seem that illegal harvest is considerably less than 16 percent and is probably not a significant portion of the annual mortality of mallards (USDI 1988a).

EFFECTS OF SUBSISTENCE HARVEST

The 2006 analysis was presented on page 112 (incorporated by reference, August 2006 Final Environmental Document, SCH#2006042115, available at 1812 9th Street, Sacramento 95811). Native and nonnative peoples living in remote areas of Alaska and Canada are dependent on migratory birds and other wildlife for subsistence. They take birds and eggs during spring and summer for food (USDI 1988a:26). These levels of harvest do not appear to be acting as a cumulative effect in conjunction with current hunting, because in general, the populations of migratory birds that are being monitored continue to increase. In particular, goose populations affected by this project are growing and some are at or near record levels.

EFFECTS OF HARVEST OUTSIDE UNITED STATES

The 2006 analysis was presented on page 113 (incorporated by reference, August 2006 Final Environmental Document, SCH#2006042115, available at 1812 9th Street, Sacramento 95811). The harvest of waterfowl in areas outside of California is easier to quantify than to determine what specific effects it has on California's migratory and resident populations because of mixing of different populations on the winter grounds. Harvest in two areas, Canada, where the majority of California's waterfowl originate, and Mexico, where segments of some populations winter, could act in addition to the harvest in California.

This information identifies the need for migratory game bird management to be conducted on a flyway, multi-flyway, or population basis. The total harvest of waterfowl throughout North America results in a decrease in the number of waterfowl in that year. Issues, such as subsistence harvest in Alaska and Canada and the harvest of birds outside the United States, clearly identify the need for a comprehensive perspective. The establishment of framework regulations by the Service addresses this issue by modifying hunting regulations in response to long-term population fluctuations. The Department concludes that the combination of the increased California harvest from this proposed project and harvest outside the State will not result in significant adverse impacts to migratory bird populations.

EFFECTS OF MAJOR DEVELOPMENT PROJECTS

The 2006 analysis was presented on page 115 (incorporated by reference, August 2006 Final Environmental Document, SCH#2006042115, available at 1812 9th Street, Sacramento 95811). Migratory game bird habitat will continue to be altered in California as the human population increases. However, strong enforcement of State and Federal laws, such as the Clean Water Act, as well as Commission policy of no net

loss of wetlands, will help to minimize any adverse effect. Changes in agricultural policies at the national level may also affect the quantities of waste grain available to some species of migratory game birds. Competitive urban needs for water, especially as it relates to rice production, may affect waterfowl food supplies in the future. This will be especially prevalent when drought conditions return.

EFFECTS ON LISTED SPECIES

The 2006 analysis was presented on page 91 (incorporated by reference, August 2006 Final Environmental Document, SCH#2006042115, available at 1812 9th Street, Sacramento 95811). The Department is charged with the responsibility to determine if any hunting regulations will impact threatened and endangered species. It complies with this mandate by consulting internally and with the Commission when establishing migratory game bird regulations to ensure that the implementation of the proposed project and existing hunting regulations do not affect these species. The Department has concluded that, based on conditions of the proposed project and existing hunting regulations, differences in size, coloration, distribution, and habitat use between the listed species and legally harvested migratory game birds, the proposed project will not jeopardize these species.

EFFECTS ON MIGRATORY BIRD HABITATS

Habitat Protection Effects

The 2006 analysis was presented on page 93 (incorporated by reference, August 2006 Final Environmental Document, SCH#2006042115, available at 1812 9th Street, Sacramento 95811). Waterfowl, coot and moorhen hunting in California provide a positive incentive for private individuals to acquire, develop, and maintain habitat that might otherwise be converted to other uses. Habitat provided by hunters is entirely available at night as a roosting site and is partially available during the day during hunting season (during days when private wetlands are not hunted or on portions of private wetlands that are not hunted). Long-term vegetative changes may occur in areas that are managed specifically for wintering waterfowl foods. This may affect species more dependent upon climax vegetation than waterfowl, coots and moorhens, which favor early successional stages of vegetation.

Short-term Effects on Habitat

The 2006 analysis was presented on pages 93 (incorporated by reference, August 2006 Final Environmental Document, SCH#2006042115, available at 1812 9th Street, Sacramento 95811). Some short-term impacts of the proposed project, and existing hunting regulations such as vegetative trampling and litter in the form of spent shell

casings, occur. These impacts are considered minor, and the effects on vegetation are generally reversed in the next growing season (USDI 1975:205).

EFFECTS ON RECREATIONAL OPPORTUNITIES

The 2006 analysis was presented on page 96 (incorporated by reference, August 2006 Final Environmental Document, SCH#2006042115, available at 1812 9th Street, Sacramento 95811). The implementation of the proposed project and existing regulations will result in the presence of hunters, their vehicles, and their dogs in migratory bird habitats throughout the State. The enjoyment of observing waterfowl by those opposed to hunting may be reduced by some degree by the knowledge or observation of hunters in the field. Because the proposed project and existing regulations occurs for no more than 107 days in largely unpopulated areas of the State, this will not result in significant adverse environmental impacts.

EFFECTS OF METHODS OF TAKE AND IMPACTS ON INDIVIDUAL ANIMALS

The 2006 analysis was presented on page 88 (incorporated by reference, August 2006 Final Environmental Document, SCH#2006042115, available at 1812 9th Street, Sacramento 95811). Section 20.21, subpart C, of Part 20, Title 50, CFR, and Section 507, Title 14, CCR, stipulate the methods of hunting that are allowed by the Service for migratory game birds. The Commission, in concert with Federal law, has authorized the use of shotguns 10-gauge or smaller, muzzle-loading shotguns, falconry, bow and arrow and crossbows, and dogs for retrieval or take. Historically, these methods of take have been used on a variety of migratory game birds throughout North America. In previous regulation-setting processes, both the Service and the Commission have stipulated restrictions on equipment and methods of take which attempt to provide for reasonably efficient and effective taking of waterfowl, coots and moorhens.

EFFECTS FROM DROUGHT

Drought cycles are part of the ecological system in California and waterfowl are well adapted to dealing with low water years e.g., delaying nest initiation, re-nesting capability, and reduced clutch size. Still, multi-year droughts can reduce waterfowl populations on a local scale and a much broader continental scale. Drought conditions impact waterfowl in a variety of ways including: degraded habitat quality which creates poor breeding habitat conditions (McLandress *et al*. 1996), lower food production (both natural and agricultural) which can limit the ability of birds to migrate and breed successfully (McWilliams *et al.* 2004), as well as expose large

portions of waterfowl populations to disease. This section summarize potential impacts that drought may have on waterfowl throughout the annual cycle in California.

California is an area of continental importance for waterfowl during various annual life history events (CVJV 2009). Winter is more significant than breeding due to the abundance of waterfowl that migrate here from northern breeding areas (Bellrose 1980). Stresses encountered on wintering areas can have carry over effects during spring migration or the breeding season, which ultimately can limit populations (Klaassen 2002, Inger *et al.* 2008). It is critical that adequate habitat for waterfowl is provided during winter.

Breeding

Female ducks find a mate on wintering areas and breed where they were hatched because of high natal fidelity (Rowher and Anderson 1988). Critical components to when and where a hen will nest are available brood water and adjacent upland habitat. In dry years females may leave their natal area and migrate to areas with better quality habitat (Johnson and Grier 1988). Females need time in a location to build energy stores such as protein which is typically associated with aquatic invertebrates (Krapu 1974). Egg formation and laying will be delayed until conditions are adequate (Ankney and Alisauskas 1991). Early in the breeding season many species of ducks delay nest-initiation in response to drought. During periods of severe drought many species of waterfowl may not breed at all. If a rapid decline in water levels occurs midway into nesting or during incubation females may desert their nests (Smith, 1971). By not breeding when conditions are poor, birds enhance their survival and their probability of reproducing later when habitat conditions improve (Krapu *et al.* 1983).

Reduced recruitment can occur when ducks travel great distances to find adequate habitat conditions for nesting or re-nesting because energy reserves have been depleted. Reduced recruitment can result from: choosing not to nest, smaller clutch sizes, a lower likelihood of laying a second clutch (Grand and Flint 1991) and later laying date which has been shown to reduce nest success and brood survival in some species (Dzus and Clark 1998). Further, females that migrate out of their natal area may also have a higher mortality rate due to increase susceptibility to predation in unfamiliar areas. Reduced recruitment and adult survival could decrease short-term population levels and if poor habitat conditions persist for subsequent years, reduce long term population levels. An adaptation to drought is in years of good habitat conditions, hens can raise numerous broods giving waterfowl populations the ability to recover quickly (McLandress *et al.* 1996).

Critical breeding areas for ducks in California as identified by the Department's breeding population survey for waterfowl (Figure 3-A) are the Sacramento Valley, San Joaquin Valley Grasslands, Suisun Marsh and high desert region of Northeastern California. Figures are for mallards because they make up the majority of the breeding duck population in California (see Figure D-4). Breeding population numbers in the Central Valley (i.e. Sacramento and San Joaquin valleys) are correlated to precipitation as well as recruitment from previous years (Figure 3-

B and C). Breeding mallard populations in northeastern California however, do not follow precipitation trends (Figure 3-D) indicating that other factors may be impacting duck production and breeding population trends in that region. The statewide breeding population of mallards has remained relatively stable except for northeastern California where the population trends are decreasing. The cause of this decline is unknown but speculated to be the lack of adequate brood water in early spring and the increase in invasive plant species (e.g. *Lepidium sp*.) throughout the area (Dave Mauser, Klamath Basin NWR personal communication).

Another breeding population indicating a decline is Canada geese that nest in northeastern California. Historically, Canada geese nested in this region in larger numbers but have declined considerably (Figure 4). Climate change is speculated (i.e. dry conditions over the long term; NOAA unpublished data) to play a significant role in the decline but no analysis or studies has been conducted (Melanie Weaver CDFW personal communication). The Department will include an analysis of possible climate change impacts as well as a survival analysis from Department leg banding data in an upcoming management plan for this population.

Molting

During late July, male ducks will typically migrate to a large permanent water marsh to molt while females follow soon after nesting in August. Like nest site fidelity, ducks will molt in the same location as previous years (Yarris *et al.* 1994). One study has indicated that 60 percent of mallards that breed in the Central Valley will migrate 280 miles to northeastern California to molt while 25% molt in marshes in the Central Valley (Yarris *et al.* 1994). Molt is an extremely vulnerable time for ducks because they become completely flightless for 30 – 40 days. Marsh water levels are critically important during the molting period and must be maintained or birds could be subject to depredation by mammalian and avian predators (Arnold *et al.* 1987).

Avian botulism

Botulism outbreaks typically occur in marshes with warm water, little flow, high organic load (rotting vegetation) and high amounts of algae (Rocke and Samuel 1999). Botulism is a bacterium that naturally occurs in wetland environments and persists in marshes with histories of outbreaks due to the release of spores into the environment. Ducks are infected by ingesting the bacterium and become paralyzed, eventually dying. Duck carcasses attract flies which lay eggs that produce maggots that in-turn eat the flesh of the carcass and consume botulism spore. Maggots drop into the water and are eaten by ducks in the marsh thereby escalating mortality events (Rocke and Samuel 1999). Outbreaks of avian botulism (Fleskes *et al.* 2010) often coincide with the molt cycle of ducks and the brood rearing stages of late nesting duck species. Many studies have been conducted to better understand the cycle of botulism and inform managers of how to prevent or minimize outbreaks

In California botulism outbreaks have been reported in every region of the state however, frequency is not well known due to reporting inconsistencies (Figure 5;

USGS National Wildlife Health Center personal communication). A robust analysis on this disease data is not possible because of the reporting inconsistences and the numerous factors possible that may have caused the outbreaks. In some years die-offs can be quite severe (Figure 5). Botulism outbreaks can kill large numbers of hens, broods and molting ducks (Fleskes *et al.* 2010).

During drought summer water allocation is reduced for managed wetlands in the Central Valley and the Klamath Basin in northeastern California. Decreasing the number of flooded wetlands increases concentrations of waterfowl, thus raising the chance of an outbreak and more birds being affected. Breeding mallards throughout California molt in the Klamath Basin. The Klamath Basin experiences botulism annually, even during normal water years (Figure 5-C). During drought years the potential for a high mortality event is great.

Wintering Waterfowl

Waterfowl migrate from northern latitudes to California beginning in August. Multiple stopover sites are used during migration to rebuild energy reserves. The Klamath Basin in northeastern California is one of the most important waterfowl stopover sites during fall and spring for waterfowl in the Pacific Flyway (Bellrose 1980). Peak numbers of waterfowl are seen on major wintering areas south of the Klamath Basin by December.

During early January, the Department and the Service and conduct the Midwinter Waterfowl Survey. This survey has been conducted since 1953 and has provided managers with midwinter indices of waterfowl species. During midwinter California supports 66 percent of all ducks (excluding mergansers; based on long term average 1955 – 2014) in the Pacific Flyway, 40 percent of which occur in the Sacramento Valley. Of total waterfowl in the Pacific Flyway (i.e. geese, ducks, swans, coots and cranes), California supports 73 percent, the Sacramento Valley alone supports 43 percent (Olson 2014, Department unpublished data). California waterfowl distribution based on this survey indicates the Sacramento Valley harbors 60 percent of total waterfowl, the San Joaquin has 20 percent, and the Delta, Suisun Marsh, northeastern California combined hold 10 percent of total waterfowl.

Sensitive wintering populations

Sensitive waterfowl subspecies also occur in California during winter. Tule greater white-fronted geese are monitored by the Department and Service through telemetry and population surveys throughout the winter in the Sacramento Valley, the Delta and northeastern California. This subspecies of white-fronted goose uses permanent marshes early in winter and begins to feed in rice fields during midwinter. The bulk of the Tule population overwinters (November to February) adjacent to and on the Sacramento National Wildlife Refuge Complex. A special management area that has a reduced season length and bag limit has been maintained in the Sacramento Valley for this population compared to the rest of the state. Department staff monitor harvest by actively measuring all greater white-fronted geese at check stations on the Sacramento National Wildlife Refuge Complex.

This population could be negatively impacted by poor body condition caused by limited habitat, particularly reduced rice decomposition flooding.

Wintering waterfowl habitat

Since the implementation of the NAWMP (USFWS 1986) and the subsequent initiation of the Central Valley Joint Venture (CVJV 1990), the wetlands of the Central Valley have fluctuated in size and quality (Fleskes *et al*. 2005, CVJV 2009). Wetland acres as of 2006 were estimated to be 205,900. Current wetland acres are being calculated as there have been a number of large easement properties acquired since 2006. The amount of wetland acres as well as the quality have increased since the last update (i.e. moist soil management and infrastructure).

Additionally, since 1996 changes in post-harvest rice straw decomposition have added an estimated 209,000 acres of flooded rice for wintering waterfowl in the Sacramento Valley (Garr 2014). Increased post-harvest flooded rice and increased wetland area is speculated to be the cause for the increasing densities of waterfowl seen in the Sacramento Valley relative to other areas on the midwinter survey (Fleskes and Yee 2005). Recent body condition studies of numerous wintering waterfowl species have improved significantly (Ely and Raveling 1989, Miller 1986, Thomas et al. 2008, Skalos *et al*. 2011) particularly within the Sacramento Valley. Numerous duck and goose species have changed their roosting and feeding habits considerably because of the increase in water on the landscape (Fleskes et al. 2005). For example, prior to post-harvest flooded rice Pacific greater white-fronted geese traveled an average of 17.5 miles from roost to forage areas. This distance has been reduced to 15 miles (14%) because the proximity of undisturbed roost areas (Ackerman et al. 2006). Increased body condition (Skalos *et al*. 2011) combined with undisturbed roost areas (Ackerman et al. 2006) has probably been a major contributor to the recovery of Pacific greater white-fronted geese since the record low in the mid 1970's (USFWS 2014b; Pacific greater white-fronted goose population indices). Waterfowl and non-game waterbird species have been known to use flooded agriculture in the Sacramento/San Joaquin Delta region (Shuford 1998) as well as the Tulare Basin in the San Joaquin Valley (Fleskes *et al*. 2013). Reduction of post-harvest agricultural field flooding because of drought in these regions could have a large impact on wintering waterfowl populations because most of the natural marsh habitat has been eliminated (Gilmer et al. 1982).

The CVJV has modeled the food resource needs of wintering ducks in California. The CVJV estimated that California currently has an adequate supply of food resources for all waterfowl species during winter. The drought model scenario decreased the total winter flooded wetlands from an estimated 197,200 to 148,000 acres and flooded rice from 305,000 to 135,000 acres in the Central Valley. Flooding rice for decomposition was assumed to be limited and at least 136,000 acres of the dry acreage would be harvested and not deep tilled post-harvest (therefore accessible). In this scenario energy available to ducks would be reduced to below adequate levels by mid-January (CVJV 2014).

Waterfowl can make up energetic shortfalls from limited food resources (Skalos et al. 2011) on wintering areas during migration if the adequate food resources are provided on stopover sites (Bauer *et al*. 2008). If the Central Valley has limited food resources for waterfowl, the CVJV speculates that further stress would be applied to waterfowl populations migrating through the Klamath Basin during spring due to the ongoing water allocation issues in that region (CVJV 2014).

Avian cholera

Avian cholera (*Pasturella multocida*) is a common winter bacterial infection in waterfowl. This disease agent occurs naturally in waterfowl populations and particular species (e.g. Lesser snow geese, Ross's geese, mute swans) tend to be reservoirs for cholera (Samuel et al. 2005, Pedersen *et al*. 2014). Environmental and physiological conditions that stress (e.g. prolonged cold temperatures, wind, precipitation, inadequate food resources and injury) birds tend to influence the expression of this disease. Blanchong et al. (2006) found that highly eutrophic water conditions are correlated to cholera abundance in wetlands. These conditions would be promoted in years of drought due to slow flow-through in wetlands. Eutrophic conditions would also be exacerbated by large concentrations of waterfowl defecating in wetlands, agricultural runoff (i.e. cattle and fertilizer) or other upstream sources of nutrients. This study also cited the increased abundance of cholera in wetlands with higher protein concentrations. Increased protein concentrations were correlated with the number of dead bird carcasses found emphasizing the need for monitoring and removal to stem outbreaks.

Figure 6 indicates the frequency and intensity of avian cholera mortality events in California as reported to the USGS Wildlife Health Center. Cholera outbreaks tend to be more common in the Sacramento Valley and northeastern California. This may be from colder temperatures experienced during winter but more likely from the high densities of waterfowl (particularly *Chen sp*.) at the time of the outbreak. Cholera outbreaks have the potential to be very severe; an outbreak in the Salton Sea during 1991 claimed an estimated 155,000 birds.

Concerning sensitive waterfowl populations Greater white-fronted geese (i.e.Tule geese) seem to be resistant to outbreaks of avian cholera (Blanchong 2006).

Hunter harvest impacts on waterfowl populations

Wintering numbers of mallards are relatively low compared to other wintering species and the population of mallards that breed in the state. A ten year average from the California midwinter survey indicate 1,217,000 Northern pintail, 575,500 Northern shoveler, 471,700 American wigeon, 415,000 American green-winged teal, compared to 298,800 mallards counted on the survey. Nonetheless, mallards are the most sought after species by hunters by proportion of population (USFWS 2014c).

Currently, little evidence supports hunter harvest having an additive effect on duck population trends (Afton and Anderson 2001). Rather, available breeding habitat (i.e. nesting habitat and brood habitat) is the driving factor behind most duck

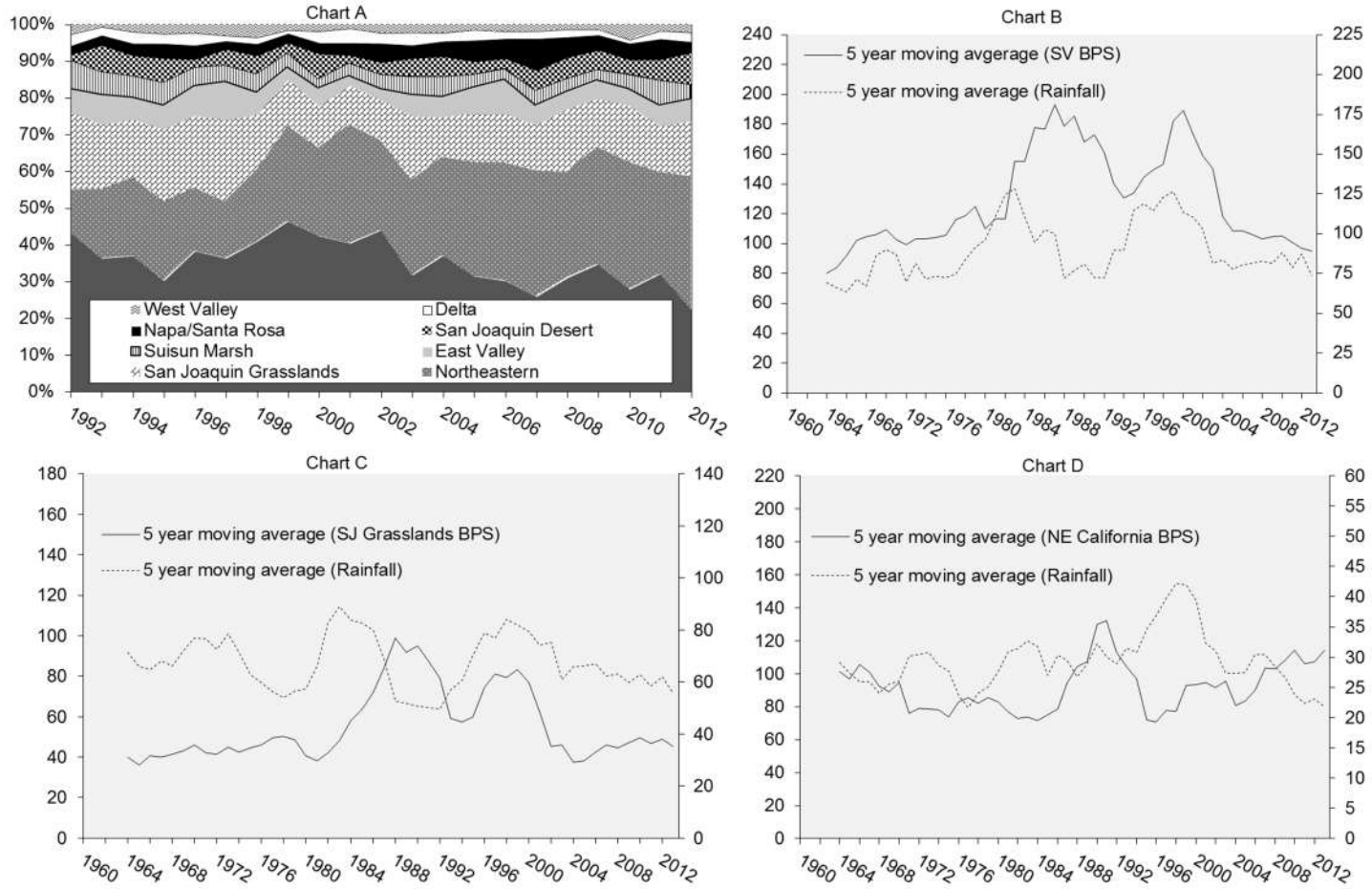
population changes. Even in absence of hunter or other mortality factors, density dependent factors on breeding areas (available habitat, predator response etc.) drive duck populations (Newton 1994, Clark and Shulter 1999, Viljugrein et al. 2005). Figure 7 compares hunter harvest in relation to the breeding population of mallards in California. Harvest has very little correlation (Chart A; R^2=0.10, Chart B; R^2=0.12, respectively) with subsequent breeding population levels.

A number of goose populations have increased substantially in the Pacific Flyway in recent years, with continued hunting and more liberal season and bag limits. Examples are the Pacific greater white-fronted goose and the Ross's goose. Pacific greater white-fronted geese have increased from 75,000 in 1978 to 650,000 by 2010. Surveys conducted in the 1960's estimated Ross's geese at 10,000 while the current population estimate is 700,000. When goose populations are low they are vulnerable to over exploitation by sport hunting. Ducks can breed successfully at age one while geese will breed at age two to three (refer to "K selection"). In the past, goose populations have been subject to overexploitation by predators (e.g. Aleutian goose; PFC 2006[b]) or overharvest by subsidence or sport hunting (Pacific greater white-fronted goose; Pamplin 1986). Recovery actions have successfully increased these populations.

The Service implemented a general harvest strategy for setting duck framework regulations that regularly occur in California and are sought after by hunters (as explained in the Adaptive Harvest Management Section under Background and Existing Conditions). These harvest management strategies ensure duck populations are healthy over the long-term while providing hunting opportunity consistent with the long-term health. As a participant of the Pacific Flyway Council, the Department reviewed and voted to adopt these management strategies for establishing seasons and bag limits. In addition, the Department participates in the monitoring of various populations, both wintering and breeding. If defined populations goals are not met than bag or season limit reductions are triggered. For example the California Breeding Population Survey is used in the Adaptive Harvest Management strategy that establishes regulatory packages for most duck species for all 11 states in the Pacific Flyway.

The Pacific Flyway is currently working on revising the management plan for Tule white-fronted geese. The plan will incorporate population estimates derived from Department ground surveys, telemetry data and public hunt area harvest from check station measurements. These management actions will ensure that population levels of waterfowl species in California are being monitored and hunter harvest is sustainable over the long term.

Figure 3. Proportion of California breeding population by area (Chart A) and area specific mallard BPS estimates with total rainfall (Charts B-D, mallard on left Y axis in thousands; precipitation on right Y axis in inches)



-Total rainfall amounts based on 5 year average from January to April.
-SV total rainfall from Woodland, Willows and Red Bluff weather stations.
-SJ Grasslands total rainfall from Stockton and Merced weather stations.
-NE total rainfall from Tule Lake and Alturas weather stations.

Figure 4. California Department of Fish and Wildlife, Northeastern California Canada Goose Survey 1950-2013.

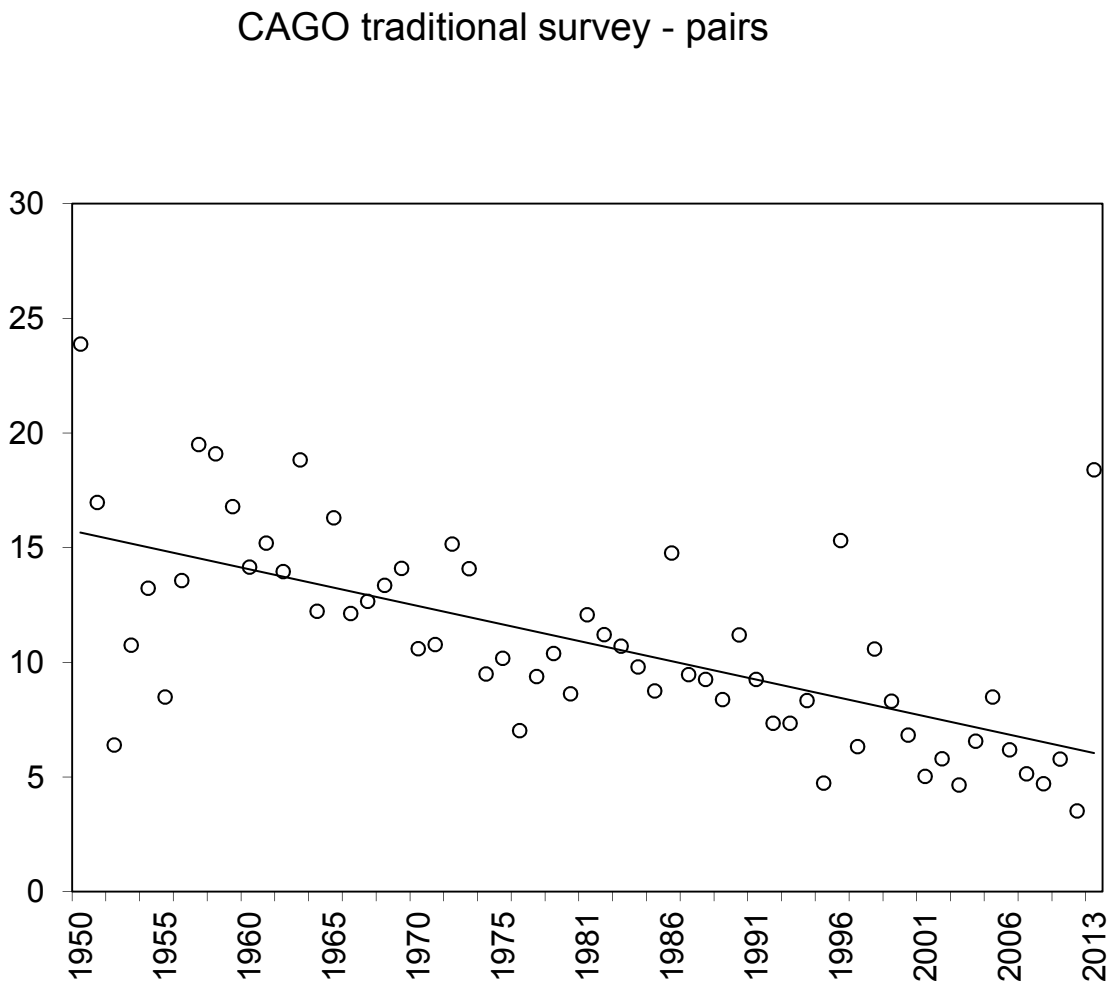
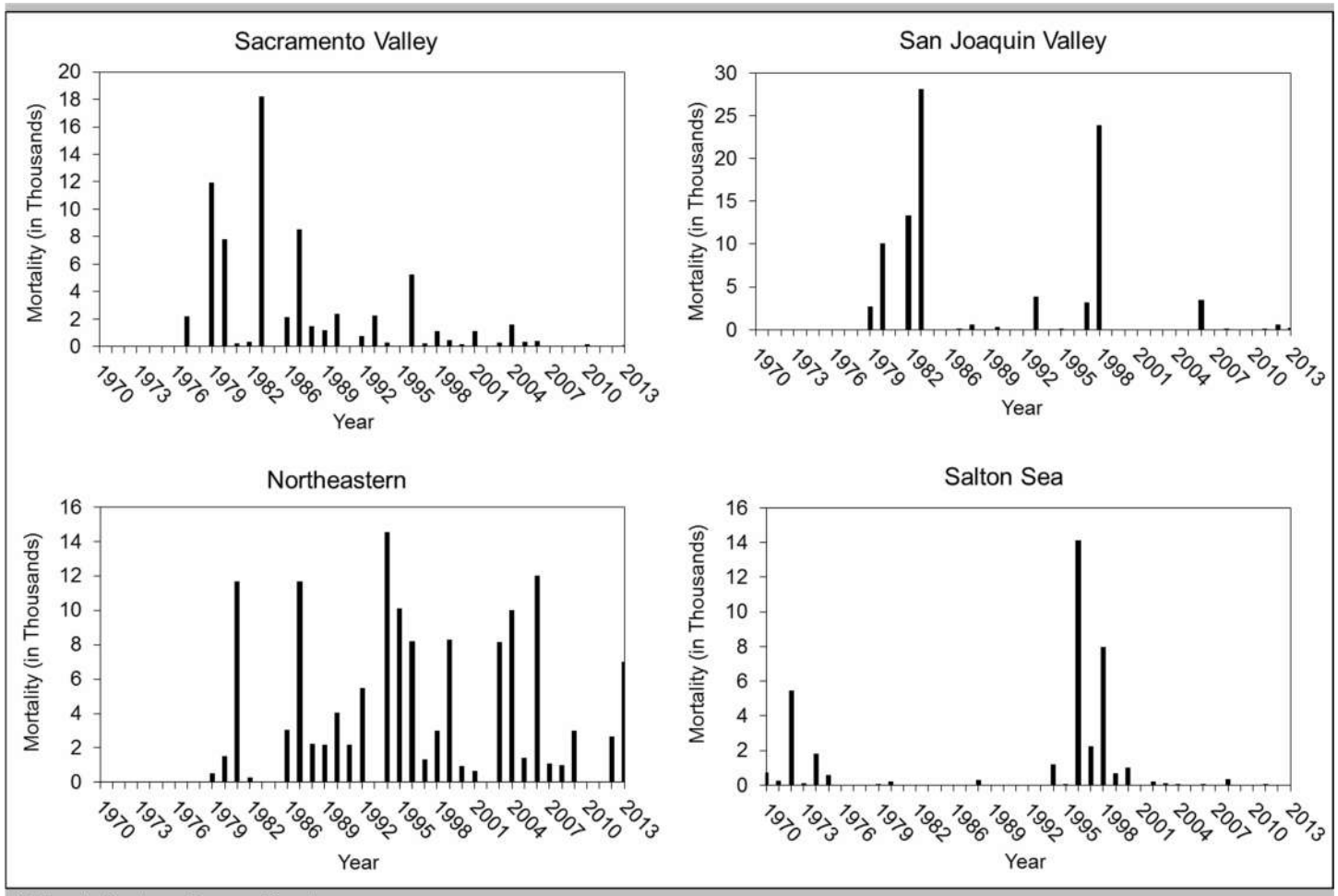
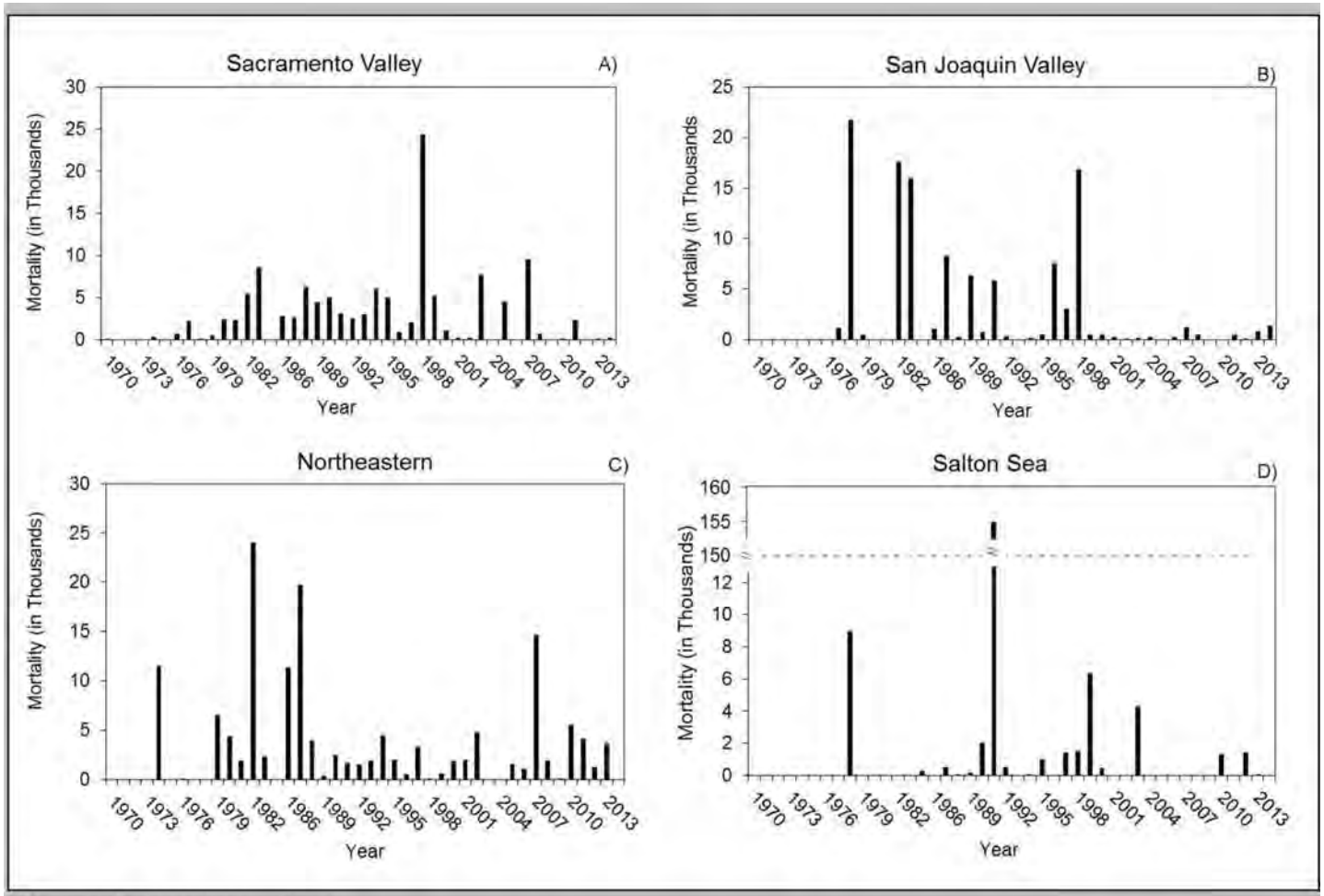


Figure 5. Waterfowl mortality from botulism by area, California 1970-2014



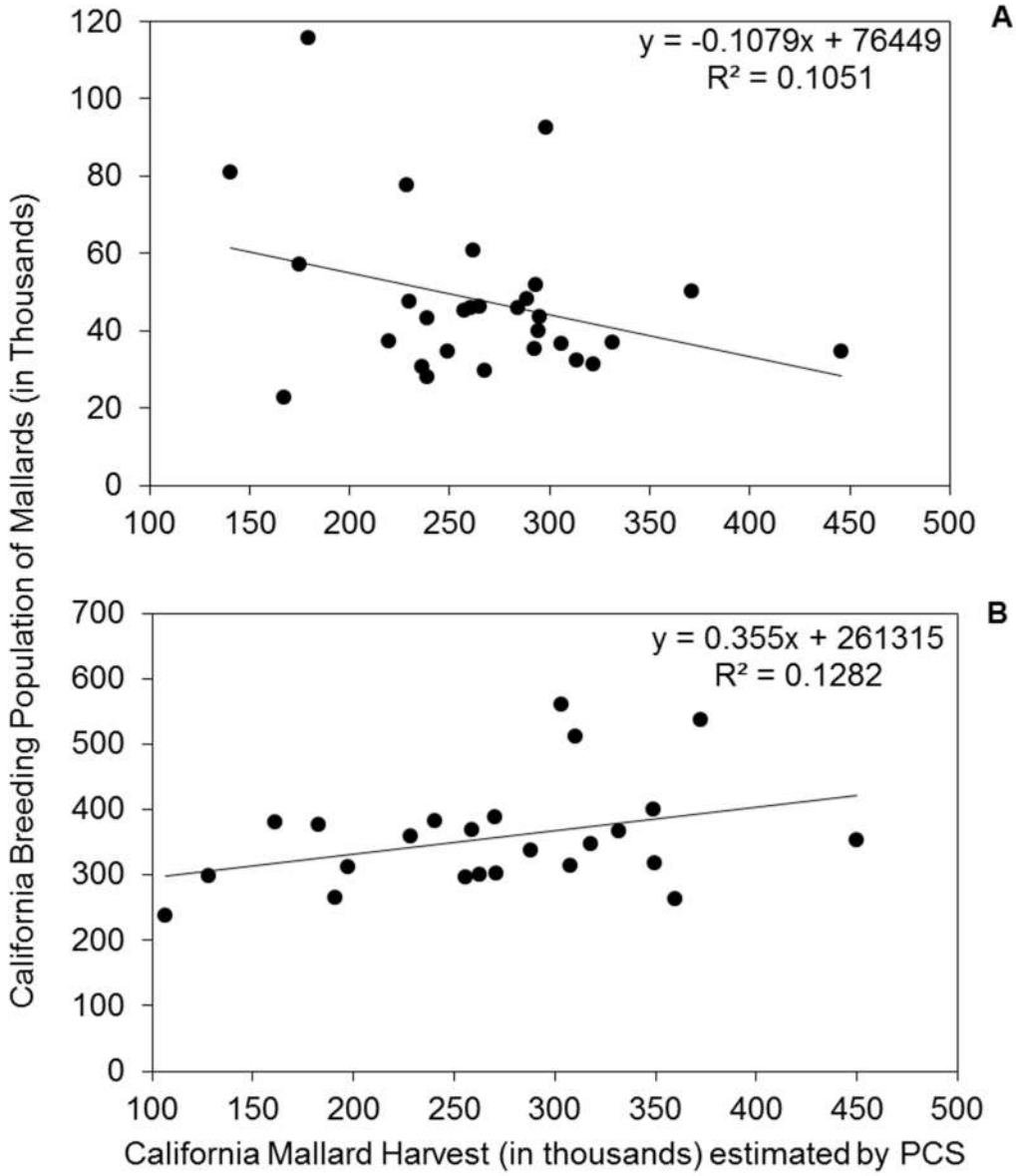
[1]All waterfowl species combined.
[2]Mortality represent total number reported to the USGS Wildlife Health Center.
[3]No data collected during 1985 due to federal government shutdown.

Figure 6. Waterfowl mortality from avian cholera by area, California 1970-2014.



[1]All waterfowl species combined.
[2]Mortality represent total number reported to the USGS Wildlife Health Center.
[3]No data collected during 1985 due to federal government shutdown.

Figure 7. California breeding mallard populations estimates vs hunter harvest: 1960-1990[1] (Chart A), 1991-2014[2] (Chart B)



CUMMULATIVE IMPACTS

Short-term uses and Long-term Productivity

The 2006 analysis was presented on page 97 (incorporated by reference, August 2006 Final Environmental Document, SCH#2006042115, available at 1812 9th Street, Sacramento 95811). The proposed project and existing hunting regulations will result in the temporary reduction of waterfowl, coot and moorhen populations and the use of nonrenewable fuels by hunters and the Department in the assessment of migratory game bird populations and the enforcement of the regulations. On the other hand, the Service concluded (USDI 1975:215) that the issuance of annual hunting regulations contributes significantly to the long-term productivity of the migratory game bird resource and their habitats, because hunting is allowed for only a few species of migratory birds for a limited period of time, and the revenues from hunting are important in the acquisition and management of migratory game bird habitats. Therefore, the project and existing regulations actually enhances long-term productivity of migratory game birds and results in no significant adverse impact on long-term productivity.

Growth Inducing Impacts

The 2006 analysis was presented on page 98 (incorporated by reference, August 2006 Final Environmental Document, SCH#2006042115, available at 1812 9th Street, Sacramento 95811). Because the hunting of migratory game birds is undertaken for a limited period of time and generally occurs in sparsely populated regions of the State, it is not likely to add to the growth in population in California or result in large-scale developments in any particular city or area. Overall numbers of migratory game bird hunters are declining, and because these numbers are declining, there is not likely to be an additional demand for housing in the specific areas in which hunting will occur. Therefore, the project and existing hunting regulations will not result in significant adverse impacts through growth.

Significant Irreversible Environmental Changes

The 2006 analysis was presented on page 98 (incorporated by reference, August 2006 Final Environmental Document, SCH#2006042115, available at 1812 9th Street, Sacramento 95811). The proposed project and existing hunting regulations would result in the continued commitment of energy resources by biologists and wardens in data collection, regulation promulgation, and law enforcement, and by hunters traveling to hunting areas. Therefore, the project will not result in significant adverse environmental impacts through irreversible changes.

The 2006 analyses and document referenced (incorporated by reference, August 2006 Final Environmental Document, SCH#2006042115) is located and available

upon request from California Department of Fish and Game, Wildlife Branch, 1812 9th Street, Sacramento, CA 95811.

CHAPTER 3 – ALTERNATIVES

The three California project alternatives evaluated herein are: (1) no project – no change from the 2015-16 hunting regulations; (2) reduced season lengths and bag limits; and (3) elimination of all mechanical decoys.

Alternative 1. No project – no change from the 2015-16 hunting regulations

This alternative provides identical season and bag limit regulations as the 2015-16 seasons. Under this alternative, an increase in the total goose daily bag limit and the white goose daily bag limit and the age requirement change for the Youth Waterfowl Hunting Days would not occur.

Advantages of This Alternative

Waterfowl regulations are inherently complicated and any changes may result in confusion for some members of the public. Maintaining the 2015-16 regulations for the 2016-17 season may result in less confusion to some members of the public.

Disadvantages of This Alternative

The no change alternative provides less hunting opportunity compared to the proposed project because an increase in the total goose daily bag limit and the white goose daily bag limit, and an increase in the youth waterfowl hunt age would not be allowed . In addition, the no change alternative may not be current with yet to be established federal frameworks for the 2016-17 season.

Conclusion Regarding Alternative 1

It is unlikely that significant irreversible impacts would occur immediately or statewide as a result of selecting the no change alternative. However, this alternative was not recommended and may conflict with Federal frameworks.

Alternative 2. Reduced Season Lengths, Season Timing and Bag Limits

This alternative provides a suite of restrictions that when taken alone or in combination are expected to reduce harvests. This alternative could be selected by the Commission based on changes in Federal frameworks or a conclusion by the Commission that reduced harvests are a better alternative than the project or existing regulations. Under this alterative, for a generalized analysis, the length of each migratory bird season could be reduced by about 50 percent. For ducks, more conservative Adaptive Harvest Management regulatory alternatives (86 or 60 days) could be used. For brant, the 37-day season would be reduced to 19 days and for most other geese the season would be reduced from either 107 or 100 days to 51 days.

The AHM alternatives for the Pacific Flyway include total duck bag limits that range from 4 to 7 with differing restrictions on mallards and hen mallards. Other bag limit reductions considered in this alternative include a reduction from as many as 20 to as few as 1 geese depending on zone; a reduction in brant from two to one; and a reduction in the coot limit from 25 to 12 birds per day. Additionally, species-specific regulations, for pintail, redheads, canvasback or scaup could be further reduced under this alternative.

Advantages of This Alternative

Selection of Alternative 2, reduced season lengths, timing and bag limits, would reduce total harvest, although the magnitude of this reduction is not precisely predictable. This alternative has advantages only if the levels of harvest are suppressing populations. In 2014-15, the estimated retrieved harvest in California was 948,860 ducks, 215,630 geese and 11,100 coots. If harvest regulation restrictions cause a larger than expected decline in hunter participation, harvests might be reduced by more than 50 percent. If, as experienced in the 1989-90 season, there is a drop in hunter participation but fall flights are larger or contain higher percentages of juveniles than are expected, harvests would probably not decline by 50 percent. If harvests declined by exactly 50 percent; approximately 474,430 ducks, 107,800 geese, and 5,550 coots would not be harvested in California. If waterfowl, coots and moorhens have access to habitat of sufficient quality and quantity and these populations are being suppressed due to the levels of harvest previously experienced, populations might increase in following years as a result of the selection of this alternative. This alternative would provide recreational opportunity for hunters and meet one of the goals of the Conservation of Wildlife Resources Policy (Fish and Game Code, Section 1801), which is to include hunting as part of maintaining diversified recreational uses of wildlife.

Non-consumptive opportunities to view migratory birds would not differ substantially from the proposed project, because while this would increase non-conflicting viewing days on hunting areas, these areas are a small percent of

total waterfowl habitat. Reduction in possible conflicts between non-consumptive and consumptive users would be a likely result of this alternative.

Disadvantages of This Alternative

Harvest restrictions for waterfowl, coots and moorhens would probably be a disincentive for many of those private landowners who provide habitat through flooding of seasonal wetlands and agricultural lands during the fall and winter. These habitats form the majority of available wintering habitat for waterfowl and wetland dependent wildlife in California *(*Heitmeyer et al. 1989*)*. Habitat provided only during the hunting season would be available for a shorter time. For many of these private landowners, the short period of time allowed for hunting may be judged to be not worth the high costs associated with providing water and managing this habitat. This would reduce the amount of habitat available for waterfowl and other wetland dependent wildlife. Overcrowding, and as a result, reduced food resources and increased losses to diseases, would be expected.

Conclusion Regarding Alternative 2

Selection of this alternative might lead to a greater decline in participation by hunters. The reductions in the number of days that waterfowl, coots and moorhens could be hunted might not be deemed to be worth the costs of licenses, stamps, travel, and entry fees. A change in season timing is not likely to significantly affect the number of active hunters. A reduction in hunter participation would result in reduced revenues to the Department and the Service which are used to acquire, manage, and maintain vital habitats. If the reduced season length resulted in a lower hunting harvest and hunting mortality was additive to natural mortality, an increase in some populations of waterfowl would be possible. However, the Department concludes that this alternative alone would not result in a significant increase in waterfowl numbers in future years.

Alternative 3. Elimination of all mechanically- and artificially-powered spinning wing decoys as a method of take.

The use of mechanical or electronic duck decoys (also known as spinning wing decoys (SWDs), “rotoducks”, “motoducks”, motion wing decoys, etc.) may lead to increases in harvest beyond those anticipated by existing bag limits and season length. Some hunters and other members of the public are opposed to the use of these devices because they believe that the devices exceed the bounds of “fair chase” and eliminate the emphasis on traditional hunting skills needed to successfully hunt ducks, and the advantages detract from the experience and dedication needed to sustain the hunting tradition.

This alternative would eliminate the use of all mechanical and artificially powered spinning wing decoys as a method of take. The Department analyzed several

sources of information relative to the possible effects of spinning wing decoys and these analyses are provided in Appendix D.

Advantages of This Alternative

The evidence seems clear that spinning blade and spinning wing decoys increase harvest at the individual hunt level, and level of observed increases in harvest at the individual hunt level are not reflected in overall estimates of harvest (Appendix E). However, the role of harvest in duck population dynamics is not clearly understood and the effect of reducing harvest success at the individual hunt level may or may not result in observable changes in population parameters. Some members of the hunting public have expressed concerns that continual advances in technology ultimately detract from the traditional hunting experience and potentially may lead to a reduction in the support for waterfowl hunting. This is thought to be due to hunters becoming less dedicated to developing skills and investing in the activity to a level that generates support for conservation and potentially increasing the negative view of hunting by those that are currently not opposed to hunting. As technology continues to improve, debates such as the one over spinning blade and spinning wing devices would continue. A new debate over each new technological advance would seem likely. Resources would continually be re-directed to assess each new technological advance.

Disadvantages of This Alternative

As detailed in Appendix D, existing analyses do not clearly establish an effect of harvest on duck population dynamics. To some unmeasured extent, the use of SWD may influence more hunters to join or remain in hunting, thereby providing support for wetland and waterfowl conservation. Commercial enterprises that develop and market these devices would likely be opposed to their regulation. There is no information regarding other duck attracting devices currently in use and there is no basis to conclude that these devices increase duck harvest. Commercial enterprises exist or may be developed to increase technological improvements for attracting ducks.

Conclusions Regarding Alternative 3

The selection of this alternative would not result in a significant adverse environmental impact. As reported in Appendix D, to date, the Department is unable to scientifically associate observed changes in duck population status, except perhaps for certain cohorts of local mallards, with the use of SWDs. The selection of this alternative would be viewed favorably by those hunters and other members of the public who are opposed to the use of non-traditional methods, but would be viewed unfavorably by those hunters who are not opposed to their use. Those commercial enterprises that develop and market these devices would likely be opposed to their regulation.

CHAPTER 4. RESPONSE TO COMMENTS REGARDING THE PROPOSED PROJECT

In accordance with CEQA, public input and agency consultation were encouraged during the environmental review process. An NOP was provided to the State Clearinghouse, land management agencies having a key role in migratory game bird management, and all individuals and organizations which expressed an interest in migratory game bird management. No comments were received as a result of the NOP circulation.

The Department prepared a DED regarding waterfowl hunting (Section 502, Title 14, CCR). The DED was made available for public review on November 9, 2015. The DED was available online on the Department's Waterfowl Program website. In addition, correspondence was either emailed or letters sent to every county library for public posting and notice of the availability of the DED. Additionally, notice of availability of the DED for public review was provided to the State Clearinghouse, which provided notice of availability to interested organizations, including all county governments in California. During the 45-day notice period the DED was available for public review there were no comments provided. However, 1 letter was received after the comment period closed that commented on the proposed waterfowl hunting regulations.

Several comments were identified in the letter from Mark Hennelly of the California Waterfowl Association (letter via email dated 01/25/2016). They are summarized as follows:

Comments from Mark Hennelly, California Waterfowl Association

Comment: Provide public opportunity for Late Season Goose Hunts

Response: The original intent of the late goose seasons in the North Coast and Imperial special management areas and the Northeastern Zone were to "…reduce depredation on private lands and disperse through hunting geese" (as proposed in the Initial Statement of Reasons for Regulatory Action, April 2013). An increasing number of complaints about depredation have been received by the Department and FGC from private landowners and the Modoc and Lassen county fish and game commissions, which have requested a late season hunt. It is the policy of the Department (Fish and Game Code Section 1801) to alleviate economic losses caused by wildlife and to bring such losses within tolerable limits. Hunting is the only tool the Department can offer private landowners to minimize depredation (with the goal of hazing geese off of private lands and onto public lands). Higher bag limits have been approved for goose populations that exceed population objectives however there are too few hunters in California to effectively reduce the total number of geese; especially to levels that eliminate goose depredation. The majority of waterfowl habitat and harvest occur on private lands. In order for the late season hunt to be effective in dispersing geese, public lands need to be closed so geese have a place to

go. Opening all public lands may push geese to Oregon where depredation also occurs. Oregon and California agreed to have similar regulations (public hunting areas closed) on each side of the border so as not to move geese across the border. State Type C Wildlife areas could be opened in California with minimal effect to the intent of the late season hunts, however of the 18 type C areas within the Northeastern Zone; 12 are dominated by sagebrush and conifers, 4 are riparian habitat and 2 are seasonal wetlands. Opening up type C areas would not provide any real goose hunting opportunity during the late season. Opening up these public waters could be opened with minimal effect to the intent of the late season hunts. Other publicly owned lands that do provide goose use (habitat) should remain closed to hunting in order to provide an alternative to private land use. The Shared Habitat Alliance for Recreational Enhancement (SHARE) could be utilized to enroll private land owners to offer goose hunting however, statute requires participants willingly volunteer their land for public access. The Department cannot force land owners to participate in SHARE. SHARE hunts were implemented for the North Coast and Imperial Special Management Area late season goose hunts, but they were cancelled because of low land owner enrollment and hunter applicants. There is substantial hunting opportunity with 100+ day seasons and current bag limits.

Comment: Provide White Goose Hunting Opportunity Early in Season in Northeast

Response: The Northeastern Zone white goose regular season was established based on goose surveys in the Klamath Basin that indicate the peak migration in fall occurs in November, not October. Federal harvest data also indicate that more white geese are harvested in November and December. However, the Department could recommend to open the white goose regular season concurrently with the general duck season and close in early December, reopen for the last 7 days of the general duck season in January and conclude with the white goose late season hunt in February. This modification would still provide private land owners with a tool to alleviate goose depredation.

Comment: Allow Junior Licensed Hunters Under 18 to participate in Federal Youth Hunts

Response: Increasing the youth age requirement for the Federal Waterfowl Youth Hunts is the Department's recommendation: Increase the age requirement to participate in the Youth Waterfowl Hunting Days from 15 years of age and younger to 17 years of age and younger. See page 25 for the explanation and analysis.

LITERATURE CITED

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Appendix A. 2015-16 Regulations Related to Migratory Waterfowl, Coot, Moorhen, (Common Gallinule).

§502. Waterfowl, Migratory; American Coot and Common Moorhen (Common Gallinule).

(a) Definitions.
(1) Dark geese. Dark geese include Canada geese, cackling geese, Aleutian geese and white-fronted geese (“specklebelly”).
(2) Large Canada geese. Large Canada geese include western Canada geese (“honker”) and lesser Canada geese (“lessers”).
(3) Small Canada geese. Small (about the size of a mallard) Canada geese include cackling geese and Aleutian geese. Both are white-cheeked geese nearly identical in appearance to Large Canada geese. Aleutian geese have a thin white neck ring and Cackling geese have dark breasts. Both species have a high-pitched cackle as opposed to the deeper “honking”.
(4) White geese. White geese include Ross' geese, snow geese and blue phase of both species.
(b) Waterfowl Hunting Zones.
(1) Northeastern California Zone: In that portion of California lying east and north of a line beginning at the intersection of Interstate 5 with the California-Oregon state line; south along Interstate 5 to its junction with Walters Lane south of the town of Yreka; west along Walters Lane to its junction with Easy Street; south along Easy Street to the junction with Old Highway 99; south along Old Highway 99 to the point of intersection with Interstate 5 north of the town of Weed; south along Interstate 5 to its junction with Highway 89; east and south along Highway 89 to Main Street in Greenville; north and east to its junction with North Valley Road; south to its junction of Diamond Mountain Road; north and east to its junction with North Arm Road; south and west to the junction of North Valley Road; south to the junction with Arlington Road (A22); west to the junction of Highway 89; south and west to the junction of Highway 70; east on Highway 70 to Highway 395; south and east on Highway 395 to the point of intersection with the California-Nevada state line; north along the California-Nevada state line to the junction of the California-Nevada-Oregon state lines west along the California-Oregon state line to the point of origin.
(2) Southern San Joaquin Valley Zone: All of Kings and Tulare counties and that portion of Kern County north of the Southern California Zone.
(3) Southern California Zone: In that portion of southern California (but excluding the Colorado River zone) lying south and east of a line beginning at the mouth of the Santa Maria River at the Pacific Ocean; east along the Santa Maria River to where it crosses Highway 166 near the City of Santa Maria; east on Highway 166 to the junction with Highway 99; south on Highway 99 to the crest of the Tehachapi Mountains at Tejon Pass; east and north along the crest of the Tehachapi Mountains to where it intersects Highway 178 at Walker Pass; east on Highway 178 to the junction of Highway 395 at the town of Inyokern; south on Highway 395 to the junction of Highway 58; east on Highway 58 to the junction of Interstate 15; east on Interstate 15 to the junction with

Highway 127; north on Highway 127 to the point of intersection with the California-Nevada state line.
(4) Colorado River Zone: In those portions of San Bernardino, Riverside, and Imperial counties lying east of the following lines: Beginning at the intersection of Highway 95 with the California-Nevada state line; south along Highway 95 to Vidal Junction; south through the town of Rice to the San Bernardino-Riverside county line on a road known as “Aqueduct Road” in San Bernardino County; south from the San Bernardino-Riverside county line on road known in Riverside County as the “Desert Center to Rice Road” to the town of Desert Center; east 31 miles on Interstate 10 to its intersection with the Wiley Well Road; south on this road to Wiley Well; southeast along the Army-Milpitas Road to the Blythe, Brawley, Davis Lake intersections; south on the Blythe-Brawley paved road to its intersection with the Ogilby and Tumco Mine Road; south on this road to Highway 80; east seven miles on Highway 80 to its intersection with the Andrade-Algodones Road; south on this paved road to the intersection of the Mexican boundary line at Algodones, Mexico.
(5) Balance of State Zone: That portion of the state not included in Northeastern California, Southern California, Colorado River or the Southern San Joaquin Valley zones.
(6) Special Management Areas
(A) North Coast. All of Del Norte and Humboldt counties.
(B) Humboldt Bay South Spit (West Side). Beginning at the intersection of the north boundary of Table Bluff County Park and the South Jetty Road; north along the South Jetty Road to the South Jetty; west along the South Jetty to the mean low water line of the Pacific Ocean; south along the mean low water line to its intersection with the north boundary of the Table Bluff County Park; east along the north boundary of the Table Bluff County Park to the point of origin.
(C) Sacramento Valley. Beginning at the town of Willows; south on Interstate 5 to the junction with Hahn Road; east on Hahn Road and the Grimes-Arbuckle Road to the town of Grimes; north on Highway 45 to its junction with Highway 162; north on Highway 45-162 to the town of Glenn; west on Highway 162 to the point of beginning.
(D) Morro Bay. Beginning at a point where the high tide line intersects the State Park boundary west of Cuesta by the Sea; northeasterly to a point 200 yards offshore of the high tide line at the end of Mitchell Drive in Baywood Park; northeasterly to a point 200 yards offshore of the high tide line west of the Morro Bay State Park Boundary, adjacent to Baywood Park; north to a point 300 yards south of the high tide line at the end of White Point; north along a line 400 yards offshore of the south boundary of the Morro Bay City limit to a point adjacent to Fairbanks Point; northwesterly to the high tide line on the sand spit; southerly along the high tide line of the sand spit to the south end of Morro Bay; easterly along the Park boundary at the high tide line to the beginning point.
(E) Martis Creek Lake. The waters and shoreline of Martis Creek Lake, Placer and Nevada counties.
(F) Northern Brant. Del Norte, Humboldt and Mendocino counties.
(G) Balance of State Brant. That portion of the state not included in the Northern Brant Special Management Area.

(H) Imperial County. Beginning at Highway 86 and the Navy Test Base Road; south on Highway 86 to the town of Westmoreland; continue through the town of Westmoreland to Route S26; east on Route S26 to Highway 115; north on Highway 115 to Weist Rd.; north on Weist Rd. to Flowing Wells Rd.; northeast on Flowing Wells Rd. to the Coachella Canal; northwest on the Coachella Canal to Drop 18; a straight line from Drop 18 to Frink Rd.; south on Frink Rd. to Highway 111; north on Highway 111 to Niland Marina Rd.; southwest on Niland Marina Rd. to the old Imperial County boat ramp and the water line of the Salton Sea; from the water line of the Salton Sea, a straight line across the Salton Sea to the Salinity Control Research Facility and the Navy Test Base Road; southwest on the Navy Test Base Road to the point of beginning.

(c) Seasons and Bag and Possession Limits for American Coots, and Common Moorhens.		
(1) Statewide Provisions		
(A) Species	*(B) Season*	*(C) Daily Bag and Possession Limits*
American Coot and Common Moorhen	Concurrent with duck season(s)	Daily bag limit: 25, either all of one species or a mixture of these species. Possession limit: triple the daily bag limit
(d) Seasons and Bag and Possession Limits for Ducks and Geese by Zone.		
(1) Northeastern California Zone (NOTE: SEE SUBSECTION 502(d)(6) BELOW FOR SPECIAL SEASONS AND CLOSURES.)		
(A) Species	*(B) Season*	*(C) Daily Bag and Possession Limits*
Ducks (including Mergansers)	From the second Saturday in October extending for 105 days. **(Oct 10 – Jan 22)** Scaup: from the second Saturday in October extending for a period of 58 days **(Oct 10 – Dec 6)** and from the fourth Saturday in December extending for a period of 28 days. **(Dec 26 – Jan 22)**	Daily bag limit: 7 Daily bag limit may include: • 7 mallards, but not more than 2 females. • 2 pintail (either sex). • 2 canvasback (either sex). • 2 redheads (either sex). • 3 scaup (either sex). Possession limit: triple the daily bag limit.
Geese	Regular Season:	Daily bag limit: 25

	Dark geese from the second Saturday in October extending for 100 days. **(Oct 10 – Jan 17)** White geese from the first Saturday in November extending for 72 days. **(Nov 7– Jan 17)** Late Season: White-fronted geese from the first Sunday in March extending for 5 days. **(Mar 6 – Mar 10)** White geese from the first Sunday in February extending for 33 days. **(Feb 7 – Mar 10)** During the Late Season, hunting is only permitted on private lands with the permission of the land owner under provisions of Section 2016, Fish and Game Code.	Daily bag limit may include: • 15 white geese. • 10 dark geese but not more than 2 Large Canada geese (see definitions: 502(a)). Possession limit: triple the daily bag limit.
(2) Southern San Joaquin Valley Zone (NOTE: SEE SUBSECTION 502(d)(6) BELOW FOR SPECIAL SEASONS AND CLOSURES.)		
(A) Species	*(B) Season*	*(C) Daily Bag and Possession Limits*
Ducks (including Mergansers)	From the fourth Saturday in October extending for 100 days. **(Oct 24 – Jan 31)** Scaup: from the first Saturday in November extending for 86 days. **(Nov 7 – Jan 31)**	Daily bag limit: 7 Daily bag limit may include: • 7 mallards, but not more than 2 females. • 2 pintail (either sex). • 2 canvasback (either sex). • 2 redheads (either sex). • 3 scaup (either sex). Possession limit: triple the daily bag limit.
Geese	From the fourth Saturday in October extending for 100 days. **(Oct 24 – Jan 31)**	Daily bag limit: 25 Daily bag limit may include: • 15 white geese. • 10 dark geese (see definitions: 502(a)). Possession limit: triple the daily bag limit.
(3) Southern California Zone (NOTE: SEE SUBSECTION 502(d)(6) BELOW FOR SPECIAL SEASONS AND CLOSURES.)		

(A) Species	*(B) Season*	*(C) Daily Bag and Possession Limits*
Ducks (including Mergansers)	From the fourth Saturday in October extending for 100 days. **(Oct 24 – Jan 31)** Scaup: from the first Saturday in November extending for 86 days. **(Nov 7 – Jan 31)**	Daily bag limit: 7 Daily bag limit may include: • 7 mallards, but not more than 2 females. • 2 pintail (either sex). • 2 canvasback (either sex). • 2 redheads (either sex). • 3 scaup (either sex). Possession limit: triple the daily bag limit.
Geese	From the fourth Saturday in October extending for 100 days. **(Oct 24 – Jan 31)**	Daily bag limit: 18 Daily bag limit may include: • 15 white geese. • 3 dark geese (see definitions 502(a)). Possession limit: triple the daily bag limit.
(4) Colorado River Zone (NOTE: SEE SUBSECTION 502(d)(6) BELOW FOR SPECIAL SEASONS AND CLOSURES.)		
(A) Species	*(B) Season*	*(C) Daily Bag and Possession Limits*
Ducks (including Mergansers).	From the third Friday in October extending for 101 days. **(Oct 16 – Jan 24)** Scaup: from the last Saturday in October extending for 86 days. **(Oct 31 – Jan 24)**	Daily bag limit: 7 Daily bag limit may include: • 7 mallards, but not more than 2 females or Mexican-like ducks. • 2 pintail (either sex). • 2 canvasback (either sex). • 2 redheads (either sex). • 3 scaup (either sex). Possession limit: triple the daily bag limit.
Geese	From the third Friday in October extending for 101 days. **(Oct 16 – Jan 24)**	Daily bag limit: 14 Daily bag limit may include: • 10 white geese. • 4 dark geese (see definitions: 502(a)). Possession limit: triple the daily

		bag limit.
(5) Balance of State Zone (NOTE: SEE SUBSECTION 502(d)(6) BELOW FOR SPECIAL SEASONS AND CLOSURES.)		
(A) Species	*(B) Season*	*(C) Daily Bag and Possession Limits*
Ducks (including Mergansers).	From the fourth Saturday in October extending for 100 days. **(Oct 24 – Jan 31)** Scaup: from the first Saturday in November extending for 86 days. **(Nov 7 – Jan 31)**	Daily bag limit: 7 Daily bag limit may include: • 7 mallards, but not more than 2 females. • 2 pintail (either sex). • 2 canvasback (either sex). • 2 redheads (either sex). • 3 scaup (either sex). Possession limit: triple the daily bag limit.
Geese	Early Season: Large Canada geese only from the Saturday closest to October 1 for a period of 5 days EXCEPT in the North Coast Special Management Area where Large Canada geese are closed during the early season. **(Oct 3 – Oct 7)** Regular Season: Dark and white geese from the fourth Saturday in October extending for 100 days **(Oct 24 – Jan 31)** EXCEPT in the Sacramento Valley Special Management Area where the white-fronted goose season will close after December 21. **(Oct 24 – Dec 21)** Late Season: White-fronted geese and white geese from the second Saturday in February extending for a period of 5 days EXCEPT in the Sacramento Valley Special Management Area	Daily bag limit: 25 Daily bag limit may include: • 15 white geese. • 10 dark geese EXCEPT in the Sacramento Valley Special Management Area where only 3 may be white-fronted geese (see definitions: 502(a)). Possession limit: triple the daily bag limit.

	where the white-fronted goose season is closed. During the Late Season, hunting is not permitted on wildlife areas listed in Sections 550-552 EXCEPT on Type C wildlife areas in the North Central and Central regions. **(Feb 13 – Feb 17)**		

(6) Special Management Areas (see descriptions in 502(b)(6))				
	(A) Species	*(B) Season*	*(C) Daily Bag and Possession Limits*	
1. North Coast	All Canada Geese	From the first Sunday in November extending for a period of 85 days **(Nov 8 – Jan 31)** (Regular Season) and from the third Saturday in February extending for a period of 20 days **(Feb 20 – Mar 10)**(Late Season). During the Late Season, hunting is only permitted on private lands with the permission of the land owner under provisions Section 2016, Fish and Game Code.	Daily bag limit: 10 Canada Geese of which only 1 may be a Large Canada goose (see definitions: 502(a)), EXCEPT during the Late Season the bag limit on Large Canada geese is zero. Possession limit: triple the daily bag limit.	
2. Humboldt Bay South Spit (West Side)	All Species	Closed during brant season.		
3. Sacramento Valley	White-Fronted Geese	Open concurrently with the goose season through December 21, and during Youth Waterfowl Hunting Days. **(Oct 24 – Dec 21)**	Daily bag limit: 3 white-fronted geese. Possession limit: triple the daily bag limit.	
4. Morro Bay	All species	Open in designated area only from the opening day of brant season through the remainder of waterfowl season.		
5. Martis Creek	All species	Closed until November		

Lake		16.		
6. Northern Brant	Black Brant	From November 8 extending for 37 days. **(Nov 8 – Dec 14)**	Daily bag limit: 2 Possession limit: triple the daily bag limit.	
(7) Balance of State Brant	Black Brant	From November 9 extending for 37 days. **(Nov 9 – Dec 15)**	Daily bag limit: 2 Possession limit: triple the daily bag limit.	
(8) Imperial County	White Geese	From the first Saturday in November extending for a period of 86 days **(Nov 7 – Jan 31)**(Regular Season) and from the first Saturday in February extending for a period of 16 days **(Feb 6 – Feb 21)**(Late Season). During the Late Season, hunting is only permitted on private lands with the permission of the land owner under provisions of Section 2016, Fish and Game Code.	Daily bag limit: 15 Possession limit: triple the daily bag limit.	

(e) Youth Waterfowl Hunting Days Regulations (NOTE: To participate in these Youth Waterfowl Hunts, federal regulations require that hunters must be 15 years of age or younger and must be accompanied by a non-hunting adult 18 years of age or older.)

(1) Statewide Provisions.

(A) Species	*(B) Season*	*(C) Daily Bag Limit*
Ducks (including Mergansers), American Coot, Common Moorhen, Black Brant, Geese	1. Northeastern California Zone: The Saturday fourteen days before the opening of waterfowl season extending for 2 days. **(Sept 26 – 27)** 2. Southern San Joaquin Valley Zone: The Saturday following the closing of waterfowl season extending for 2 days. **(Feb 6 – Feb 7)** 3. Southern California Zone: The Saturday following the closing of	Same as regular season.

	waterfowl season extending for 2 days. **(Feb 6 – Feb 7)** 4. Colorado River Zone: The Saturday following the closing of waterfowl season extending for 2 days. **(Jan 30 – Jan 31)** 5. Balance of State Zone: The Saturday following the closing of waterfowl season extending for 2 days. **(Feb 6 – Feb 7)**	
(f) Falconry Take of Ducks (including Mergansers), Geese, American Coots, and Common Moorhens.		
(1) Statewide Provisions		
(A) Species	*(B) Season*	*(C) Daily Bag and Possession Limits*
Ducks (including Mergansers), Geese, American Coot and Common Moorhen	1. Northeastern California Zone. Open concurrently with duck season. **(Oct 10 – Jan 17)** 2. Balance of State Zone. Open concurrently with duck season and February 6-7, 2016, EXCEPT in the North Coast Special Management Area where the falconry season for geese runs concurrently with the season for Small Canada geese (see 502(d)(6)). **(Oct 24 – Jan 31 & Feb 6 – Feb 7)** 3. Southern San Joaquin Valley Zone. Open concurrently with duck season and February 1-3, 2016. Goose hunting in this zone by means of falconry is not permitted. **(Oct 24 – Jan 31 & Feb 1 – Feb 3)** 4. Southern California Zone. Open concurrently with duck season and February 1-5, 2016 EXCEPT in the Imperial County Special Management Area where goose hunting by means of falconry is not permitted. **(Oct 24 –**	Daily bag limit: 3 Daily bag limit makeup: • Either all of 1 species or a mixture of species allowed for take. Possession limit: 9

	Jan 31 & Feb 1 – Feb 5) 5. Colorado River Zone. Open concurrently with duck season and January 25-28, 2016. Goose hunting in this zone by means of falconry is not permitted. Federal regulations require that California's hunting regulations conform to those of Arizona, where goose hunting by means of falconry is not permitted. **(Oct 16 – Jan 28)**	

Note: Authority cited: Sections 202 and 355, Fish and Game Code. Reference: Sections 202, 355 and 356, Fish and Game Code.

Appendix B. Estimated Retrieved Harvest of Geese in California

Year	Canada	White-Front	Snow	Ross'	Brant	TOTAL
1962	53,532	50,088	28,826	0	9,433	141,879
1963	99,888	56,694	66,810	0	8,008	231,400
1964	77,920	51,735	55,151	0	3,748	188,554
1965	49,685	42,211	33,771	0	10,735	136,402
1966	72,415	65,321	155,543	1,022	7,155	301,456
1967	8,756	62,819	72,413	533	6,929	151,450
1968	72,935	47,345	53,308	0	8,298	181,886
1969	72,613	68,443	72,545	2,514	10,056	226,171
1970	95,112	70,639	112,614	5,114	393	283,872
1971	74,008	34,216	94,123	3,646	2,524	208,517
1972	148,888	51,813	41,998	0	13,698	256,397
1973	69,701	44,615	106,721	4,398	2,161	227,596
1974	72,166	40,682	50,764	8,464	1,693	173,769
1975	62,002	30,193	81,993	6,968	0	181,156
1976	58,444	44,044	127,678	7,726	515	238,407
1977	42,610	33,572	77,771	3,395	9,700	167,048
1978	46,530	34,719	28,578	2,360	674	112,861
1979	31,373	21,399	26,179	4,419	0	83,370
1980	26,950	18,693	28,459	2,795	0	76,897
1981	52,089	21,781	28,591	6,316	0	108,777
1982	46,418	15,004	26,263	7,298	0	94,983
1983	56,384	16,157	43,223	6,789	3,573	126,126
1984	38,004	6,686	49,609	8,373	0	102,672
1985	40,313	15,157	65,085	8,913	0	129,468
1986	21,999	7,542	31,839	3,477	0	64,857
1987	1,348	9,634	28,601	2,375	0	41,958
1988	26,296	4,707	30,571	884	0	62,458
1989	24,486	9,519	30,263	5,106	566	69,940
1990	32,691	7,003	8,104	2,438	475	50,711
1991	9,474	9,828	25,839	3,253	211	48,605
1992	28,546	11,705	26,407	3,076	1,810	71,544
1993	21,066	12,311	46,461	7,430	2,368	89,636
1994	28,469	12,597	21,847	7,476	2,774	73,163
1995	21,119	11,476	30,679	4,833	328	68,435
1996	25,487	16,530	46,849	12,405	2,639	103,910
1997	23,659	22,448	27,628	8,058	4,029	85,822
1998	23,299	21,984	38,371	6,049	12,097	101,800
1999	14,017	23,925	35,563	23,545	2,639	99,689
2000	25,877	21,184	31,721	6,749	1,800	87,331
2001	30,228	27,080	33,167	13,015	4,100	107,590
2002	37,762	31,497	30,279	15,662	1,100	116,300
2003	41,946	24,685	32,851	16,333	2,300	118,115
2004	44,492	39,924	35,355	10,329	800	130,900
2005	49,182	42,156	46,653	7,729	900	146,620
2006	41,381	52,492	43,296	5,875	2,900	145,944
2007	50,484	59,416	52,038	7,961	1,800	171,699
2008	49,252	110,523	70,946	13,779	1,000	245,500
2009	53,865	56,101	30,693	8,740	900	150,299
2010	68,666	67,810	54,548	14,974	541	206,539
2011	51,870	55,760	43,718	14,635	750	166,733
2012	47,877	41,842	45,261	14,886	1,093	150,959
2013	44,071	65,071	38,747	13,310	952	162,151
2014*	52,735	74,976	66,492	18,343	3,080	215,626
Averages:						
1962-2013	46,301	35,015	48,968	6,643	2,888	139,814
1962-65	70,256	50,182	46,140	0	7,981	174,559
1966-70	64,366	62,913	93,285	1,837	6,566	228,967
1971-75	85,353	40,304	75,120	4,695	4,015	209,487
1976-80	41,181	30,485	57,733	4,139	2,178	135,717
1981-85	46,642	14,957	42,554	7,538	715	112,405
1986-90	21,364	7,681	25,876	2,856	208	57,985
1991-95	21,735	11,583	30,247	5,214	1,498	70,277
1996-00	22,468	21,214	36,026	11,361	4,641	95,710
2001-05	40,722	33,068	35,661	12,614	1,840	123,905
2005-12	52,100	63,465	48,842	10,528	1,256	176,191
2010-14	53,044	61,092	49,753	15,230	1,283	180,402
% Change from:						
2013	19.7%	15.2%	71.6%	37.8%	223.5%	33.0%
1962-2013	13.9%	114.1%	35.8%	176.1%	6.7%	54.2%
% State's Total Goose Harvest:						
2014	23.3%	33.2%	29.4%	8.1%	1.4%	
1962-2013	33.1%	25.0%	35.0%	4.8%	2.1%	
*Preliminary Data						

Appendix C. 2014 Pacific Flyway Fall and Winter Goose Surveys

Pacific White-fronted Goose abundance indices from breeding pair surveys in Alaska (Yukon-Kuskokwim Delta Coastal Zone Survey and Alaska-Yukon Waterfowl Breeding Population and Habitat Survey) and fall counts in California, 1979–current.

	Yukon-Kuskokwim		Bristol Bay		Projected fall	
Year	Delta	Interior	Total	Total	population[b]	Fall Survey[a]
1979						73,100
1980						93,500
1981						116,500
1982						91,700
1983						112,900
1984						100,200
1985	18,914	12,082	5,050	36,046	163,249	93,900
1986	13,400	10,019	4,266	27,685	141,930	107,100
1987	15,717	7,564	3,657	26,938	140,026	130,600
1988	27,191	14,145	3,918	45,254	186,728	124,690
1989	28,004	16,307	5,398	49,709	198,087	263,350
1990	37,836	18,468	2,003	58,307	220,010	237,050
1991	31,286	13,262	4,527	49,075	196,470	215,655
1992	34,671	16,110	7,052	57,833	218,802	230,675
1993	39,748	22,790	1,306	63,844	234,128	253,820
1994	56,513	12,966	4,092	73,571	258,930	298,930
1995	77,710	10,215	2,612	90,537	302,190	251,970
1996	78,032	36,543	4,353	118,928	374,582	350,850
1997	83,215	30,452	3,657	117,324	370,492	318,954
1998	87,881	34,381	1,915	124,177	387,966	413,100
1999	95,040	27,800	3,483	126,323	393,437	285,514
2000	91,911	16,798	1,654	110,363	352,743	284,044
2001	113,603	24,460	6,095	144,158	438,913	337,848
2002	90,407	17,387	5,311	113,105	359,734	402,565
2003	117,951	17,387	2,177	137,515	421,975	424,900
2004	100,622	16,601	1,828	119,051	374,895	337,971
2005	121,017	18,566	6,530	146,113	443,898	508,890
2006	138,067	28,979	4,702	171,748	509,262	426,300
2007	178,515	28,488	2,177	209,180	604,706	476,009
2008	161,979	54,913	1,045	217,937	627,035	602,699
2009	144,678	32,712	5,137	182,527	536,746	457,802
2010	174,556	44,402	7,923	226,881	649,840	783,648
2011	168,925	33,989	6,095	209,009	604,270	646,501
2012	181,519	47,250	3,744	232,513	664,201	831,955
2013	164,399	29,568	5,485	199,452	579,902	No Survey
2014	205,081	16,503	348	221,932	637,221	663,257
2015	140,313	18,468	1,132	159,913	479,085	
Averages:						
Long Term	97,377	23,535	3,828	124,740	389,402	324,241
3-yr	169,931	21,513	2,322	193,766	565,403	663,257
% Change from:						
Long Term	46.2	-22.1	-71.1	29.4	24.0	-100.0
3-yr	-17.4	-14.2	-51.2	-17.5	-15.3	-100.0
2014	-31.6	11.9	225.3	-27.9	-24.8	-100.0

[a]Fall surveys were initiated in 1979 and guided management actions until 1998. Management actions after 1998 were based on total indicated birds (AK Total) from the breeding ground survey and a factor derived from the historic relationship between the fall survey and breeding ground survey (1985–1998). Timing of the Fall survey is as follows: 1979–1988 (November) and 1989–2014 (October).

[b]Projected fall population = (Alaska total * 2.5498) + 71,339.

White Goose (Snow Goose and Ross's Goose) abunda
indices from the California Special white goose survey a
Skagit-Fraser photo inventory conducted in December,
1979–current.

Year	Skagit-Fraser	California	Total
1979	35,600	492,500	528,100
1980	22,400	181,800	204,200
1981	48,600	711,300	759,900
1982	26,100	328,000	354,100
1983	24,500	523,100	547,600
1984	26,600	439,700	466,300
1985	46,200	503,600	549,800
1986	39,900	481,800	521,700
1987	47,700	477,600	525,300
1988	43,800	397,200	441,000
1989	32,200	431,700	463,900
1990	31,700	676,800	708,500
1991	39,100	651,000	690,100
1992	34,300	605,000	639,300
1993	49,100	520,100	569,200
1994	42,600	435,600	478,200
1995	37,000	464,400	501,400
1996	45,800	320,500	366,300
1997	47,000	369,400	416,400
1998	47,100	307,200	354,300
1999	28,600	550,400	579,000
2000	56,300	600,500	656,800
2001	52,000	396,200	448,200
2002	73,100	523,700	596,800
2003	66,800	521,000	587,800
2004	68,141	682,128	750,269
2005	80,040	630,686	710,726
2006	79,891	719,810	799,701
2007	94,859	978,622	1,073,481
2008	57,000	900,403	957,403
2009	73,964	827,055	901,019
2010	63,641	800,156	863,797
2011	69,964	1,027,887	1,097,851
2012	56,973	824,432	881,405
2013	75,313	1,275,890	1,351,203
2014	58,007	1,122,679	1,180,686
Averages:			
Long Term	50,608	602,774	653,382
3-yr	63,431	1,074,334	1,137,765
% Change from:			
Long Term	15.1	91.0	85.0
3-yr	-8.6	4.5	3.8
2013	-23.0	-12.0	-12.6

Aleutian Canada Goose abundance indices from direct count and mark-resight methods, 1975–current.

Year	Estimate	SE	L95% C.I.	U95% C.I.	Method
1975	790				Direct count
1976	900				Direct count
1977	1,280				Direct count
1978	1,500				Direct count
1979	1,590				Direct count
1980	1,740				Direct count
1981	2,000				Direct count
1982	2,700				Direct count
1983	3,500				Direct count
1984	3,800				Direct count
1985	4,200				Direct count
1986	4,300				Direct count
1987	5,000				Direct count
1988	5,400				Direct count
1989	5,800				Direct count
1990	6,300				Direct count
1991	7,000				Direct count
1992	7,680				Direct count
1993	11,680				Direct count
1994	15,700				Direct count
1995	19,150				Direct count
1996[a]	21,420				Direct count
1997[a]	22,800				Direct count
1998[a]	27,600				Direct count
1999[a]	15,417	556	14,326	16,508	Mark-resight
2000[a]	20,352	761	18,861	21,843	Mark-resight
2001[a]	32,408	1,069	30,313	34,503	Mark-resight
1999	35,508	3,118	29,396	41,619	Mark-resight
2000	34,245	1,346	31,607	36,882	Mark-resight
2001[b]					
2002[b]					
2003	72,750	2,705	67,448	78,051	Mark-resight
2004	108,505	4,642	99,407	117,604	Mark-resight
2005	87,091	4,553	78,167	96,014	Mark-resight
2006	100,030	4,525	91,161	108,898	Mark-resight
2007	107,467	7,559	92,650	122,283	Mark-resight
2008	110,950	6,661	97,894	124,006	Mark-resight
2009	83,589	11,798	60,465	106,712	Mark-resight
2010	107,439	8,568	90,646	124,231	Mark-resight
2011	101,435	6,979	87,756	115,114	Mark-resight
2012	132,526	10,052	112,823	152,229	Mark-resight
2013	161,137	14,530	132,657	189,616	Mark-resight
2014	147,609	12,905	122,316	172,903	Mark-resight
2015	189,110	17,925	153,977	224,243	Mark-resight
Averages:					
Long Term	43,605	6,681	78,437	104,626	
3-yr	165,952	15,120	136,317	195,587	
% Change from:					
Long Term	372.1	197.8	108.1	129.8	
3-yr	14.0	18.6	13.0	14.7	
2014	28.1	38.9	25.9	29.7	

[a]Methods overlapped by three years.

[b]There is no estimate for 2001 and 2002 because of insufficient data.

Pacific Brant population indices from the Mid-winter Waterfowl Survey, 1936–current. The table continues on the next page and includes long-term summary statistics.

	U.S. and Canada						Mexico[b]			MWS Index		Izembek Index	
Year	Ak[e]	BC[a]	WA	OR	CA	Subtotal[a]	Baja	Mainland	Subtotal	Annual[c]	3-yr Avg[c]	Annual[d]	% Juv[d]
1936			8,202	3,085	19,910	31,197							
1937			13,450	5,935	13,460	32,845							
1938			24,560	10,475	38,200	73,235							
1939			25,595	9,502	16,890	51,987							
1940			35,520	5,350	35,050	75,920							
1941			24,100	5,000	31,785	60,885							
1942			53,950	6,850	28,983	89,783							
1943			37,000	575	18,000	55,575							
1944			33,950	7,250	20,250	61,450							
1945			32,650	3,000	30,100	65,750							
1946			25,462	55	60,452	85,969							
1947			20,250	8,200	39,640	68,090							
1948			20,660	2,850	32,750	56,260							
1949			20,650	803	66,515	87,968							
1950			15,574	3,600	57,792	76,966							
1951			21,639	2,110	48,131	71,880	93,200	0					
1952			16,578	3,200	43,840	63,618	102,945	0					
1953			27,473	1,509	37,557	66,539	87,905	0					
1954			15,376	1,560	28,750	45,686	86,316	0					
1955			21,915	1,686	34,070	57,671	76,679	0					
1956			15,914	2,073	38,510	56,497	52,743	0					
1957			20,701	1,493	35,848	58,042	73,380	0					
1958			25,219	2,778	26,560	54,557	71,305	4					
1959			10,815	1,121	10,750	22,686	71,305	1,400					
1960			17,614	652	3,771	22,037	113,087	1,115	114,202	136,239	--		
1961			16,675	1,330	6,853	24,858	138,625	4,355	142,980	167,838	--		
1962			25,815	2,266	23,510	51,591	116,245	2,400	118,645	170,236	158,104		
1963			20,400	2,639	2,388	25,427	101,575	13,240	114,815	140,242	159,439		
1964			34,169	2,000	8,353	44,522	117,470	23,290	140,760	185,282	165,253		23.9
1965			19,938	1,325	3,372	24,635	117,350	24,915	142,265	166,900	164,141		25.6
1966			22,175	798	3,284	26,257	115,601	19,505	135,106	161,363	171,182		19.2
1967			21,235	1,523	3,824	26,582	111,755	41,315	153,070	179,652	169,305		41.8
1968			15,746	865	1,729	18,340	111,600	24,400	136,000	154,340	165,118		16.8
1969			10,063	382	166	10,611	97,400	35,075	132,475	143,086	159,026		17.1
1970			8,916	963	207	10,086	98,200	33,400	131,600	141,686	146,371		21.8
1971			10,915	1,374	130	12,419	105,800	31,000	136,800	149,219	144,664		34.1
1972			4,328	1,047	0	5,375	91,200	28,200	119,400	124,775	138,560		28.8
1973			5,911	2,544	950	9,405	85,500	30,100	115,600	125,005	133,000		35.9
1974			4,977	1,904	470	7,351	96,900	26,400	123,300	130,651	126,810		29.4
1975			6,163	1,507	480	8,150	80,825	34,455	115,280	123,430	126,362		4.6
1976			7,540	1,769	680	9,989	82,783	29,273	112,056	122,045	125,375		36.7
1977			14,111	2,100	0	16,211	86,534	44,222	130,756	146,967	130,814	107,784	35.3
1978			18,100	1,110	560	19,770	106,469	36,648	143,117	162,887	143,966	116,298	31.6
1979			8,078	1,255	10	9,343	87,860	32,210	120,070	129,413	146,422		14.7
1980			7,665	1,015	135	8,815	89,690	47,860	137,550	146,365	146,222	128,204	14.7
1981	3,271		10,107	1,790	540	15,708	160,560	21,200	181,760	197,468	157,749	127,667	25.8
1982			6,451	706	485	7,642	85,105	28,297	113,402	121,044	154,959	180,734	18.6
1983			3,113	718	565	4,396	81,761	23,157	104,918	109,314	142,609	125,177	9.5
1984	1,611		7,097	930	700	10,338	95,170	29,533	124,703	135,041	121,800	147,933	24.1
1985		283	11,793	641	800	13,517	101,405	30,163	131,568	145,085	129,813	120,122	13.7

[a] In British Columbia, totals for 1984-1991 are Christmas Bird Counts, and from 1992-on are from Canadian Wildlife Service counts.

[b] Incomplete survey in Mexico during 1951–1959.

[c] Includes Western High Arctic brant. 3-year average considers most recent 3 years of annual counts.

[d] Izembek index from fall before Mid-winter Waterfowl Survey, includes Western High Arctic brant.

[e] The historical Alaska MWS index was recalcutated in 2015, following the reccomendation by Wilson and Dau 2015.

Pacific Brant population index, continued.

	U.S. and Canada						Mexico[b]			MWS Index		Izembek Index	
Year	Ak[f]	BC[a]	WA	OR	CA	Subtotal[a]	Baja	Mainland	Subtotal	Annual[c]	3-yr Avg[c]	Annual[d]	% Juv[d]
1986	5,338	319	12,026	1,113	706	19,502	92,525	22,200	114,725	134,227	134,227	122,673	13.7
1987	7,550	205	14,371	1,133	736	23,995	73,825	13,088	86,913	110,908	122,568	108,582	15.3
1988	6,180	263	19,831	1,104	947	28,325	99,066	17,630	116,696	145,021	130,052	136,765	31.2
1989	6,918	484	18,538	871	1,033	27,844	89,600	18,121	107,721	135,565	130,498	123,822	19.3
1990	5,303	406	13,756	1,399	992	21,856	107,545	22,320	129,865	151,721	144,102	135,041	23.9
1991	4,742	591	16,221	1,262	1,340	24,156	88,650	19,905	108,555	132,711	139,999	123,551	19.2
1992	7,043	283	13,505	1,397	2,424	24,652	78,280	14,905	93,185	117,837	134,090	128,784	27.8
1993	8,369	180	13,058	1,254	9,415	32,276	68,280	24,444	92,724	125,000	125,183	119,965	16.5
1994	12,125	382	13,595	666	2,299	29,067	83,130	17,135	100,265	129,332	124,056	143,375	23.6
1995	11,381	363	20,231	708	3,987	36,670	74,060	22,755	96,815	133,485	126,414	142,701	11.6
1996	10,278	634	6,941	644	2,008	20,505	87,280	20,205	107,485	127,990	128,952	152,613	36.1
1997	10,049	500	9,753	669	3,598	24,569	108,018	22,720	130,738	155,307	138,927	125,475	21.7
1998	8,562	619	10,881	580	6,091	26,733	97,805	14,300	112,105	138,838	140,712	130,104	17.4
1999	10,354	985	15,252	645	4,296	31,532	84,965	15,795	100,760	132,292	142,146	117,312	25.7
2000	8,120	1,238	13,859	523	3,389	27,129	92,020	16,420	108,440	135,569	135,566	131,134	21.6
2001	17,790	1,254	10,197	695	4,197	34,133	78,850	13,010	91,860	125,993	131,285	151,216	30.9
2002	13,576	1,483	13,478	552	4,092	33,181	93,995	11,055	105,050	138,231	133,264	112,554	7.5
2003	7,677	1,103	11,455	557	3,124	23,916	74,132	8,094	82,226	106,142	123,455	115,839	20.5
2004	12,756	2,117	14,544	528	6,372	36,317	71,685	13,270	84,955	121,272	121,882	135,944	13.7
2005	12,041	1,020	14,286	609	5,224	33,180	59,960	14,068	74,028	107,208	111,541	134,474	18.2
2006	15,404	1,792	16,305	649	5,069	39,219	87,483	14,254	101,737	140,956	123,145	134,189	33.3
2007	28,533	2,078	12,712	702	7,387	51,412	65,250	13,932	79,182	130,594	126,253	120,875	20.3
2008	27,422	1,264	19,775	370	4,827	53,658	83,856	19,443	103,299	156,957	142,836	135,551	28.2
2009	21,482	2,574	29,243	823	6,392	60,514	*no survey conducted* [e]			--	142,836	130,294	15.5
2010	28,234	2,699	23,908	0	13,553	68,394	71,688	23,389	95,077	163,471	150,341	144,594	26.8
2011	42,937	2,414	21,457	0	15,610	82,418	61,153	18,897	80,050	162,468	160,965	130,093	20.3
2012	44,252	1,229	17,502	687	2,227	65,897	101,571	9,873	111,444	177,341	167,760	126,028	17.5
2013	41,821	2,204	16,454	200	7,448	68,127	71,607	23,566	95,173	163,300	167,703	154,481	13.8
2014	48,140	2,104	17,485	511	7,916	76,156	68,290	28,869	97,159	173,315	171,319	157,781	15.2
2015	50,316	1,636	10,706	486	4,906	68,050	44,533	23,899	68,432	136,482	157,699	170,539	
Averages:													
Long Term	16,862	1,120	17,095	1,832	12,742	38,848	89,865	18,980	113,616	142,275	141,793	132,902	22.2
3-yr	46,759	1,981	14,882	399	6,757	70,778	61,477	25,445	86,921	157,699	165,574	160,934	14.5
% Change from:													
Long Term	218.8	48.4	-37.7	-73.7	-61.8	76.9	-50.8	26.4	-40.2	-4.1	11.5	29.3	-100.0
3-yr	7.6	-17.4	-28.1	21.8	-27.4	-3.9	-27.6	-6.1	-21.3	-13.5	-4.8	6.0	-100.0
2014	4.5	-22.2	-38.8	-4.9	-38.0	-10.6	-34.8	-17.2	-29.6	-21.3	-7.9	8.1	-100.0
Objectives:	9,000	8,000	25,000	3,000	10,000	55,000			107,000		162,000		

[a] In British Columbia, totals for 1984–1991 are Christmas Bird Counts, and from 1992–on are from Canadian Wildlife Service counts.

[b] Aerial surveys were not flown (2009, 2011-2012, 2014–2015) in Mexico due to pilot safety concerns. Instead, ground-counts conducted by Palacios and Avila (including 2013).

[c] Includes Western High Arctic brant. 3-year average considers most recent 3 years of annual counts.

[d] Izembek index from fall before Mid-winter Waterfowl Survey, includes Western High Arctic brant.

[e] No survey conducted due to pilot survey concerns.

[f] The historical Alaska MWS index was recalcutated in 2015, following the reccomendation by Wilson and Dau 2015.

Snow Goose population and productivity indices from Wrangel Island, Russia, 1966–current.

	Population				Nesting			Brood Size		
Year	Adults	Breeding adults	% Juvenile	Total spring	Nests	% Successful	Clutch Size	At Nesting colony	At brood rearing area	Colony Size (ha)
1966							3.6			
1967							4.9			
1968										
1969		114,000			58,200		3.7			1,962
1970	120,000	120,000	20.0	150,000	60,000	96.0	3.7	3.5	2.5	2,600
1971	120,000	24,000	9.1	132,000	12,000	55.0	4.7	3.4	2.3	825
1972	106,000	36,000	0.6	107,000	18,000	45.0	4.2	3.5	2.3	950
1973	85,900	12,000	0.0	86,000	6,000	67.0	6.0	3.9		200
1974	69,500	32,000	0.7	70,000	15,000	0.0	4.7			800
1975	56,000	56,000	0.0	56,000	28,000	74.4	3.8	3.4	2.4	
1976	46,000	46,000	20.7	58,000	23,000	79.0	3.7	3.2	2.8	1,840
1977	57,200	10,000	16.1	68,200	5,000	76.8	5.0	3.7		400
1978	64,900	42,000	0.8	65,400	21,000	80.0	4.2	3.7	2.4	2,200
1979	62,100	60,000	26.5	84,500	30,000	90.0	3.8	3.6		1,860
1980	80,300	20,000	11.5	90,700	10,000	70.0	5.4	3.3		315
1981	86,200	78,000	3.2	89,000	39,000	95.0	4.0	3.7	3.1	2,118
1982	81,000	28,000	18.5	100,000	14,000	65.0	4.1	3.2	2.8	688
1983	92,800	3,400	2.4	95,000	1,700	5.9	4.8			125
1984	85,000	42,000	0.0	85,000	21,000	83.3	3.7	3.2	2.1	1,500
1985	80,000	50,000	5.4	85,000	25,000	87.7	3.7	3.2	2.4	1,457
1986	70,000	58,000	20.4	90,000	29,000	90.0	3.9	3.6	3.2	2,100
1987	85,000	47,000	15.0	100,000	23,500	80.0	3.7	3.4	2.8	1,900
1988	80,000	13,000	17.7	80,000	6,500	51.0	5.2	3.4	2.7	675
1989	70,000	60,000	1.4	70,000	30,000	60.0	3.8	3.3		1,025
1990	60,000	53,000	0.0	60,000	26,500	49.2	3.8	3.2	2.2	940
1991	56,000	41,600	6.6	60,000	20,800	82.0	4.1	3.4	2.7	888
1992	56,000	46,200	20.0	70,000	23,100	70.1	4.0	3.5	3.5	742
1993	64,500	52,200	0.8	65,000	26,100	85.1	3.9	3.2		910
1994	52,500	30,000	25.0	70,000	15,000	13.0	2.8	2.1		1,000
1995	64,000	8,800	0.8	65,000	4,400	50.0	4.7	2.8		430
1996	75,000	75,400	0.0	75,000	37,700	75.4		3.7	2.4	740
1997	70,000	55,200	15.0	85,000	22,600	71.2	4.0	3.5		628
1998	80,000	31,800	10.0	90,000	15,900	66.0	4.6	3.5		750
1999	85,000	20,800	5.6	90,000	10,400	75.0	4.7	3.3		278
2000	87,400	49,600	8.0	95,000	24,800	87.8	3.5	3.2	2.8	738
2001	92,400	48,000	12.0	105,000	24,000	87.0	3.6	3.2	2.3	900
2002		60,600		110,000	30,300	81.5	4.0	3.5	3.0	855
2003		55,000		115,000	27,500	77.5			2.2	900
2004	111,700	56,800	4.9	117,500	28,400	75.0	3.6	3.2		838
2005		95,800		117,500	47,900	82.3	4.2	3.7	3.3	900
2006	100,800	93,200	23.9	132,500	46,600	87.7	4.0	3.7	3.2	875
2007		79,000		140,000	39,500	84.4	4.0	3.5	3.1	1,100
2008		20,000		140,000	10,000	35.0				
2009		108,800		132,500	54,400	79.5	4.1	3.6		
2010		10,000		150,000	5,000					
2011		144,000	5.0	155,000	72,000	81.0	4.2	3.7		
2012[a]										
2013				160,000	78,300	75.8	3.7	3.2	2.7	1,063
2014[a]										
2015	228,500	215,600	4.8	240,000	107,800	89.1	4.0	3.7		2,680
Averages:										
Long Term	82,334	54,609	9.2	100,041	28,331	70.0	4.1	3.4	2.7	1,092
3-yr	147,000	123,200	11.2	185,000	86,033	82.0	4.0	3.5	3.0	1,013
% Change from:										
Long Term	192.8	323.9	-48.7	148.0	306.4	28.0	-3.3	9.0	-100.0	154.8
3-yr	0.0	0.0	0.0	20.0	15.9	8.1	4.2	6.6	-100.0	43.2
2014	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

[a]Data were not gathered in 2012 or 2014.

Appendix D. Possible Effects of Spinning Wing Decoys in California

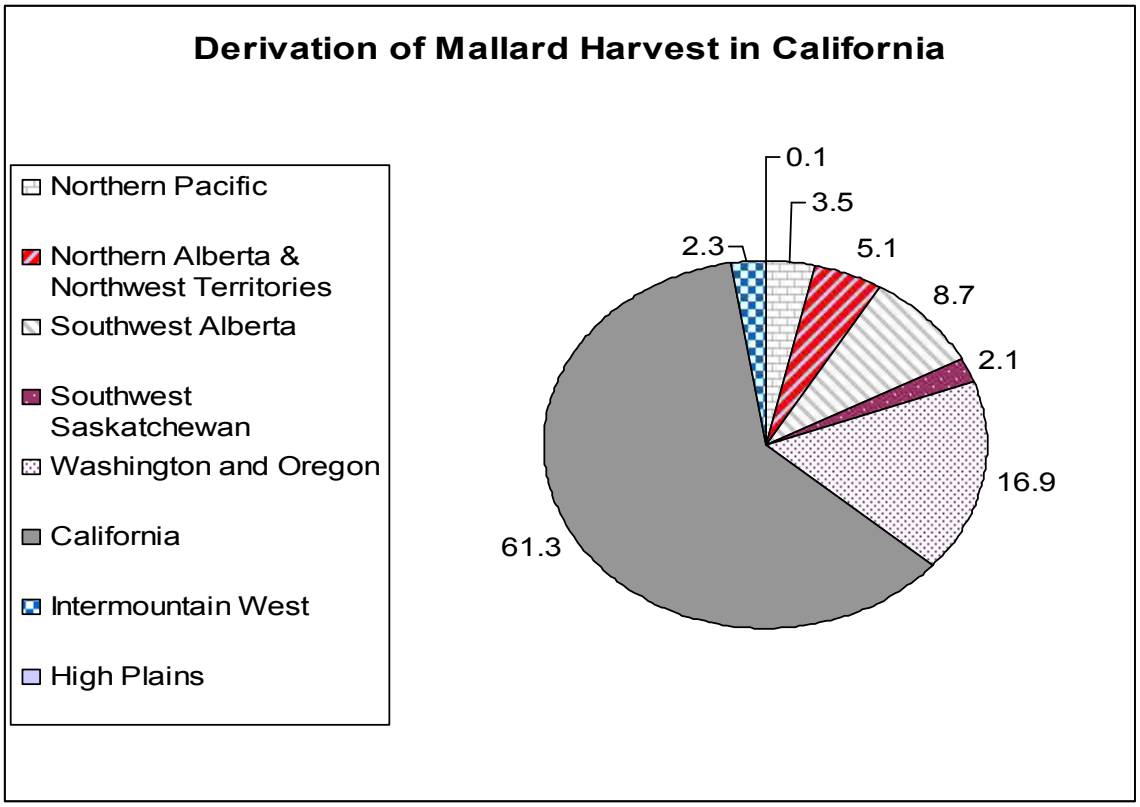
Introduction

The use of mechanical or electronic duck decoys (also known as spinning wing decoys (SWDs), “rotoducks”, “motoducks”, motion wing decoys, etc.) may lead to increases in harvest beyond those anticipated by existing bag limits and season length. Some hunters and other members of the public are opposed to the use of these devices because they believe that the devices may lead to excessive harvest or exceed the bounds of “fair chase” and eliminate the emphasis on traditional hunting methods.

The Department examined the results of studies, existing monitoring programs, and initiated additional analyses to assess the potential effects of SWDs on the harvest of ducks. Monitoring programs (i.e. estimates of breeding populations, total harvests) are not designed to measure the effectiveness of a single harvest method, such as a SWD.

These analyses mostly focus on mallards because mallards are the most abundant breeding duck in the State, are the most frequently occurring duck species in the harvest (Appendix E) and, unlike other species of ducks, are mostly derived from within California (62%; J. Dubovsky, USFWS, unpub data, Figure D-1).

Figure D-1. Derivation of Mallard Harvest in California.



Department Surveys on the Use and Effectiveness of SWDs

The widespread use of SWDs in California began in 1998. The Department compared the daily harvest of hunters on public hunting areas who said they used SWDs to those that said they did not during the 1999-00 to 2001-02 seasons.

Hunters were sampled on five public hunting areas (Delevan National Wildlife Refuge, Upper Butte Basin Wildlife Area, Grizzly Island Wildlife Area, Los Banos Wildlife Area, and Mendota Wildlife Area) on 10 randomly-selected dates during the 1999-00 hunting season and again on five areas (Sacramento National Wildlife Refuge, Upper Butte Basin Wildlife Area, Grizzly Island Wildlife Area, Los Banos Wildlife Area, and Mendota Wildlife Area) on 14 random days during the 2000-01 hunting season. During the 2001-02 hunting season, sampling occurred on 10 days picked at random on the Delevan National Wildlife Refuge, Upper Butte Basin Wildlife Area, Grizzly Island Wildlife Area, Los Banos Wildlife Area, and Mendota Wildlife Area.

The results from nearly 23,000 hunter-days from the three year survey are summarized in Table D-1. Use of SWDs generally increased in the second year of study, especially in the Sacramento Valley, but use declined on some areas during the third year of study on some areas. SWD use varied from 16 to 59 percent of hunters. There were no other differences between years. Total ducks harvested was significantly greater for hunters using SWDs on all five areas, and the overall average increase was about 1 bird per hunter.

Although the average number of mallards taken by hunters using mechanical duck decoys trended higher, harvest on only one of the five areas was higher at a statistically significant level in one year. The overall average increase in mallards bagged for hunters using SWDs was about 0.5 mallards per hunter-day.

Although average numbers of ducks taken by hunters using SWDs were higher than the averages by hunters that did not use the devices, and use of the devices was common, overall duck harvest on the public hunting areas in 1999 (201,000); 2000 (165,000); and 2001 (157,000); was lower than in 1998 and the overall ducks per hunter per day was essentially unchanged.

Effectiveness of December 1st Regulation

Beginning in 2001, the Commission adopted a prohibition on the use of electronic or mechanically operated spinning-wing decoys from the beginning of the waterfowl season until November 30th. Before and after the regulation change, a variety of changes have occurred with mallard harvest regulations (i.e. opening days, bag limits, season length). The Department analyzed public hunt results to see if any changes have occurred with mallard harvest in relation to the regulation change. Mallards were chosen for this analysis, since the December 1st regulation was created when the

Table D-1. Use and success of hunters using SWD on selected public hunting areas.

Area	Year	% Who Used Decoy	Total Duck Harvest	Percent Mallard	Avg Mallards per Hunter	Avg Ducks per Hunter	Sample Size	Total Annual Hunter Visits
Little Dry Creek	1999-00	52 - YES 48 - NO	2431 1610	36 34	1.4 1	3.9 2.8	1197	5030
	2000-01	59 - YES 41 - NO	2707 1006	47 51	1.4 0.8	2.9 1.6	1550	4650
	2001-02	52 - YES 47 - NO	2697 1553	42 47	1.86 1.32	4.42 2.79	1165	4188
Delevan	1999-00	52 - YES 48 - NO	1643 1177	17 18	0.5 0.4	2.6 2	1210	7061
	2000-01	not sampled						
	2001-02	45 - YES 54 - NO	1831 1251	30 30	1.09 0.6	3.55 2.02	1132	5941
Sacramento	1999-00	not sampled						
	2000-01	57 - YES 43 - NO	1271 904	24 32	0.5 0.6	1.8 1.7	1212	8656
	2001-02	not sampled						
Grizzly Island	1999-00	29 - YES 71 - NO	1129 1998	14 18	0.3 0.3	2 1.4	1978	8658
	2000-01	36 - YES 64 - NO	1508 1852	28 26	0.5 0.3	1.8 1.2	2305	7176
	2001-02	39 - YES 60 - NO	699 652	17 17	0.24 0.14	1.42 0.85	1250	5880
Los Banos	1999-00	24 - YES 76 - NO	416 786	31 28	0.6 0.3	1.8 1.1	981	4314
	2000-01	41 - YES 59 - NO	802 448	31 35	0.7 0.3	2.1 0.9	914	4698
	2001-02	34 - YES 65 - NO	454 502	16 23	0.32 0.26	2 1.17	654	4427
Mendota	1999-00	16 - YES 84 - NO	790 3179	16 13	0.4 0.2	2.4 1.8	2133	9886
	2000-01	24 - YES 76 - NO	1224 2716	29 20	0.6 0.3	2 1.3	2638	10196
	2001-02	28 - YES 71 - NO	1842 3056	12 12	0.33 0.22	2.59 1.71	2497	11132

breeding population of mallards in California was declining. Beginning in December, a larger percentage of migrant mallards start appearing in the harvest.

A mallard per hunter visit was calculated for all public hunt areas. Although waterfowl zones and other issues exist (e.g. delay due to rice harvest), these were controlled for by computing an average mallard take per hunter day on all areas before and after December 1st (including this date). Additionally, for analysis, data from 1992 – 2006 was partitioned into three categories: 1992-1997, 1998-2000, and 2001-2006). Use of SWDs began during the 1998-1999 hunting season in California, and continued without restriction until the December 1st restriction starting with the 2001-02 waterfowl hunting season, therefore we have a five year buffer (before and after restriction) on each side of their uncontrolled use on public hunting areas (Figure D-2).
Also Included are past years (2007 – 2013) average mallard take per day on public areas.

Based on statistical tests (ANOVAs), there was no difference in mallard harvest per hunter day during the three time periods after December 1st (P = 0.617). However, there were significant differences in hunter harvest per day among the three time periods before December 1st (P = .005). On average, the mallard harvest per hunter-day was 33% larger from 1998-2000 than 1992-1997 before December 1st. The mallard harvest per hunter day was 26% larger for the same period when compared to 2001-2006 seasons. Based on public hunt results, it appears that the December 1st restriction has significantly decreased the before December 1st harvest on mallards on public hunt areas (on a hunter-day basis).

Studies and Scientific Literature on Spinning Wing Decoys (SWDs)

University of California Davis Study

A more rigorous study during the 1999-00 hunting season by the University of California, Davis, also indicated an increase in harvest, particularly early in the season. In this study, hunters were observed during alternating 30 minute periods with SWDs in use and not in use. A total of 37 hunts were conducted. Overall, when hunters used a mechanical duck decoy, they shot about 2.5 times as many ducks as when they didn't use one. Early in the season, hunters using the device shot nearly 7 times more ducks than when the same hunters didn't use the device (Eadie *et al*. 2001). Summary information from this study is provided in the Figure D-3.

Arkansas Study

In Arkansas, as study was conducted during 2 years (2001-02 and 2002-03) to evaluate their effectiveness. Overall, 272 hunters killed 537 ducks during 101 hunts. Mallards comprised 57% of the harvest. Of ducks taken, 64 percent were harvested during periods when decoys were on and only 36 percent when off. Results of paired observations indicate that kill per hunter was 1.8 times greater with decoys on versus off. Similarly, 1.3 times as many flocks were seen per hunt, 1.8 times as many shots were fired per hunter and 1.2 times as many cripples were lost during periods when SWDs were on versus off. Age ratios of harvested mallards were similar with decoy use

(Imm./Adult ratio = 0.26 when ON and Imm./Adult ratio = 0.23 when OFF), however, adult mallards were 2 times more likely to be shot during periods with a robo" decoy on than off. Body mass was similar for mallards shot and retrieved during both treatments (ON and OFF) (M. Checkett, Arkansas Game & Fish Commission, unpub. data).

Figure D-2. Mallard harvest on the public hunting areas relative to December 1, 1992-2014 hunt seasons.

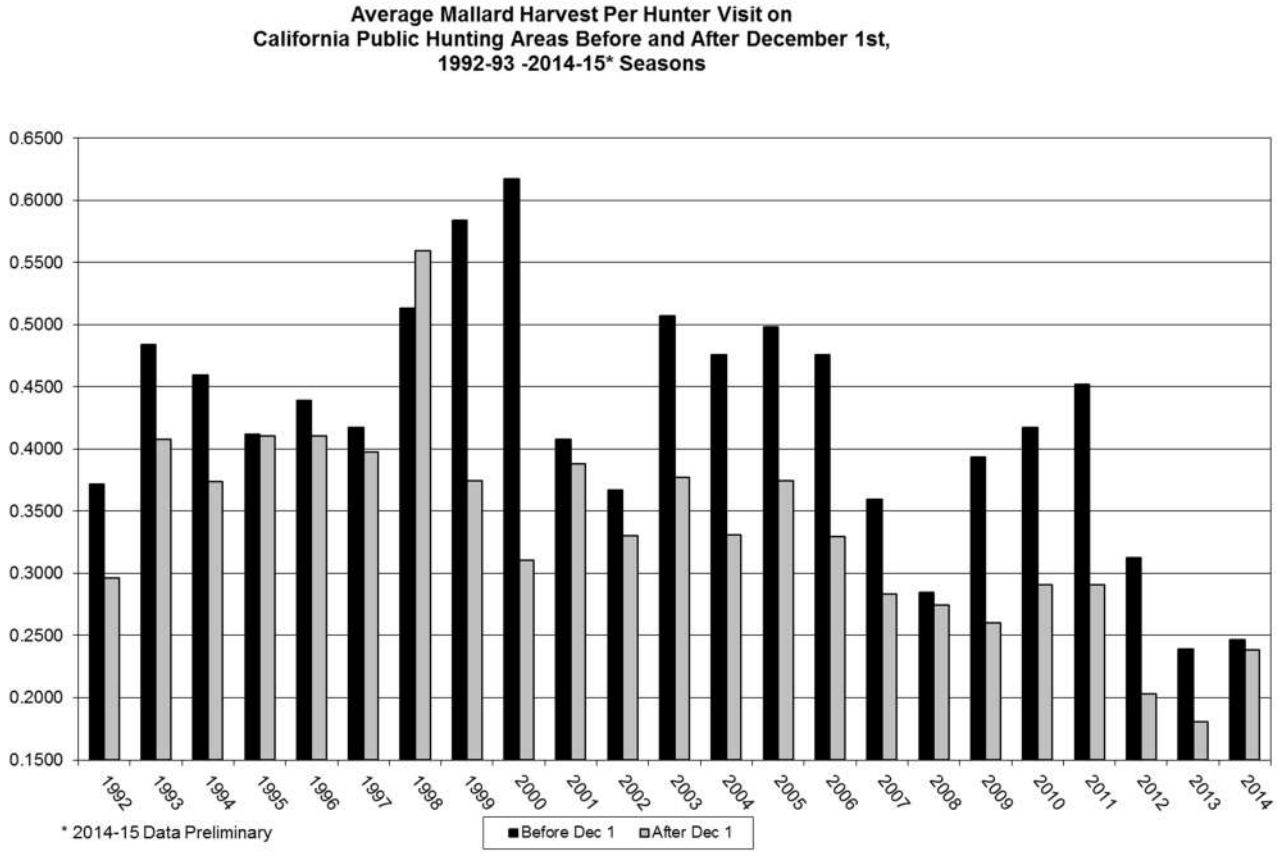
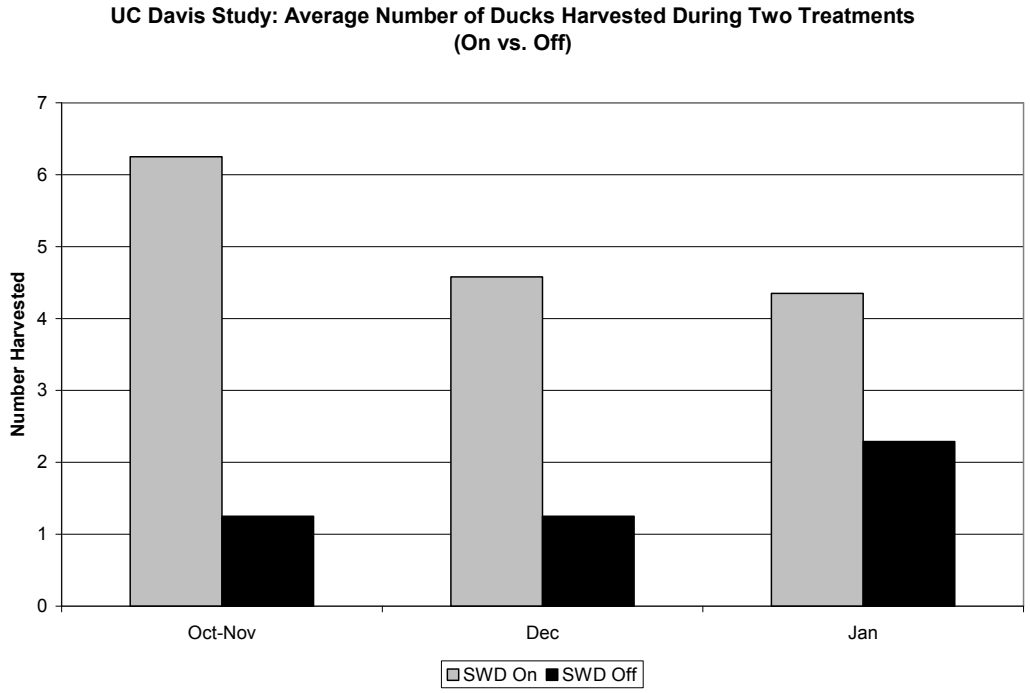


Figure D-3. Summary results from University of California, Davis Study



Manitoba, Canada, Study

In Manitoba, Canada, during the falls of 2001 and 2002, 99 experimental marsh and 55 experimental field hunts were conducted. Each hunt consisted of a series of equal and alternating 15-minute experimental (SWD on) and control (SWD off) periods, separated by a 3-minute buffer. Duration of total hunts ranged from 1.0 to 3.0 hours with an average of 1.4 ± 0.5 hours. Experimental marsh hunts indicated that mallards were 1.9 times more likely to fly within gun range, the kill rate was 5.0 times greater, size adjusted body mass of harvested mallards was greater, and the crippling rate was 1.6 times lower in experimental than control periods. Field hunts indicated that mallards were 6.3 times more likely to fly within gun range, kill rate was 33 times greater, and crippling rate was 2.2 times lower in experimental than control periods. A SWD activity*age interaction indicated that adult males harvested during experimental periods had higher size adjusted body mass than that of juveniles mallards harvested during experimental periods. However, body condition of harvested adult and juvenile mallards did not differ significantly during control periods (Caswell and Caswell 2004).

Minnesota study

In Minnesota, due to concerns about the potential increased harvest of local mallards, 219 experimental hunts with 367 volunteer hunters were conducted during 1,556 sampling periods (both ON and OFF treatments) during the 2002 waterfowl season. When using a SWD, mallards were 2.91 times more likely to respond to the decoy (within 40 m) as compared to when off. Flock size was larger when the decoy was on,

as compared to off. The number of mallards killed/hour/hunter was 4.71 times higher when the SWD was on. There was no difference in crippling loss in treatment types (ON vs. OFF). Age ratios of mallards were 1.89 (HY/AHY birds) versus 0.61 when ON and OFF, respectively. Overall, the study predicted an increase in mallard harvest, if SWDs became widely used in Minnesota (Szymanski and Afton 2004).

Missouri Study

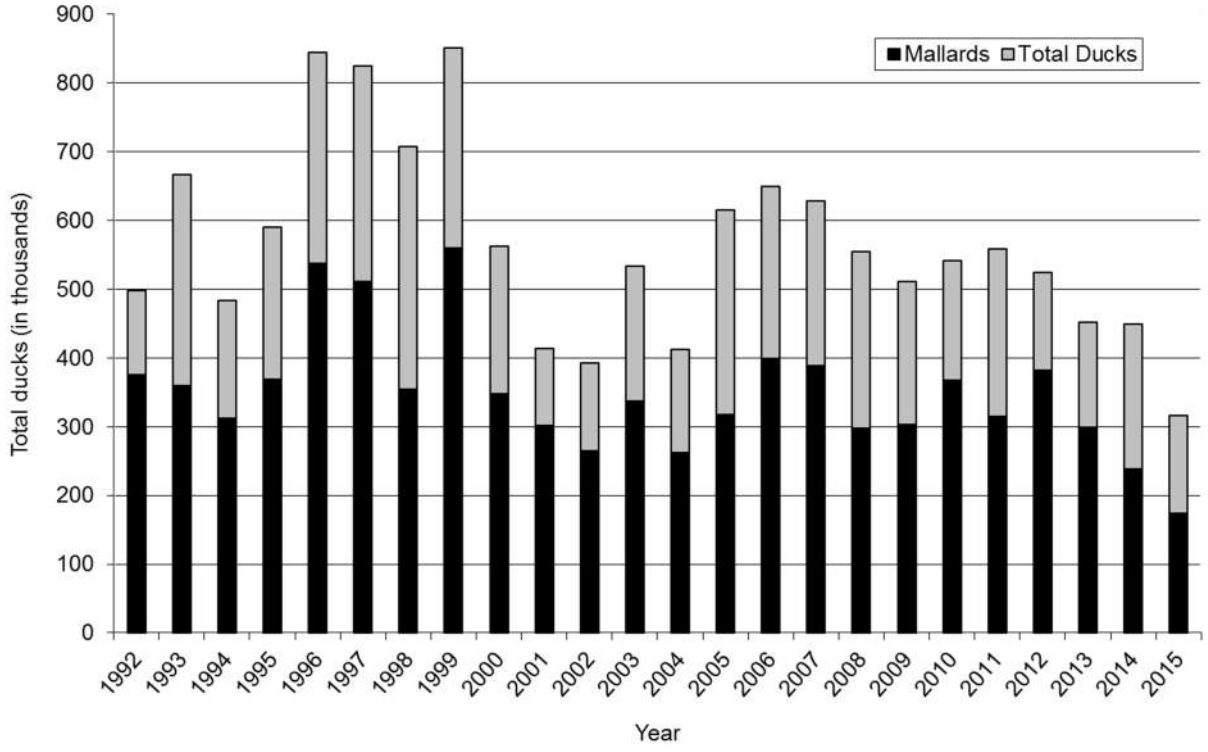
In Missouri, efforts to evaluate the use and attitudes regarding SWD were completed in 2000 and 2001. Hunters using SWDs shot and retrieved 1.28 more total ducks per hunting party (2-3 hunters) and 0.82 more male mallards than when not using a SWD. Missouri waterfowl hunters hunting on public areas were more successful in 2000 when using SWDs than hunters who did not use SWDs. The overall difference in success rate between users and non-users was 0.78 ducks per hunter trip; however, about half of this difference was attributed to factors other than SWDs, such as greater hunting skills. The remaining increase in hunting success, between 0.32 and 0.45 ducks/ hunter trip (13%-19% increase in success rate), was attributed to SWDs (A. Raedecke, Missouri Department of Conservation, unpub. data).

These brief summaries of the additional results and other studies (Nebraska) were summarized in Ackerman et al (2006). Overall, 70.2% of all ducks were harvested when the SWDs were used, as compared to 29.8% when the decoy was not in use. Significant results indicated that the probability of being shot increased with latitude (study location) and annual survival rates of species. These results support that fact that ducks may be more naïve at the beginning of migration (i.e. Manitoba), as compared to late in migration (i.e. Arkansas). Ackerman et al. (2006) suggested that these studies “only measured the effect of SWDs on kill rates of ducks and these rates will not necessarily translate into overall changes in population harvest rates.”

<u>California breeding populations</u>

The Department annually estimates the breeding population of ducks in California. Results of the current year breeding population survey are not usually available until June of each year. Based on the mallard breeding population, a decline was observed following the 1999 waterfowl season, but this trend was not statistically significant because the annual estimates have large confidence intervals. More recent mallard breeding population levels are similar to the mid 1990s levels when SWDs were not being used for duck hunting. Furthermore, breeding populations of mallards and total ducks have remained relatively stable since 2008 (Figure D-4).

Figure D-4. California Duck Breeding Population Estimates, 1992- 2015



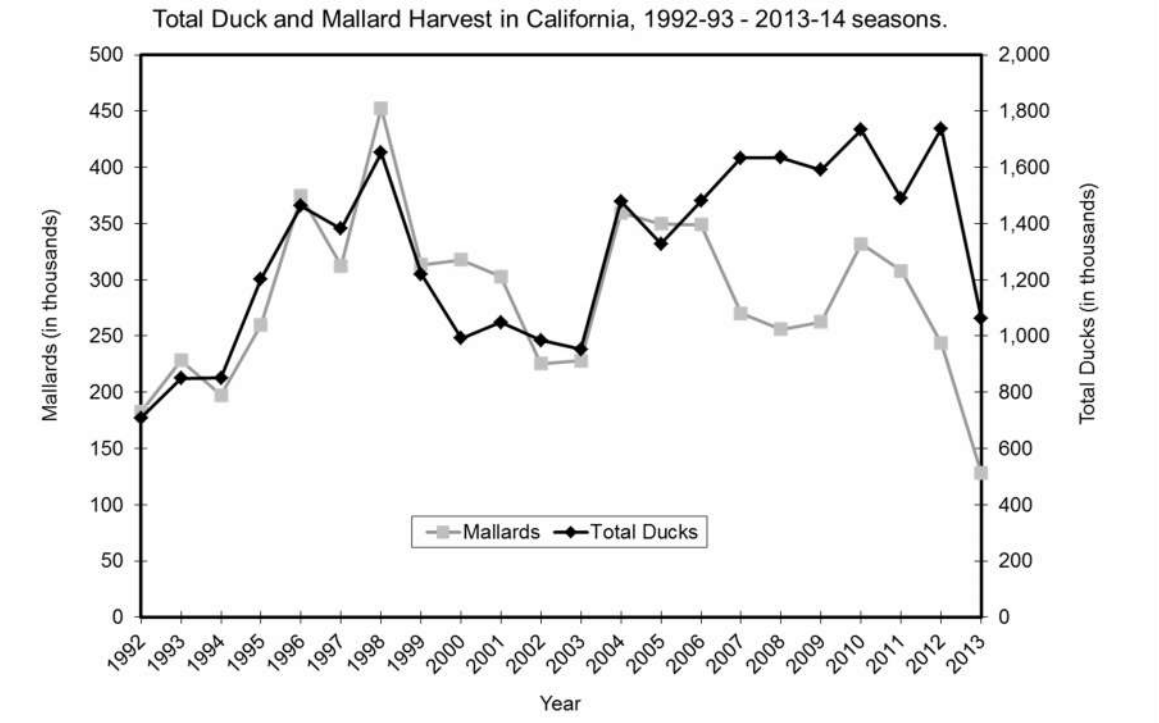
Total estimated duck harvest

The Service annually estimates the harvest of ducks in California and though out the United States. However, the most recent year of harvest is not available until July of the following year. For example, at this time, harvest information from the 2013-14 season is available but harvest estimates from 2014-15 will not be available until July, 2015. This information will be updated in the Final Environmental Document. There remain many factors (e.g. regulations, weather, hunter participation, age ratios in duck populations, etc.) besides the use SWDs that may impact hunter success on an individual hunt, which may transfer to decreased or increased total statewide duck harvest.

Relationships Among Survival & Harvest in Mallards: Issues in Findings

The studies cited above indicate that the use of SWDs increases harvest at the individual hunt level, however, despite the widespread use of SWDs (at least when last measured) overall estimates of harvest have not changed at the same magnitude as indicated in the individual hunt studies (Appendix E, Figure D-5). To have a biological effect at the population level, SWDs would have to be shown to lead to increased harvests and those increased harvests would have to be shown to lead to decreased annual survival rates. Other unmeasured variables act on populations during and after hunting seasons and it is not possible to unequivocally attribute potential population level effects due to SWDs through existing monitoring programs. However, banding data are the most likely of these monitoring programs that provide any inference on the role of SWDs on population parameters of ducks.

Figure D-5. Mallard and Total Duck (all species combined) harvest in California.



Numerous scientific studies have attempted to improve the understanding of the relationship among harvest rates and annual survival rates of waterfowl (Anderson and Burnham 1976, Nichols *et al*. 1984, Nichols and Hines 1982, Burnham and Anderson 1984, Johnson *et al*. 1986, Trost 1987, Raveling and Heitmeyer 1989, Nichols 1991, Smith and Reynolds 1992, Conn and Kendall 2004). Most of these studies have relied on banding data. As an example, Smith and Reynolds (1992) concluded that survival rates increased in response to restrictive regulations, and they rejected the completely compensatory model of population dynamics. Conversely, Sedinger and Rextad (1994) contested those conclusions because Smith and Reynolds pooled data and their analyses had low statistical power. Thus, there is still debate whether existing harvest levels affect survival rates in mallard populations. Partially due to this debate and uncertainty, the Service implemented Adaptive Harvest Management in 1995 to help reduce the uncertainty about the role of harvest and survival rates in population dynamics of mid-continent mallards.

The ability to detect significant changes in estimates of mallard recovery and survival rates in California, and relate these changes solely to the use of SWDs, is difficult if not impossible for several reasons.

First, survival and recovery rates are calculated through modeling using data from banded ducks. The data from these banded ducks consists of the number of birds banded (categorized by age, sex, date and location of banding) and reports of encountered bands (usually through hunting for game birds). The number of birds encountered divided by the number of birds banded is the recovery rate. However, not all bands encountered are reported, and an estimate of reporting rate is needed. The product of the recovery rate and the reporting rate is the harvest rate.

Reporting rates have been estimated because this rate is necessary to estimate the harvest rate and harvest rate is necessary to understand the relationship between harvest and population dynamics. Reporting rates vary widely due to band type and even geography (Nichols *et al*. 1991, 1995, Royle and Garretson 2004). Band types (i.e. their inscriptions) have changed over time. Before the 1990s, “avise” bands were used. These bands were inscribed with “AVISE BIRD BAND, WRITE WASHINGTON DC USA”. Later, “address” bands were introduced with the inscription “WRITE BIRD BAND LAUREL MD 20708”. These bands were replaced beginning in 1995, but not entirely until about 1999, with “toll-free” bands that were inscribed with “CALL 1 800 327 BAND and WRITE BIRD BAND LAUREL MD 20708 USA”. The adoption and widespread advertising of this new reporting method greatly increased reporting rate and apparent recovery rates. Due to the overlap of band types and the timing and duration of research into reporting rates, harvest rates can not be calculated for all areas in all years.

Secondly, changes in basic hunting regulations (e.g. season length and bag limits) occurred before and after the use of SWDs began. For instance, in 2001 (the first year of the December 1 regulation), the season was 100 days long with a 7 mallard (2 hen) daily bag limit whereas in 2002, the season was 74 days long with a 5 mallard (1 hen) daily bag limit. Thus, changes in harvest and survival rates due to basic regulations could be confounded with any changes to these parameters due to the use of SWDs.

More inferences could be made from the standard monitoring programs with stabilized regulations over a period of time.

Third, duck (and presumably mallard) harvest varies annually due to non-regulatory effects (weather, hunter participation, etc.) and survival rates vary due to variation in natural mortality (disease, etc.) (Miller et al. 1988).

With these caveats in mind, the Department calculated recovery rates and survival rates for mallards banded in California between 1988 and 2005. These ducks were banded by the Department, the California Waterfowl Association, and the U.S. Fish and Wildlife Service. Only normal, wild mallards banded from June to September with standard USFWS bands were used in this analysis. The Department examined the data by age class (adult and hatch-year or immature) and sex. Survival and recovery rates were calculated using Brownie models (Brownie *et al.* 1985) in Program MARK (White and Burnham 1999). Harvest rates were calculated from recovery rates by incorporating reporting rates (Nichols *et al.* 1995, Royle and Garretson 2004). For comparison purposes, the Department summarized harvest rates for mid-continent mallards during liberal seasons (1979-1984) (Smith and Reynolds 1992) and for mallards from eastern Washington (1981-198) (Giudice 2003).

For data from mallards banded in California, the data were portioned into 4 time periods (Table D-3): Period 1 (Restrictive season lengths and bag limits, no SWD); Period 2 (Liberal season lengths and bag limits, no SWD); Period 3 (Liberal regulations with SWD, but no December 1 regulation) and, Period 4 (Liberal regulations with December 1 regulation). If SWD affected harvest and survival rates, harvest rates should be highest and survival rates lowest during Period 3. If regulations by themselves change these parameters, harvest rates should be higher and survival rates lower in Period 2 compared to Period 1. If SWD had an effect, survival rates should be lower and harvest rates higher in Period 3 compared to Period 2. If the December 1 regulation had an effect, harvest rates should be lower and survival rates higher during Period 4 compared to Period 3.

Table D-3. Time periods used to summarize basic regulations, SWD use, and the December 1 regulation.

Time Period	Starting Season	Ending Season	Regulations	Pre or Post-SWD	Dec 1st Restrictions
1st	1988	1994	Conservative	Pre-SWD	No
2nd	1995	1997	Liberal	Pre-SWD	No
3rd	1998	2000	Liberal	Post-SWD	No
4th	2001	2004	Liberal	Post-SWD	Yes

Unfortunately, due to the introduction of “toll-free” bands and the increasing and changing reporting rates, harvest rate estimates are only available for Periods 1 and 4. Harvest rates for adults between Period 1 and Period 4 were unchanged and lower than those rates for eastern Washington and mallards from the mid-continent region (Table D-4). However, harvest rates of immature mallards banded in California have increased between periods 1 and 4 by 62 and 30 percent for males and females, respectively. Thus, the combination of regulation changes and use of SWD did not change harvest rates of adults, but the combination of more liberal regulations and the use of SWD did change harvest rates of immature mallards. The combination of liberalized regulations and SWD appears to have increased the harvest rate of mallards banded in California to higher levels than occurred in the mid-continent region or eastern Washington (Table D-4).

Table D-4. Harvest rates for mallards banded in California (restrictive and liberal periods), eastern Washington (liberal period) and the mid-continent region (liberal period).

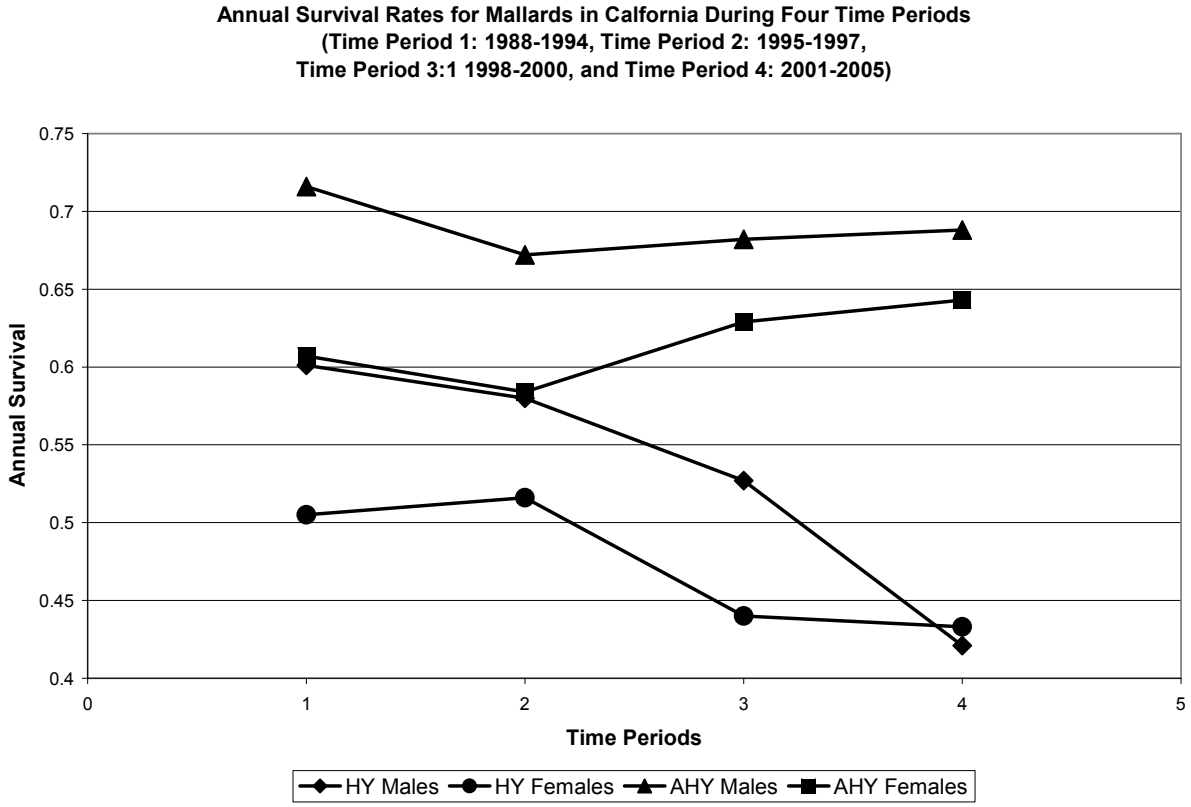
	California (restrictive)	**California (liberal)**	**Eastern Washington**	**Mid-Continent (liberal)**
Adult Males	0.138	0.138	0.172	0.150
Hatch-Year Males	0.202	0.327	0.286	0.228
Adult Females	0.058	0.058	0.100	0.097
Hatch-Year Females	0.143	0.186	0.172	0.157

Survival rates could be calculated for each cohort (age and sex) for each period (Figure D-6) since recovery and survival rate are not conditional on each other. Covariance among recovery and survival rates must be addressed to understand the impact of harvest on survival rates. Although recovery rates may have increased during these periods, it would not have as large an impact on survival rates, as compared to computed harvest rates. Furthermore, the grouping into time periods also correlates with the introduction of different band types.

Survival rates were constant for adult birds of sexes irrespective of harvest regulations, the use of SWD or the December 1 regulation (Figure D-6). However, survival rates for immature birds declined but only for males was the decline statistically significant (P=0.048).

From these analyses, it appears that adult mallard recovery, harvest and survival rates have not changed despite changes in regulations, the use of SWDs, or the imposition of the December 1 regulation. In contrast, immature mallard harvest rates have increased and survival rates have declined, but these changes may have been due to changing basic regulations, the use of SWDs, both, or other unmeasured variables.

Figure D-6. Annual survival rates of Mallards banded in California.



Public Perception of SWDs

The findings of this section have concentrated on biological information as related to the SWD in California. However, since past public views to the Commission has demonstrated different views on "fair chase", public opinion information has been added to this review of this topic. In 2005, D. J. Case & Associates, as commissioned by the Association of Fish and Wildlife Agencies, released the findings of the National Duck Hunter Survey. According to this study, 55% of California duck hunters stated that SWDs should be allowed, whereas 26% opposed their use and 19% had no opinion on the subject. Other surveys have shown a wide variety of responses to their opinions on SWDs. For instance, California Waterfowl Association's (CWA) 2006 survey indicated that a majority of hunters opposed electronic decoys, but accepted wind driven decoys (CWA, pers. comm.).

Summary of Findings

There is substantial evidence that SWDs can/have increased harvest and harvest potential on an individual hunt basis. Although SWDs have been shown to increase potential harvest, total harvest estimates have not increased at the same magnitude. Furthermore, SWDs have not increased harvest rates nor decreased survival rates on adult mallards. In hatch-year mallards, harvest rates have increased over 60 percent

on males, and survival rates have significantly declined. However, this is not a cause-and-effect relationship because other unmeasured variables were likely occurring simultaneously. The implementation of the December 1 regulation appears to have reduced daily harvest rates of mallards on public hunt areas when compared to unrestricted use of SWDs (1998-2000).

There is no clearly explicit link detectable through existing monitoring programs (or population level measures) between the introduction of SWDs and changes in measured population parameters. There remains no substantial evidence either for or against their large-scale effect on waterfowl populations. There are strongly held opposing positions on the “fair-chase” and other aspects of SWDs. For this reason, the Department has provided an alternative in Chapter 3.

Appendix E. Estimated Retrieved Harvest of Certain Ducks in California, 1962-2014

Year	Mallard	Gadwall	American Wigeon	G-w Teal	B-w/Cin. Teal	Northern Shoveler	Pintail	Wood Duck	Red-head	Canvas-back	All Other Species	TOTAL
1961	197.0	19.2	183.9	153.3	28.9	108.4	299.3	7.3	0.8	0.4	49.3	1,047.8
1962	167.0	17.5	128.5	145.1	48.8	86.8	285.3	12.1	1.0	0.0	70.1	962.2
1963	267.5	42.3	159.2	242.5	59.5	182.3	415.7	14.7	4.3	0.0	72.0	1,460.0
1964	249.0	40.5	166.3	214.6	49.4	77.2	342.0	17.0	7.8	9.2	74.2	1,247.3
1965	295.0	41.7	202.2	216.2	59.1	139.6	373.0	34.7	10.6	8.3	79.9	1,460.3
1966	288.4	51.5	215.2	267.1	36.6	162.3	563.0	13.1	8.6	39.9	97.5	1,743.2
1967	446.0	85.3	311.8	363.1	73.1	194.2	798.5	24.3	9.8	15.5	133.6	2,455.2
1968	236.2	34.2	169.6	262.5	42.6	111.5	381.1	11.3	5.5	10.5	68.3	1,333.4
1969	331.7	43.3	229.9	332.2	49.2	197.4	900.5	18.8	6.0	12.3	94.4	2,215.8
1970	371.0	43.5	264.0	361.3	38.2	201.8	1,032.9	21.4	12.9	26.9	77.7	2,451.5
1971	313.4	66.0	255.3	295.9	44.6	189.3	752.1	14.2	13.2	34.4	96.6	2,075.0
1972	321.8	49.3	231.5	332.6	64.9	157.4	715.3	21.2	5.8	0.9	90.2	1,991.0
1973	219.4	32.4	145.6	245.2	94.8	101.1	477.0	32.7	9.5	13.8	79.5	1,451.0
1974	292.3	60.2	194.3	319.6	59.8	167.4	712.4	21.7	8.9	27.1	59.4	1,923.0
1975	293.1	46.5	193.9	344.7	47.7	184.5	746.9	19.3	5.4	28.1	49.5	1,959.6
1976	305.6	37.6	278.7	403.0	42.5	185.6	680.6	23.4	6.6	34.2	82.9	2,080.6
1977	229.7	27.4	162.4	306.4	44.8	115.3	350.8	24.3	7.1	22.4	82.9	1,373.5
1978	294.3	39.2	179.4	405.1	64.9	161.0	596.0	29.0	8.2	14.1	66.0	1,857.2
1979	260.7	47.9	168.3	292.0	42.4	112.6	641.5	12.4	6.6	14.8	63.1	1,662.3
1980	238.6	64.2	165.6	259.1	27.1	108.4	410.0	40.2	10.8	10.3	67.6	1,401.8
1981	239.0	33.6	125.8	211.8	28.9	120.4	261.0	23.8	7.9	14.3	73.8	1,140.3
1982	284.2	53.8	122.8	266.5	50.3	140.2	327.9	26.2	10.9	10.6	59.6	1,353.1
1983	298.6	59.2	103.7	203.7	58.9	112.4	334.3	23.1	14.8	6.9	71.4	1,287.0
1984	265.1	43.3	94.6	178.2	52.6	91.9	194.9	15.7	6.6	12.2	50.8	1,005.9
1985	261.8	53.6	106.0	180.7	28.6	99.6	200.3	9.5	6.7	27.5	52.7	1,027.0
1986	257.6	57.7	113.9	176.8	19.0	86.6	194.5	20.2	4.4	16.3	43.2	990.2
1987	228.4	50.4	124.3	214.1	29.4	113.1	243.8	11.8	5.3	12.6	49.8	1,083.0
1988	139.7	23.2	62.7	122.1	16.0	44.1	70.3	9.6	2.3	0.1	23.7	513.8
1989	175.8	42.1	71.8	185.0	31.9	64.2	91.6	15.9	4.6	7.2	33.3	723.3
1990	179.7	45.2	80.1	149.9	19.4	69.5	80.3	11.4	2.5	4.2	28.7	671.0
1991	161.2	40.4	94.3	169.7	13.7	49.4	81.3	14.3	1.8	4.7	23.0	653.9
1992	182.7	33.3	72.9	183.9	18.4	74.1	75.0	16.4	3.5	8.8	39.2	708.1
1993	228.4	63.1	77.3	219.2	25.7	60.2	90.5	31.9	5.6	10.2	37.1	849.2
1994	197.4	68.7	97.6	183.0	14.7	106.0	92.0	20.8	5.8	14.4	51.0	851.3
1995	259.8	85.4	159.2	291.2	35.4	101.5	162.7	28.8	9.0	10.2	59.6	1,202.8
1996	374.4	104.1	175.6	306.5	39.4	164.1	182.0	26.4	10.8	12.7	66.4	1,462.4
1997	312.2	79.4	162.0	311.6	36.9	172.6	188.2	22.5	11.7	17.1	67.3	1,381.5
1998	452.6	129.6	166.5	352.4	62.0	217.1	146.3	33.4	15.9	21.4	55.2	1,652.4
1999	313.5	69.4	153.9	285.5	66.8	116.1	123.3	25.6	5.0	13.8	47.9	1,220.8
2000	317.7	62.4	113.1	207.2	31.3	87.5	85.4	32.0	4.7	10.6	39.6	991.5
2001	302.8	65.4	146.9	200.5	36.1	111.6	89.7	32.5	4.3	6.6	51.5	1,047.9
2002	225.4	83.7	134.4	239.7	35.6	103.9	79.9	24.7	4.9	0.7	52.4	985.3
2003	228.1	79.7	112.8	218.0	46.2	96.2	79.2	25.2	8.2	7.0	51.5	952.1
2004	359.7	132.6	196.8	348.7	57.3	147.7	98.8	22.5	9.6	11.5	94.1	1,479.3
2005	349.8	105.0	176.8	297.6	58.2	128.8	115.7	39.4	7.8	4.8	43.3	1,327.2
2006	349.1	124.2	165.7	331.3	56.9	224.6	123.2	31.3	9.1	17.5	47.9	1,480.8
2007	270.3	122.2	218.8	402.9	43.4	275.3	137.9	33.7	9.5	32.6	86.4	1,632.9
2008	255.9	110.2	271.8	468.5	39.9	209.5	169.4	36.3	7.0	0.6	64.2	1,633.7
2009	262.4	117.9	195.3	387.5	35.3	157.7	177.1	27.1	6.6	9.8	63.6	1,591.4
2010	332.0	124.4	226.2	394.9	48.2	220.8	242.6	34.1	7.7	17.6	85.6	1,734.1
2011	308.1	106.2	169.8	311.9	36.9	253.9	201.6	21.0	14.3	15.9	47.2	1,489.1
2012	243.5	95.3	193.7	371.2	31.9	291.5	201.1	21.9	14.6	23.4	25.0	1,738.1
2013	127.9	60.7	152.5	258.8	22.0	197.3	130.5	5.5	7.7	30.0	67.9	1,062.3
2014*	106.3	56.4	161.5	240.5	18.1	155.1	115.6	9.3	3.8	15.5	66.7	948.8
Averages:												
1961-13	271.0	64.4	163.1	271.5	42.4	140.6	312.2	22.4	7.6	13.9	62.4	1,378.8
1961-65	235.1	32.3	168.0	194.3	49.2	118.9	343.1	17.2	4.9	3.6	69.1	1,235.5
1966-70	334.7	51.6	238.1	317.2	47.9	173.4	735.2	17.8	8.6	21.0	94.3	2,039.8
1971-75	288.0	50.9	204.1	307.6	62.4	159.9	680.7	21.8	8.6	20.9	75.0	1,879.9
1976-80	265.8	43.2	190.9	333.1	44.3	136.6	535.8	25.8	7.9	19.2	72.5	1,675.1
1981-85	269.7	48.7	110.6	208.2	43.9	112.9	263.7	19.7	9.4	14.3	61.7	1,162.7
1986-90	196.2	43.7	90.6	169.6	23.1	75.5	136.1	13.8	3.8	8.1	35.8	796.3
1991-95	205.9	58.2	100.3	209.4	21.6	78.3	100.3	22.4	5.1	9.7	42.0	853.1
1996-00	354.1	89.0	154.2	292.6	47.3	151.5	145.0	28.0	9.6	15.1	55.3	1,341.7
2001-05	293.2	93.3	153.5	260.9	46.7	117.6	92.7	28.9	7.0	6.1	58.6	1,158.4
2006-12	296.3	117.5	207.9	382.8	43.4	223.6	175.3	30.6	9.0	15.7	65.8	1,593.7
2013-14	117.1	58.6	157.0	249.7	20.1	176.2	123.1	7.4	5.8	22.8	67.3	1,005.6
% Change from:												
2013	-16.9%	-7.1%	5.9%	-7.1%	-17.7%	-21.4%	-11.4%	70.3%	-50.6%	-48.3%	-1.8%	-10.7%
1961-13	-60.8%	-12.5%	-1.0%	-11.4%	-57.3%	10.3%	-63.0%	-58.5%	-49.7%	11.5%	6.8%	-31.2%
% State's Total Duck Harvest:												
2014	11.2%	5.9%	17.0%	25.3%	1.9%	16.3%	12.2%	1.0%	0.4%	1.6%	7.0%	
1961-13	19.7%	4.7%	11.8%	19.7%	3.1%	10.2%	22.6%	1.6%	0.5%	1.0%	4.5%	
* Preliminary Data												

Appendix F. Possible Effects of Climate Change Impacts on Waterfowl

Over the long term climate change models suggest temperature increases in many areas, both increases and decreases in precipitation, its timing, sea level rise, changes in the timing and length of the four seasons, declining snow packs and increasing frequency and intensity of severe weather events. Many uncertainties make it difficult to predict the precise impacts that climate change will have on wetlands and waterfowl. The effects of climate change on waterfowl populations, including their size and distribution, will probably be species specific and variable, with some effects considered negative and others considered positive (Anderson and Sorenson 2001). For example, a longer and warmer ice-free season in the Arctic would be expected to result in higher overall reproductive success for Arctic nesting geese (Batt 1998).

Breeding Season

Increasing spring temperatures have led to earlier arrival of waterfowl on northern breeding areas (Murphy-Klassen et al. 2005), yet nest survival has not decreased at this point of time (Drever and Clark 2007). In fact, earlier nest initiations are often more successful (Emery et al. 2005, Sedinger et al. 2008). However, future changes in wetland distribution and type (Johnson et al. 2005) on northern breeding grounds may impact settling patterns (Johnson and Grier 1988), and potentially recruitment for certain species through differences in breeding probability (Krapu et al. 1983), nest survival, and duckling survival. In California, areas with wetland brood habitat may become more limited if precipitation decreases with increasing temperatures, as predicted for the prairie pothole region of the United States and Canada (Sorenson et al 1998). Production of waterfowl that rely on agricultural habitats may be similarly affected if water availability (amounts and or timing) change.

Non-breeding Season

The Central Valley of California has one of the world's largest concentrations of over-wintering waterfowl (Heitmeyer et al. 1989). The primary expected response of waterfowl to climate change is redistribution as birds seek to maintain energy balance. Increased fall and winter temperatures in northern regions would make it unnecessary for waterfowl to migrate as far south and the wintering populations of waterfowl in California may be reduced. Shifting patterns of precipitation and temperatures may cause decreased availability of water for managed wetlands and agricultural production in the Central Valley. Changes in water availability and timing (Miller et al 2003) would likely have the greatest impact on rice agriculture, an important component of wintering waterfowl habitat in California. Decreasing habitats may cause a decline in body condition which may impact recruitment and survival in waterfowl populations. Ultimately, this will cause decreased recruitment as birds shift out of optimal nesting habitats (e. g. Ward et al. 2005), and a decrease in over-wintering populations.

Summary of Findings

There is substantial evidence that climate change will cause changes in habitats and other factors that affect waterfowl populations over the long term. Waterfowl populations are assessed in many ways on an annual basis (See pages 38-40 of the 2006 Final Environmental Document for Migratory Game Bird Hunting, SCH #2006042115, incorporated by reference, available at 1812 9th Street, Sacramento 95811). In summary, the condition of breeding habitats is assessed annually during the breeding population surveys conducted by the Service with assistance from some states and the Canadian Wildlife Service (CWS) in the spring and summer. The specific methodology of these surveys is provided in Chapter 3, pages 55-57, 2006 Final Environmental Document for Migratory Game Bird Hunting, SCH #2006042115, incorporated by reference, available at 1812 9th Street, Sacramento 95811).

Because the effect of regulated harvest is minimal (pages 57-67 of 2006 Final Environmental Document for Migratory Game Bird Hunting, SCH #2006042115, , incorporated by reference, available at 1812 9th Street, Sacramento 95811) implementation of the proposed project in the current year is not expected to result in significant negative effects to waterfowl populations. The effect is minimal because summary, the weight of historic scientific evidence leans toward the compensatory mortality hypothesis, though there are enough ambiguities to make complete reliance on this hypothesis as a management strategy an unwise approach (USDI 1988a:96). Accordingly, restrictive regulations have been established when populations reached low levels. For example, duck seasons were reduced from 93 days to 59 days, and bag limits were reduced from seven birds per day to four birds per day during the late 1980s in response to declines in duck populations caused by drought (Page 66, 2006 Final Environmental Document for Migratory Game Bird Hunting, SCH #2006042115, incorporated by reference, available at 1812 9th Street, Sacramento 95811).

STATE OF CALIFORNIA
FISH AND GAME COMMISSION
INITIAL STATEMENT OF REASONS FOR REGULATORY ACTION
(Pre-publication of Notice Statement)

Amend Section 502
Title 14, California Code of Regulations
Re: Waterfowl, Migratory; American Coot; and
Common Moorhen (Common Gallinule)

I. Date of Initial Statement of Reasons: December 28, 2015

II. Dates and Locations of Scheduled Hearings:

(a)	Discussion Hearing:	Date:	December 10, 2015
		Location:	San Diego, CA
(b)	Notice Hearing:	Date:	February 11, 2016
		Location:	Sacramento, CA
(c)	Adoption Hearing:	Date:	April 14, 2016
		Location:	Santa Rosa, CA

III. Description of Regulatory Action:

(a) Statement of Specific Purpose of Regulation Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary:

The U.S. Fish and Wildlife Service (Service) annually establishes federal regulation "frameworks" for migratory bird hunting. These "frameworks" describe the earliest waterfowl hunting seasons can open, the maximum number of days hunting can occur, the latest hunting seasons must close, and the maximum daily bag limit, among other things. States must set waterfowl hunting regulations within the federal frameworks. Beginning with the 2016–17 hunting season, the Service is using a new schedule for establishing frameworks in October rather than the previous schedule (established in late July). This enables State agencies to select and publish season dates by April rather than August. This year, there will be a onetime overlap in the regulatory processes for the 2015–16 and 2016–17 seasons.

Under the new process, the proposed hunting season frameworks for a given year will be developed in the fall, of the prior year. For example, the breeding populations (including the California Breeding Population

Survey) and habitat conditions observed in 2015 and the regulatory alternatives selected for the 2015 hunting season will be used to develop the frameworks for the 2016-17 season.

States may make recommendations to change federal framework regulations. These recommendations are made to Flyway Councils during August or September. The Councils may elect to forward recommendations to the Service. The Service may elect to incorporate proposed changes in the "framework" regulations. The Service establishes the hunting framework regulations at a public meeting held in October.

Sections 202, 355 and 356 of the Fish and Game Code authorize the Fish and Game Commission (FGC) to annually adopt regulations pertaining to the hunting of migratory birds that conform with, or further restrict, the regulations prescribed by the Service pursuant to its authority under the Migratory Bird Treaty Act. The Fish and Game Commission selects and establishes in State regulations the specific hunting season dates and daily bag limits within the federal frameworks.

Current regulations in Section 502, Title 14, California Code of Regulations (CCR), provide definitions, hunting zone descriptions, season opening and closing dates, and daily bag and possession limits. The frameworks for the 2016-17 season have been approved by the Flyway Councils and adopted at the Service's Regulations Committee meeting October 20-21, 2015. The frameworks allow for a liberal duck season which includes a 107 day season, 7 daily duck limit including 7 mallards but only 2 hen mallards, 2 pintail, 2 canvasback, 2 redheads, and 3 scaup (during an 86 day season). Duck daily bag limits ranges, duck season length ranges and goose season length ranges have been provided to allow the FGC flexibility. See tables in the Informative Digest for season and bag limits. Lastly, Federal regulations require that California's hunting regulations conform to those of Arizona in the Colorado River Zone and with Oregon in the North Coast Special Management Area.

The specific recommended regulation changes are:

1) Changes in current subsection 502(d) propose to increase the total daily bag limit for geese in the Northeastern, Southern San Joaquin Valley, and the Balance of State zones from 25 to 30 geese per day; the Southern California Zone total daily bag limit for geese will increase from 18 to 23 geese per day. The daily bag limit for white geese will increase from 15 to 20 per day in the zones referenced.

   Both Ross' geese and lesser snow geese populations (defined as white

geese in Section 502(a)) in the Pacific Flyway are about 1,000,000 birds and are above their population goals (100,000 and 200,000 respectively). The Canadian Wildlife Service has proposed to designate both populations as overabundant because of the rapid population growth since 2003 and concern for the potential impacts to the breeding grounds in the Western Canadian Arctic. The Service and Pacific Flyway Council recognize that reducing the population is needed and increased the daily bag limit to 20 in 2013. California increased the daily bag limit to 15 in 2015 and would like to liberalize again. However, achieving a population reduction through hunting alone is not likely given the low numbers of hunters.

The increase in the white goose and total goose daily bag limits are intended to increase the harvest of geese, allow additional hunting opportunity, and potentially reduce depredation complaints.

2) Proposed changes in current subsection 502(d)(5)(D)8 increase the white goose daily bag limit in the Imperial County Special Management Area from 15 to 20 per day.

This change is intended to increase the harvest of white geese. See recommendation 1 above.

Minor editorial changes are also proposed to clarify and simplify the regulations and to comply with existing federal frameworks.

3) Proposed changes in current subsection 502(e) modify the age limit to participate in the Youth Waterfowl Hunting Days from 15 years of age and under to 17 years of age and under.

The federal frameworks were modified to allow the Youth Waterfowl Hunt age requirements to mimic that of individual states as long as the youth hunter is not 18 years of age or older.

(b) Authority and Reference Sections from Fish and Game Code for Regulation:

Authority: Sections 202 and 355, Fish and Game Code.
Reference: Sections 202, 355, and 356, Fish and Game Code.

(c) Specific Technology or Equipment Required by Regulatory Change:

None.

(d) Identification of Reports or Documents Supporting Regulation Change:

2016 Draft Environmental Document Migratory Game Bird Hunting

(e) Public Discussions of Proposed Regulations Prior to Notice Publication:

This proposal was discussed at the FGC's Wildlife Resources Committee meeting held on September 9, 2015 in Fresno, CA.

IV. Description of Reasonable Alternatives to Regulatory Action:

(a) Alternatives to Regulation Change:

1) Three alternatives were offered by the public regarding hunting in Morro Bay Special Management Area: 1) Eliminate all hunting during the Martin Luther King weekend during the Morro Bay Winter Bird Festival; 2) Change the start time for hunting to 8 AM on Saturdays and Sundays instead of 7 AM; and 3) Change the days of hunting to Wednesdays, Saturdays and Sundays..

2) An alternative was offered by the public regarding hunting on public lands during the Late Season for white geese in the Northeastern Zone. Allow hunting during the late season on Type C wildlife areas or other public (nonrefuge) lands.

(b) No Change Alternative:

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1) The No Change Alternative would maintain the 2015-16 season lengths, dates, and daily bag limits in all zones. The federal frameworks were adopted at the U S Wildlife Service’s Regulations Committee Meeting in October and are the basis for the Department’s recommendations for the 2016-17 season. Maintaining the existing regulations may cause nonconformance to federal rules.

2) The No Change Alternative would maintain the existing regulations in the Morro Bay Special Management Area.

3) The No Change Alternative would maintain the existing regulations for the Late Season for white geese in the Northeastern Zone.

4) The No Change Alternative would maintain the existing total daily goose bag limits and the white goose daily bag limits.

5) The No Change Alternative would maintain the existing age limit to participate in the Youth Waterfowl Hunting Days.

(c) Consideration of Alternatives

Regarding the alternatives proposed for the Morro Bay Special Management Area: Current regulations (Section 506) already provide for a later morning start time (7 a.m. rather than ½ hour before sunrise in all other hunt zones in California) and a substantial portion of Morro Bay is not open for hunting. These limits on hunting in Morro Bay are consistent with the federal framework and the FGC's mandate to conserve wildlife and provide recreational opportunity. The FGC, after consideration, therefore rejects the alternatives proposing to further restrict waterfowl hunting in Morro Bay.

Regarding the alternative proposed for the Late Season for white geese in the Northeastern Zone: The original intent of the late goose seasons in the North Coast and Imperial special management areas and the Northeastern Zone were to "…reduce depredation on private lands and disperse through hunting geese" (as proposed in the Initial Statement of Reasons for Regulatory Action, April 2013). An increasing number of complaints about depredation have been received by the Department and FGC from private landowners and the Modoc and Lassen county fish and game commissions, which have requested a late season hunt. It is the policy of the Department (Fish and Game Code Section 1801) to alleviate economic losses caused by wildlife and to bring such losses within tolerable limits. Hunting is the only tool the Department can offer private landowners to minimize depredation (with the goal of hazing geese off of private lands and onto public lands). Higher bag limits have been approved for goose populations that exceed population objectives however there are too few hunters in California to effectively reduce the total number of geese; especially to levels that eliminate goose depredation. The majority of waterfowl habitat and harvest occur on private lands. In order for the late season hunt to be effective in dispersing geese, public lands need to be closed so geese have a place to go. Opening public lands may push geese to Oregon where depredation also occurs. Oregon and California agreed to have similar regulations (public hunting areas closed) on each side of the border so as not to move geese across the border. State Type C Wildlife areas could be opened in California with minimal effect to the intent of the late season hunts, however of the 18 type C areas within the Northeastern Zone; 12 are dominated by sagebrush and conifers, 4 are riparian habitat and 2 are seasonal wetlands. Opening up type C areas would not provide any real goose hunting opportunity during the late season. Other public areas such as national forests and reservoirs that may be open to hunting and provide goose use (habitat) should remain closed to hunting in order to provide an alternative to private land use. Nonpublic hunt areas such as

national forests and reservoirs that do provide goose use (habitat) should remain closed to hunting in order to provide an alternative to private land use. The Shared Habitat Alliance for Recreational Enhancement (SHARE) could be utilized to enroll private land owners to offer goose hunting however, statute requires participants willingly volunteer their land for public access. The Department cannot force land owners to participate in SHARE. SHARE hunts were implemented for the North Coast and Imperial Special Management Area late season goose hunts, but they were cancelled because of low land owner enrollment and hunter applicants. Lastly, this alternative was discussed during the 2015-16 season regulatory review and the FGC chose not to adopt this alternative.

In view of information currently possessed, no reasonable alternative considered would be more effective in carrying out the purpose for which the regulation is proposed, would be as effective and less burdensome to affected private persons than the proposed regulation, or would be more cost effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.

(d) Description of Reasonable Alternatives That Would Lessen Adverse Impact on Small Business: None.

V. Mitigation Measures Required by Regulatory Action:

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed.

VI. Impact of Regulatory Action:

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States:

The proposed action will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. The proposed regulations are intended to provide additional recreational opportunity to the public. The response is expected to be minor in nature.

(b) Impact on the Creation or Elimination of Jobs Within the State, the

Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment:

The Commission does not anticipate any impacts on the creation or elimination of jobs, the creation of new business, the elimination of existing businesses or the expansion of businesses in California. The proposed waterfowl regulations will set the 2016-17 waterfowl hunting season dates and bag limits within the federal frameworks. Positive impacts to jobs and/or businesses that provide services to waterfowl hunters will be realized with the proposed regulations for the waterfowl hunting season in 2016-17. This is based on a 2011 US Fish and Wildlife national survey of fishing, hunting, and wildlife associated recreation for California. The report estimated that migratory bird hunters contributed about $169,115,000 to businesses in California during the 2011 migratory bird hunting season. The impacted businesses are generally small businesses employing few individuals and, like all small businesses, are subject to failure for a variety of causes. Additionally, the long-term intent of the proposed regulations is to sustainably manage waterfowl populations, and consequently, the long-term viability of these same small businesses.

The Commission anticipates benefits to the health and welfare of California residents. Hunting provides opportunities for multi-generational family activities and promotes respect for California's environment by the future stewards of the State's resources. The Commission anticipates benefits to the State's environment by the sustainable management of California's waterfowl resources. The Commission does not anticipate any impacts to worker safety because the proposed amendments will not affect working conditions.

(c) Cost Impacts on a Representative Private Person or Business:

The Commission is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

(d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State: None.

(e) Nondiscretionary Costs/Savings to Local Agencies: None.

(f) Programs Mandated on Local Agencies or School Districts: None.

(g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code: None.

(h) Effect on Housing Costs: None.

VII. Economic Impact Assessment

The proposed waterfowl regulations will set the 2016-17 waterfowl hunting season dates and bag limits within the federal frameworks.

(a) Effects of the regulation on the creation or elimination of jobs within the state

Positive impacts to jobs and/or businesses that provide services to waterfowl hunters will be realized with the adoption of the proposed waterfowl hunting regulations for the 2016-17 waterfowl season. This is based on the 2011 U.S. Fish and Wildlife National Survey of Fishing, Hunting, and Wildlife-Associated Recreation for California (issued Feb. 2013). The report estimates that hunters contributed about $169,115,000 to small businesses in California during the 2011 waterfowl hunting season. The impacted businesses are generally small businesses employing few individuals and, like all small businesses, are subject to failure for a variety of causes. Additionally, the long-term intent of the proposed regulations is to sustainably manage waterfowl populations, and consequently, the long-term viability of these same small businesses. The 2011 report is posted on the US Dept. of Commerce website at http://www.census.gov/prod/2013pubs/fhw11-ca.pdf.

(b) Effects of the regulation on the creation of new businesses or the elimination of existing businesses within the state

The result of the regulations on the creation of new businesses or the elimination of existing businesses within the state will be neutral. Minor variations in the bag limits as may be established in the regulations are, by themselves, unlikely to stimulate the creation of new businesses or cause the elimination of existing businesses. The number of hunting trips and the economic contributions from them are expected to remain more or less the same.

(c) Effects of the regulation on the expansion of businesses currently doing business within the state

The long-term intent of the proposed regulations is to sustainably manage waterfowl populations, and consequently, the long-term viability of small businesses that serve recreational waterfowl hunters. Minor variations in the

bag limits as may be established in the regulations are, by themselves, unlikely to stimulate substantial expansion of these existing businesses.

(d) Benefits of the regulation to the health and welfare of California residents

Hunting is an outdoor activity that can provide several benefits for those who partake in it and for the environment as well. The fees that hunters pay for licenses and stamps are used for conservation. In addition, the efforts of hunters can help to reduce wildlife depredation on private lands. Hunters and their families benefit from fresh game to eat, and from the benefits of outdoor recreation. People who hunt have a special connection with the outdoors and an awareness of the relationships between wildlife, habitat, and humans. With that awareness comes an understanding of the role humans play in being caretakers of the environment. Hunting is a tradition that is often passed on from one generation to the next creating a special bond between family members and friends.

(e) Benefits of the regulation to worker safety

The regulations will not affect worker safety because they will not impact working conditions.

(f) Benefits of the regulation to the state's environment

It is the policy of this state to encourage the conservation, maintenance, and utilization of waterfowl resources for the benefit of all the citizens of the state. The objectives of this policy include, but are not limited to, the maintenance of sufficient populations of waterfowl to ensure their continued existence and the maintenance of a sufficient resource to support recreational opportunity. Adoption of scientifically-based waterfowl seasons, bag and possession limits provides for the maintenance of sufficient populations of waterfowl to ensure those objectives are met.

(g) Concurrence with other Statutory Requirements:

Not applicable

Informative Digest/Policy Statement Overview

Current regulations in Section 502, Title 14, California Code of Regulations (CCR), provide definitions, hunting zone descriptions, season opening and closing dates, and establish daily bag and possession limits for waterfowl hunting.

The frameworks for the 2016-17 season have been approved by the Flyway Councils and adopted at the Service Regulation's Committee meeting October 20-21, 2015. The proposed frameworks allow for a liberal duck season which includes a 107 day season, 7 daily duck limit including 7 mallards but only 2 hen mallards, 2 pintail, 2 canvasback, 2 redheads, and 3 scaup (during an 86 day season). Duck daily bag limits ranges, duck season lengths ranges and goose season length ranges have been provided to allow the FGC flexibility. Lastly, Federal regulations require that California's hunting regulations conform to those of Arizona in the Colorado River Zone and with Oregon in the North Coast Special Management Area. Based on the frameworks, the Department of Fish and Wildlife (Department) provides an annual recommendation to the Fish and Game Commission.

The Department recommendations are as follows:

1. Changes in current subsection 502(d) propose to increase the total daily bag limit for geese in the Northeastern, Southern San Joaquin Valley, and the Balance of State zones from 25 to 30 geese per day; the Southern California Zone total daily bag limit for geese will increase from 18 to 23 geese per day. The bag limit for white geese will increase from 15 to 20 per day in the zones referenced.

2. Proposed changes in current subsection 502(d)(5)(D)8 increase the white goose daily bag limit in the Imperial County Special Management Area from 15 to 20 per day.

3. Proposed changes in current subsection 502(e) modify the age limit to participate in the Youth Waterfowl Hunting Days from 15 years of age and under to 17 years of age and under.

Minor editorial changes are also proposed to clarify and simplify the regulations and to comply with existing federal frameworks.

<u>Benefits of the regulations</u>

The benefits of the proposed regulations are concurrence with federal law and the sustainable management of the State's waterfowl resources. Positive impacts to jobs and/or businesses that provide services to waterfowl hunters will be realized with the continued adoption of waterfowl hunting seasons in 2016-17.

Non-monetary benefits to the public

The Commission does not anticipate non-monetary benefits to the protection of public health and safety, worker safety, the prevention of discrimination, the promotion of fairness or social equity and the increase in openness and transparency in business and government.

Evaluation of incompatibility with existing regulations

The Commission has reviewed its regulations in Title 14, CCR, and conducted a search of other regulations on this topic and has concluded that the proposed amendments to Section 502 are neither inconsistent nor incompatible with existing State regulations. No other State agency has the authority to promulgate waterfowl hunting regulations.

Summary of Proposed Waterfowl Hunting Regulations

AREA	SPECIES	SEASONS	DAILY BAG & POSSESSION LIMITS
Statewide	Coots & Moorhens	Concurrent w/duck season	25/day. 75 in possession
Northeastern Zone *Season may be split for Ducks, Pintail, Canvasback ,Scaup, and Dark and White Geese. White geese may be split 3-ways.*	Ducks	Between 38 & 105 days	4-7/day, which may include: 3-7 mallards no more than 1-2 females, 2 pintail, 2 canvasback, 2 redheads, 3 scaup. Possession limit triple the daily bag.
	Scaup	86 days	
	Geese	No longer than 105 days	30/day, which may include: 20 white geese, 10 dark geese no more than 2 Large Canada geese. Possession limit triple the daily bag.
Southern San Joaquin Valley Zone *Season may be split for Ducks, Pintail, Canvasback and Scaup.*	Ducks	Between 38 & 105 days	4-7/day, which may include: 3-7 mallards no more than 1-2 females, 2 pintail, 2 canvasback, 2 redheads, 3 scaup. Possession limit triple the daily bag.
	Scaup	86 days	
	Geese	No longer than 100 days	30/day, which may include: 20 white geese, 10 dark geese. Possession limit triple the daily bag.
Southern California Zone *Season may be split for Ducks, Pintail, Canvasback and Scaup.*	Ducks	Between 38 &100 days	4-7/day, which may include: 3-7 mallards no more than 1-2 females, 2 pintail, 2 canvasback, 2 redheads, 3 scaup. Possession limit triple the daily bag.
	Scaup	86 days	
	Geese	No longer than 100 days	23/day, which may include: 20 white geese, 3 dark geese. Possession limit triple the daily bag.
Colorado River Zone *Season may be split for Ducks, Pintail, Canvasback and Scaup.*	Ducks	101 days	7/day, which may include: 7 mallards no more than 2 females or Mexican-like ducks, 2 pintail, 2 canvasback, 2 redheads, 3 scaup. Possession limit triple the daily bag.
	Scaup	86 days	
	Geese	101 days	14/day, up to 10 white geese, up to 4 dark geese. Possession limit triple the daily bag.

Summary of Proposed Waterfowl Hunting Regulations, Continued			
AREA	**SPECIES**	**SEASONS**	**DAILY BAG & POSSESSION LIMITS**
Balance of State Zone *Season may be split for Ducks, Pintail, Canvasback, Scaup and Dark and White Geese.*	Ducks	Between 38 & 100 days	4-7/day, which may include: 3-7 mallards no more than 1-2 females, 2 pintail, 2 canvasback, 2 redheads, 3 scaup. Possession limit triple the daily bag.
	Scaup	86 days	
	Geese	Early Season: 5 days (CAGO only) Regular Season: no longer than 100 days Late Season: 5 days (whitefronts and white geese)	30/day, which may include: 20 white geese, 10 dark geese. Possession limit triple the daily bag.
SPECIAL MANAGEMENT AREAS	**SPECIES**	**SEASON**	**DAILY BAG & POSSESSION LIMITS**
North Coast *Season may be split*	All Canada Geese	105 days except for Large Canada geese which cannot exceed 100 days or extend beyond the last Sunday in January.	10/day, only 1 may be a Large Canada goose. Possession limit triple the daily bag. Large Canada geese are closed during the Late Season.
Humboldt Bay South Spit (West Side)	All species	Closed during brant season	
Sacramento Valley	White-fronted geese	Open concurrently with general goose season through Dec 21	3/day. Possession limit triple the daily bag.
Morro Bay	All species	Open in designated areas only	Waterfowl season opens concurrently with brant season.
Martis Creek Lake	All species	Closed until Nov 16	
Northern Brant	Black Brant	Open Nov 8 extending for 37 days	2/day. Possession limit triple the daily bag.
Balance of State Brant	Black Brant	Open Nov 9 extending for 37 days	2/day. Possession limit triple the daily bag.
Imperial County *Season may be split*	White Geese	Up to 102 days	20/day. Possession limit triple the daily bag.
YOUTH WATERFOWL HUNTING DAYS	(NOTE: To participate in these Youth Waterfowl Hunts, federal regulations require that hunters must be 17 years of age or younger and must be accompanied by a non-hunting adult 18 years of age or older.)		
	SPECIES	**SEASON**	**DAILY BAG & POSSESSION LIMITS**
Northeastern Zone	Same as regular season	The Saturday fourteen days before the opening of waterfowl season extending for 2 days.	Same as regular season
Southern San Joaquin Valley Zone		The Saturday following the closing of waterfowl season extending for 2 days.	
Southern California Zone		The Saturday following the closing of waterfowl season extending for 2 days.	
Colorado River Zone		The Saturday following the closing for waterfowl season extending for 2 days.	
Balance of State Zone		The Saturday following the closing of waterfowl season extending for 2 days.	
FALCONRY OF DUCKS	**SPECIES**	**SEASON**	**DAILY BAG & POSSESSION LIMITS**
Northeastern Zone	Same as regular season	Between 38 and 105 days	3/ day, possession limit 9
Balance of State Zone		Between 38 and 107 days	
Southern San Joaquin Valley Zone		Between 38 and 107 days	
Southern California Zone		Between 38 and 107 days	
Colorado River Zone	Ducks only	105 days	

REGULATORY TEXT

Section 502, Title 14, CCR, is amended as follows:

§502. Waterfowl, Migratory; American Coot and Common Moorhen (Common Gallinule).

. . . [No changes to 502(a) through (c)]

(d) Seasons and Bag and Possession Limits for Ducks and Geese by Zone.		
(1) Northeastern California Zone (NOTE: SEE SUBSECTION 502(d)(6) BELOW FOR SPECIAL SEASONS AND CLOSURES.)		
(A) Species	*(B) Season*	*(C) Daily Bag and Possession Limits*
Ducks (including Mergansers)	~~From the second Saturday in October extending for 105 days. Scaup: from the second Saturday in October extending for a period of 58 days and from the fourth Saturday in December extending for a period of 28 days.~~ [Opening no earlier than the Saturday closest to October 1 and closing no later than the last Sunday in January. Season may be split into two segments and will be between 38 and 105 days except for some species that may have a shorter season than the general duck season.]	Daily bag limit: ~~7~~[4-7] Daily bag limit may include: • ~~7~~[3-7] mallards, but not more than ~~2~~[1-2] females. • 2 pintail (either sex). • 2 canvasback (either sex). • 2 redheads (either sex). • 3 scaup (either sex). Possession limit: triple the daily bag limit.
Geese	Regular Season: Dark geese ~~from the second Saturday in October extending for 100 days.~~ ~~White geese from the first Saturday in November extending for 72 days.~~ [Opening no earlier than the Saturday closest to October 1 and closing no later than the last Sunday in January. Season will be no longer than 100 days.] White geese [opening no	Daily bag limit: ~~25~~ 30 Daily bag limit may include: • ~~15~~ 20 white geese. • 10 dark geese but not more than 2 Large Canada geese (see definitions: 502(a)). Possession limit: triple the daily bag limit.

	earlier than the Saturday closest to October 1 and closing no later than the last Sunday in January.] Late Season: ~~White-fronted geese from the first Sunday in March extending for 5 days. White geese from the first Sunday in February extending for 33 days.~~ White-fronted geese from March 6 extending for 5 days. White geese [Season will be no longer than 33 days and closing no later than March 10.] During the Late Season, hunting is only permitted on private lands with the permission of the land owner under provisions of Section 2016, Fish and Game Code.	
(2) Southern San Joaquin Valley Zone (NOTE: SEE SUBSECTION 502(d)(6) BELOW FOR SPECIAL SEASONS AND CLOSURES.)		
(A) Species	*(B) Season*	*(C) Daily Bag and Possession Limits*
Ducks (including Mergansers)	~~From the fourth Saturday in October extending for 100 days. Scaup: from the first Saturday in November extending for 86 days.~~ [Opening no earlier than the Saturday closest to October 1 and closing no later than the last Sunday in January. Season may be split into two segments and will be between 38 and 105 days except for some species that may have a shorter season than the general duck season.]	Daily bag limit: ~~7~~[4-7] Daily bag limit may include: • ~~7~~[3-7] mallards, but not more than ~~2~~[1-2] females. • 2 pintail (either sex). • 2 canvasback (either sex). • 2 redheads (either sex). • 3 scaup (either sex). Possession limit: triple the daily bag limit.
Geese	~~From the fourth Saturday in October extending for 100 days.~~ [Opening no earlier than the Saturday closest to October 1	Daily bag limit: ~~25~~ 30 Daily bag limit may include: • ~~15~~ 20 white geese. • 10 dark geese (see definitions: 502(a)).

	and closing no later than the last Sunday in January. Season will be no longer than 100 days.]	Possession limit: triple the daily bag limit.
(3) Southern California Zone (NOTE: SEE SUBSECTION 502(d)(6) BELOW FOR SPECIAL SEASONS AND CLOSURES.)		
(A) Species	*(B) Season*	*(C) Daily Bag and Possession Limits*
Ducks (including Mergansers)	~~From the fourth Saturday in October extending for 100 days.~~ ~~Scaup: from the first Saturday in November extending for 86 days.~~ [Opening no earlier than the Saturday closest to October 1 and closing no later than the last Sunday in January. Season may be split into two segments and will be between 38 and 105 days except for some species that may have a shorter season than the general duck season.]	Daily bag limit: ~~7~~[4-7] Daily bag limit may include: • ~~7~~[3-7] mallards, but not more than ~~2~~[1-2] females. • 2 pintail (either sex). • 2 canvasback (either sex). • 2 redheads (either sex). • 3 scaup (either sex). Possession limit: triple the daily bag limit.
Geese	~~From the fourth Saturday in October extending for 100 days.~~ [Opening no earlier than the Saturday closest to October 1 and closing no later than the last Sunday in January. Season will be no longer than 100 days.]	Daily bag limit: ~~18~~ 23 Daily bag limit may include: • ~~15~~ 20 white geese. • 3 dark geese (see definitions: 502(a)). Possession limit: triple the daily bag limit.
(4) Colorado River Zone (NOTE: SEE SUBSECTION 502(d)(6) BELOW FOR SPECIAL SEASONS AND CLOSURES.)		
(A) Species	*(B) Season*	*(C) Daily Bag and Possession Limits*
Ducks (including Mergansers).	~~From the third Friday in October extending for 101 days.~~ ~~Scaup: from the last Saturday in October extending for 86 days.~~ [Opening no earlier than the Saturday closest to October 1 and closing no later than the last Sunday in January. Season will	Daily bag limit: 7 Daily bag limit may include: • 7 mallards, but not more than 2 females or Mexican-like ducks. • 2 pintail (either sex). • 2 canvasback (either sex). • 2 redheads (either sex). • 3 scaup (either sex).

	be 101 days except for some species that may have a shorter season than the general duck season.]	Possession limit: triple the daily bag limit.
Geese	~~From the third Friday in October extending for 101 days.~~ [Opening no earlier than the Saturday closest to October 1 and closing no later than the last Sunday in January. Season will be 101 days.]	Daily bag limit: 14 Daily bag limit may include: • 10 white geese. • 4 dark geese (see definitions: 502(a)). Possession limit: triple the daily bag limit.
(5) Balance of State Zone (NOTE: SEE SUBSECTION 502(d)(6) BELOW FOR SPECIAL SEASONS AND CLOSURES.)		
(A) Species	*(B) Season*	*(C) Daily Bag and Possession Limits*
Ducks (including Mergansers).	~~From the fourth Saturday in October extending for 100 days.~~ ~~Scaup: from the first Saturday in November extending for 86 days.~~ [Opening no earlier than the Saturday closest to October 1 and closing no later than the last Sunday in January. Season may be split into two segments and will be between 38 and 100 days except for some species that may have a shorter season than the general duck season.]	Daily bag limit: ~~7~~[4-7] Daily bag limit may include: • ~~7~~[3-7] mallards, but not more than ~~2~~[1-2] females. • 2 pintail (either sex). • 2 canvasback (either sex). • 2 redheads (either sex). • 3 scaup (either sex). Possession limit: triple the daily bag limit.
Geese	Early Season: Large Canada geese only from the Saturday closest to October 1 for a period of 5 days EXCEPT in the North Coast Special Management Area where Large Canada geese are closed during the early season. Regular Season: Dark and white geese ~~from the fourth Saturday in October extending for 100 days~~ [Opening no earlier than the Saturday closest to October 1 and closing no later than the last Sunday in January. Season	Daily bag limit: ~~25~~ 30 Daily bag limit may include: • ~~15~~ 20 white geese. • 10 dark geese EXCEPT in the Sacramento Valley Special Management Area where only 3 may be white-fronted geese (see definitions: 502(a)). Possession limit: triple the daily bag limit.

	will be no longer than 100 days] EXCEPT in the Sacramento Valley Special Management Area where the white-fronted goose season will close after December 21. Late Season: White-fronted geese and white geese from the second Saturday in February extending for a period of 5 days EXCEPT in the Sacramento Valley Special Management Area where the white-fronted goose season is closed. During the Late Season, hunting is not permitted on wildlife areas listed in Sections 550-552 EXCEPT on Type C wildlife areas in the North Central and Central regions.		

(6) Special Management Areas (see descriptions in 502(b)(6))

	(A) Species	*(B) Season*	*(C) Daily Bag and Possession Limits*	
1. North Coast	All Canada Geese	~~From the second Sunday in November~~ From November 5 extending for a period of ~~85~~ 86 days (Regular Season) and from ~~the third Saturday in~~ February 20 extending for a period of ~~20~~ 19 days (Late Season). During the Late Season, hunting is only permitted on private lands with the permission of the land owner under provisions Section 2016, Fish and Game Code.	Daily bag limit: 10 Canada Geese of which only 1 may be a Large Canada goose (see definitions: 502(a)), EXCEPT during the Late Season the bag limit on Large Canada geese is zero. Possession limit: triple the daily bag limit.	
2. Humboldt Bay South Spit (West Side)	All Species	Closed during brant Season		
3. Sacramento Valley	White-Fronted Geese	Open concurrently with the goose season through December 21, and during Youth	Daily bag limit: 3 white-fronted geese. Possession limit: triple	

		Waterfowl Hunting Days.	the daily bag limit.	
4. Morro Bay	All species	Open in designated area only from the opening day of brant season through the remainder of waterfowl season.		
5. Martis Creek Lake	All species	Closed until November 16.		
6. Northern Brant	Black Brant	From November 8 extending for 37 days.	Daily bag limit: 2 Possession limit: triple the daily bag limit.	
7. Balance of State Brant	Black Brant	From November 9 extending for 37 days.	Daily bag limit: 2 Possession limit: triple the daily bag limit.	
8. Imperial County	White Geese	From the first Saturday in November extending for a period of 86 days (Regular Season) and from the first Saturday in February extending for a period of 16 days (Late Season). During the Late Season, hunting is only permitted on private lands with the permission of the land owner under provisions of Section 2016, Fish and Game Code.	Daily bag limit: ~~15~~ 20 Possession limit: triple the daily bag limit.	

(e) Youth Waterfowl Hunting Days Regulations (NOTE: To participate in these Youth Waterfowl Hunts, federal regulations require that hunters must be ~~15~~ 17 years of age or younger and must be accompanied by a non-hunting adult 18 years of age or older.)

(1) Statewide Provisions.

(A) Species	*(B) Season*	*(C) Daily Bag Limit*
Ducks (including Mergansers), American Coot, Common Moorhen, Black Brant, Geese	1. Northeastern California Zone: The Saturday fourteen days before the opening of waterfowl season extending for 2 days. 2. Southern San Joaquin Valley Zone: The Saturday following the closing of waterfowl season extending for 2 days.	Same as regular season.

	3. Southern California Zone: The Saturday following the closing of waterfowl season extending for 2 days. 4. Colorado River Zone: The Saturday following the closing of waterfowl season extending for 2 days. 5. Balance of State Zone: The Saturday following the closing of waterfowl season extending for 2 days.	
(f) Falconry Take of Ducks (including Mergansers), Geese, American Coots, and Common Moorhens.		
(1) Statewide Provisions		
(A) Species	*(B) Season*	*(C) Daily Bag and Possession Limits*
Ducks (including Mergansers), Geese, American Coot and Common Moorhen	1. Northeastern California Zone. ~~Open concurrently with duck season through January 17, 2016.~~ [No longer than 105 days.] 2. Balance of State Zone. ~~Open concurrently with duck season~~ [No longer than 102 days] EXCEPT in the North Coast Special Management Area where the falconry season for geese runs concurrently with the season for Small Canada geese (see 502(d)(6)) 3. Southern San Joaquin Valley Zone. ~~Open concurrently with duck season and February 1-3, 2016.~~ [No longer than 107 days.] Goose hunting in this zone by means of falconry is not permitted. 4. Southern California Zone. ~~Open concurrently with duck season and February 1-5, 2016.~~ [No longer than 107 days] EXCEPT in the Imperial County Special Management	Daily bag limit: 3 Daily bag limit makeup: • Either all of 1 species or a mixture of species allowed for take. Possession limit: 9

	Area where the falconry season for geese runs concurrently with the season for white geese. 5. Colorado River Zone. Open concurrently with duck season ~~and January 25-28, 2016~~ [not to exceed 105 days.] Goose hunting in this zone by means of falconry is not permitted. Federal regulations require that California's hunting regulations conform to those of Arizona, where goose hunting by means of falconry is not permitted	

Note: Authority cited: Sections 202 and 355, Fish and Game Code. Reference: Sections 202, 355 and 356, Fish and Game Code.

STATE OF CALIFORNIA
FISH AND GAME COMMISSION
INITIAL STATEMENT OF REASONS FOR REGULATORY ACTION
(Pre-publication of Notice Statement)

Amend Section 507
Title 14, California Code of Regulations
Re: **Provisions Related to the Taking of Migratory Game Birds**

I. Date of Initial Statement of Reasons: December 28, 2015

II. Dates and Locations of Scheduled Hearings:

(a) Discussion Hearing: Date: December 10, 2015
Location: San Diego, CA

(b) Notice Hearing: Date: February 11, 2016
Location: Sacramento, CA

(c) Adoption Hearing: Date: April 14, 2016
Location: Santa Rosa, CA

III. Description of Regulatory Action:

(a) Statement of Specific Purpose of Regulation Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary:

Current regulations in Section 507(a)(2), Title 14, California Code of Regulations (CCR), prohibit archery hunters from carrying a firearm while hunting migratory birds. However, since there is no specific archery only hunt or tag set aside for migratory birds, there is no reason to think individuals would take a bird with a firearm but pretend it was taken with archery equipment. Consequently, there is no reason to restrict archers from carrying firearms when taking migratory birds.

This amendment also addresses a grammatical error, correcting "~~crossbows~~ bolts" to "<u>crossbow</u> bolts," which is necessary to improve the clarity of the regulation.

The Department proposes to delete that part of subsection 507(a)(2) prohibiting the possession of a firearm while archery hunting:

> Only arrows or ~~crossbows~~ <u>crossbow</u> bolts with flu- flu fletching may be used except that conventionally fletched arrows may be used to take

waterfowl sitting on the water from scullboats or similar watercraft. ~~Archers hunting during any archery season may not possess a firearm while in the field engaged in archery hunting.~~

(b) Authority and Reference Sections from Fish and Game Code for Regulation:

Authority: Section 355, Fish and Game Code.
Reference: Sections, 355, and 356, Fish and Game Code.

(c) Specific Technology or Equipment Required by Regulatory Change: None.

(d) Identification of Reports or Documents Supporting Regulation Change: None.

(e) Public Discussions of Proposed Regulations Prior to Notice Publication:

This proposal was discussed at the Fish and Game Commission's Wildlife Resources Committee meeting held on September 9, 2015 in Fresno, CA.

IV. Description of Reasonable Alternatives to Regulatory Action:

(a) Alternatives to Regulation Change:

The California Bowmen Hunters (CBH) proposed amending section 507 to allow the use of conventionally fletched arrows for the take of waterfowl when on land or on water. Because the potential lethal range of conventionally fletched arrows is much greater than arrows with flu-flu fletching and waterfowl hunters are often in close proximity to other hunting parties, the Department has advised against the adoption of this alternative for reasons of public safety. The Commission has rejected this alternative to preserve the public safety.

(b) No Change Alternative:

The No Change Alternative would maintain the existing regulation that prohibits archery hunters while engaged in migratory bird hunting from carrying a firearm.

(c) Consideration of Alternatives: In view of information currently possessed, no reasonable alternative considered would be more effective in carrying out the purpose for which the regulation is proposed, would be as effective and less burdensome to affected private persons than the proposed regulation, or would be more cost effective to affected private persons and equally effective in implementing the statutory policy or other provision of

law.

(d) Description of Reasonable Alternatives That Would Lessen Adverse Impact on Small Business: None.

V. Mitigation Measures Required by Regulatory Action:

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed.

VI. Impact of Regulatory Action:

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States:

The proposed action will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. The proposed regulations are intended to provide additional recreational opportunity to the public. The response is expected to be minor in nature.

(b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State's Environment:

The Commission anticipates benefits to the health and welfare of California residents. Hunting provides opportunities for multi-generational family activities and promotes respect for California's environment by the future stewards of the State's resources. The Commission anticipates benefits to the State's environment in the sustainable management of natural resources.

The proposed action will not have significant impacts on jobs or business within California and does not provide benefits to worker safety.

(c) Cost Impacts on a Representative Private Person or Business:

The Commission is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

(d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State: None.

(e) Nondiscretionary Costs/Savings to Local Agencies: None.

(f) Programs Mandated on Local Agencies or School Districts: None.

(g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code: None.

(h) Effect on Housing Costs: None.

VII. Economic Impact Assessment

(a) Effects of the regulation on the creation or elimination of jobs within the state: Not applicable.

(b) Effects of the regulation on the creation of new businesses or the elimination of existing businesses within the state:

The result of the regulations on the creation of new businesses or the elimination of existing businesses within the state will be neutral. Clarification of regulations is, by itself, unlikely to stimulate the creation of new businesses or cause the elimination of existing businesses. The number of hunters and the economic contributions from them are expected to remain more or less the same.

(c) Effects of the regulation on the expansion of businesses currently doing business within the state:

The long-term intent of the proposed regulation is to maintain consistency in hunting regulations. Changes in this section are unlikely to stimulate substantial expansion of these existing businesses.

(d) Benefits of the regulation to the health and welfare of California residents:

Hunting is an outdoor activity that can provide several benefits for those who partake in it and for the environment as well. The fees that hunters pay for licenses and stamps are used for conservation. In addition, the efforts of

hunters can help to reduce wildlife depredation on private lands. Hunters and their families benefit from fresh game to eat, and from the benefits of outdoor recreation. People who hunt have a special connection with the outdoors and an awareness of the relationships between wildlife, habitat, and humans. With that awareness comes an understanding of the role humans play in being caretakers of the environment. Hunting is a tradition that is often passed on from one generation to the next creating a special bond between family members and friends.

(e) Benefits of the regulation to worker safety:

The regulations will not affect worker safety because they will not impact working conditions.

(f) Benefits of the regulation to the state's environment:

It is the policy of this state to encourage the conservation, maintenance, and utilization of wildlife resources for the benefit of all the citizens of the state.

(g) Concurrence with other Statutory Requirements:

Not applicable

Informative Digest/Policy Statement Overview

Current regulations in Section 507(a)(2), Title 14, California Code of Regulations (CCR), prohibit archery hunters from carrying a firearm while hunting migratory birds. However, since there is no specific archery only hunt set aside for migratory birds, there is no reason to think individuals would take a bird with a firearm but pretend it was taken with archery equipment. Consequently, there is no reason to restrict archers from carrying firearms when taking migratory birds. The existing regulation also refers to "crossbows bolts," rather than the proposed "crossbow bolts." This amendment is intended to correct a grammatical error and is necessary to improve the clarity of the regulation.

The Department proposes to delete that part of subsection 507(a)(2) prohibiting the possession of a firearm while archery hunting:

> "Only arrows or crossbow bolts with flu- flu fletching may be used except that conventionally fletched arrows may be used to take waterfowl sitting on the water from scullboats or similar watercraft. ~~Archers hunting during any archery season may not possess a firearm while in the field engaged in archery hunting.~~"

Benefits of the regulations

The benefit of the proposed regulation is consistency in regulations.

Non-monetary benefits to the public

The Commission does not anticipate non-monetary benefits to the protection of public health and safety, worker safety, the prevention of discrimination, the promotion of fairness or social equity and the increase in openness and transparency in business and government.

Evaluation of incompatibility with existing regulations

The Commission has reviewed its regulations in Title 14, CCR, and conducted a search of other regulations on this topic and has concluded that the proposed amendments to Section 507 are neither inconsistent nor incompatible with existing State regulations.

REGULATORY TEXT

Section 507, Title 14, CCR, is amended to read as follows:

§507. Provisions Related to the Taking of Migratory Game Birds.
(a) Authorized Methods. Only the following methods may be used to take migratory game birds:
(1) Falconry.
(2) Bow and Arrows or Crossbows. Only arrows or ~~crossbows~~ crossbow bolts with flu- flu fletching may be used except that conventionally fletched arrows may be used to take waterfowl sitting on the water from scullboats or similar watercraft. ~~Archers hunting during any archery season may not possess a firearm while in the field engaged in archery hunting.~~

… [No changes to subsections 507(a)(3) through 507(d)]

Note: Authority cited: Section 355, Fish and Game Code. Reference: Sections 355, 356 and 3005, Fish and Game Code.

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Part III

Department of the Interior

Fish and Wildlife Service

50 CFR Part 20

Migratory Bird Hunting; Final Frameworks for Migratory Bird Hunting Regulations; Final Rule

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 20

[Docket No. FWS–HQ–MB–2015–0034; FF09M21200–167–FXMB1231099BPP0]

RIN 1018–BA70

Migratory Bird Hunting; Final Frameworks for Migratory Bird Hunting Regulations

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: The Fish and Wildlife Service (Service or we) prescribes final frameworks from which States may select season dates, limits, and other options for the 2016–17 migratory bird hunting seasons. The effect of this final rule is to facilitate the States' selection of hunting seasons and to further the annual establishment of the migratory bird hunting regulations. We annually prescribe frameworks, or outer limits, for dates and times when hunting may occur and the number of birds that may be taken and possessed in hunting seasons. These frameworks are necessary to allow State selections of seasons and limits and to allow recreational harvest at levels compatible with population and habitat conditions.

DATES: This rule takes effect on March 28, 2016.

ADDRESSES: States should send their season selections to: Chief, Division of Migratory Bird Management, U.S. Fish and Wildlife Service, MS: MB, 5275 Leesburg Pike, Falls Church, VA 22041–3803. You may inspect comments received on the migratory bird hunting regulations during normal business hours at the Service's office at 5275 Leesburg Pike, Falls Church, VA 22041–3803. You may obtain copies of referenced reports from the street address above, or from the Division of Migratory Bird Management's Web site at *http://www.fws.gov/migratorybirds/,* or at *http://www.regulations.gov* at Docket No. FWS–HQ–MB–2015–0034.

FOR FURTHER INFORMATION CONTACT: Ron W. Kokel, U.S. Fish and Wildlife Service, Department of the Interior, MS: MB, 5275 Leesburg Pike, Falls Church, VA 22041–3803; (703) 358–1714.

SUPPLEMENTARY INFORMATION:

Regulations Schedule for 2016

On August 6, 2015, we published in the **Federal Register** (80 FR 47388) a proposal to amend 50 CFR part 20. The proposal provided a background and overview of the migratory bird hunting regulations process, and addressed the establishment of seasons, limits, and other regulations for hunting migratory game birds under §§ 20.101 through 20.107, 20.109, and 20.110 of subpart K. Major steps in the 2016–17 regulatory cycle relating to open public meetings and **Federal Register** notifications were also identified in the August 6, 2015, proposed rule. Further, we explained that all sections of subsequent documents outlining hunting frameworks and guidelines were organized under numbered headings. Therefore, it is important to note that we omit those items requiring no attention, and remaining numbered items appear discontinuous and incomplete.

On October 20–21, 2015, we held open meetings with the Flyway Council Consultants, at which the participants reviewed information on the current status of migratory game birds and developed recommendations for the 2016–17 regulations for these species.

On December 11, 2015, we published in the **Federal Register** (80 FR 77088) the proposed frameworks for the 2016–17 season migratory bird hunting regulations. This document establishes final frameworks for migratory bird hunting regulations for the 2016–17 season. There are no substantive changes from the December 11 proposed rule. We will publish State selections in the **Federal Register** as amendments to §§ 20.101 through 20.107, and 20.109 of title 50 CFR part 20.

Status and Harvest

In the December 11 proposed rule we provided preliminary information on the status and harvest of migratory game birds excerpted from various reports. For more detailed information on methodologies and results, you may obtain complete copies of the various reports at the address indicated under **FOR FURTHER INFORMATION CONTACT** or from our Web site at *http://www.fws.gov/migratorybirds/NewsPublicationsReports.html.*

Review of Public Comments and Flyway Council Recommendations

The preliminary proposed rulemaking, which appeared in the August 6, 2015, **Federal Register**, opened the public comment period for migratory game bird hunting regulations. The December 11, 2015, **Federal Register** publication discussed and proposed the frameworks for the 2016–17 season migratory bird hunting regulations. Comments are summarized below and numbered in the order used in the August 6 **Federal Register**. We have included only the numbered items pertaining to issues for which we received written comments. Consequently, the issues do not follow in successive numerical order.

We received recommendations from all four Flyway Councils. Some recommendations supported continuation of last year's frameworks. Due to the comprehensive nature of the annual review of the frameworks performed by the Councils, support for continuation of last year's frameworks is assumed for items for which no recommendations were received. Council recommendations for changes in the frameworks are summarized below. Wherever possible, they are discussed under headings corresponding to the numbered items in the August 6, 2015, **Federal Register** document.

General

Written Comments: A commenter protested the entire migratory bird hunting regulations process, the killing of all migratory birds, and status and habitat data on which the migratory bird hunting regulations are based. The commenter further stated that the general public was excluded from the process and that regulation-setting meetings are not announced and closed to the general public.

Service Response: Our long-term objectives continue to include providing opportunities to harvest portions of certain migratory game bird populations and to limit harvests to levels compatible with each population's ability to maintain healthy, viable numbers. Having taken into account the zones of temperature and the distribution, abundance, economic value, breeding habits, and times and lines of flight of migratory birds, we believe that the hunting seasons provided for herein are compatible with the current status of migratory bird populations and long-term population goals. Additionally, we are obligated to, and do, give serious consideration to all information received as public comment. While there are problems inherent with any type of representative management of public-trust resources, we believe that the Flyway Council system of migratory game bird management has been a longstanding example of State-Federal cooperative management since its establishment in 1952. However, as always, we continue to seek new ways to streamline and improve the process.

Regarding the claims about excluding the general public from the regulations-setting process and holding closed meetings, we note that on May 27, 2015, we published in the **Federal Register** (80 FR 30205) a document concerning

the first Service Regulations Committee (SRC) meeting to discuss preliminary issues on the 2016–17 migratory bird hunting regulations. On August 6, 2015, we published in the **Federal Register** (80 FR 47388) a proposal to amend 50 CFR part 20. The proposal provided a background and overview of the migratory bird hunting regulations process, and identified major steps in the 2016–17 regulatory cycle relating to open public meetings and **Federal Register** notifications, including notice of the October 21–22, 2015, SRC meeting. On October 20–21, 2015, we held open meetings with the Flyway Council Consultants, at which the participants reviewed information on the current status of migratory game birds and developed recommendations for the 2016–17 regulations for these species. In accordance with Department of the Interior (hereinafter Department) policy regarding meetings of the SRC attended by any person outside the Department, these meetings are open to public observation. The Service is committed to providing access to this meeting for all participants.

1. Ducks

A. General Harvest Strategy

Council Recommendations: The Atlantic, Mississippi, Central, and Pacific Flyway Councils recommended the adoption of the ''liberal'' regulatory alternative.

Service Response: We will continue using adaptive harvest management (AHM) to help determine appropriate duck-hunting regulations for the 2016–17 season. AHM permits sound resource decisions in the face of uncertain regulatory impacts and provides a mechanism for reducing that uncertainty over time. We use AHM to evaluate four alternative regulatory levels for duck hunting based on the population status of mallards. (We enact other hunting regulations for species of special concern, such as canvasbacks, scaup, and pintails).

The prescribed regulatory alternative for the Atlantic, Mississippi, Central, and Pacific Flyways is based on the status of mallard populations that contribute primarily to each Flyway. In the Atlantic Flyway, we set hunting regulations based on the population status of mallards breeding in eastern North America (Federal survey strata 51–54 and 56, and State surveys in New England and the mid-Atlantic region). In the Central and Mississippi Flyways, we set hunting regulations based on the status and dynamics of mid-continent mallards. Mid-continent mallards are those breeding in central North America (Federal survey strata 13–18, 20–50, and 75–77, and State surveys in Minnesota, Wisconsin, and Michigan). In the Pacific Flyway, we set hunting regulations based on the status and dynamics of western mallards. Western mallards are those breeding in Alaska and the northern Yukon Territory (as based on Federal surveys in strata 1–12), and in California and Oregon (as based on State-conducted surveys).

For the 2016–17 season, we will continue to use independent optimization to determine the optimal regulatory choice for each mallard stock. This means that we develop regulations for eastern mallards, mid-continent mallards, and western mallards independently, based upon the breeding stock that contributes primarily to each Flyway. We detailed implementation of this AHM decision framework for western and mid-continent mallards in the July 24, 2008, **Federal Register** (73 FR 43290) and for eastern mallards in the July 20, 2012, **Federal Register** (77 FR 42920). We further documented how adjustments were made to these decision frameworks in order to be compatible with the new regulatory schedule (*http://www.fws.gov/migratorybirds/pdf/management/AHM/SEIS&AHMReportFinal.pdf*).

For the 2016–17 hunting season, we considered the same regulatory alternatives as those used last year. The nature of the ''restrictive,'' ''moderate,'' and ''liberal'' alternatives has remained essentially unchanged since 1997, except that extended framework dates have been offered in the ''moderate'' and ''liberal'' regulatory alternatives since 2002 (67 FR 47224; July 17, 2002).

The optimal AHM strategies for mid-continent, eastern, and western mallards for the 2016–17 hunting season were calculated using: (1) Harvest-management objectives specific to each mallard stock; (2) the 2016–17 regulatory alternatives (see further discussion below under B. Regulatory Alternatives); and (3) current population models and associated weights. Based on ''liberal'' regulatory alternatives selected for the 2015 hunting season, the 2015 survey results of 11.79 million mid-continent mallards and 4.15 million ponds in Prairie Canada, 0.73 million eastern mallards (0.19 million and 0.54 million respectively in northeast Canada and the northeastern United States), and 0.73 million western mallards (0.26 million in California-Oregon and 0.47 million in Alaska), the optimal regulatory choice for all four Flyways is the ''liberal'' alternative. Therefore, we concur with the recommendations of the Atlantic, Mississippi, Central, and Pacific Flyway Councils regarding selection of the ''liberal'' regulatory alternative for the 2016–17 season and will adopt the ''liberal'' regulatory alternative, as described in the August 6, 2015, **Federal Register**.

B. Regulatory Alternatives

Council Recommendations: The Atlantic and Mississippi Flyway Councils recommended that the framework closing date for ducks be extended to January 31 in the ''moderate'' and ''liberal'' regulatory alternatives.

Written Comments: Several commenters expressed a desire for a later closing framework date, citing changes in climate and the migratory timing of birds. Several others recommended that States (in particular those in the upper Midwest) should shift their opening season dates later in order to allow more hunting in December.

Service Response: We do not support the Councils' recommendation, or the commenters' request, to extend the duck season framework closing date to January 31 at this time. We note that the current framework opening and closing dates were developed through a cooperative effort between all four Flyway Councils and that framework dates are only one of several components that comprise the regulatory packages utilized in AHM. Regulatory packages also consider season length, daily bag limits, and shooting hours. We believe the current regulatory packages in the Atlantic and Mississippi Flyways should remain unchanged until revisions to the AHM protocols, which are being undertaken by the Flyways, have been completed. Those efforts will include examination of duck harvest management objectives, model updates, and revisions to regulatory packages, including framework dates. We prefer that the issue of framework dates and any other component of the regulatory packages be addressed through this cooperative process and would prefer a comprehensive approach to revising regulatory packages rather than making incremental changes.

Regarding the timing of States' earlier opening season dates, we note that these dates are selected solely by the States (within the overall frameworks). Requests to move back the opening date should be directed to your State wildlife agency.

D. Special Seasons/Species Management

i. September Teal Seasons

For the 2016–17 season, we utilized the 2015 breeding population estimate

of 8.3 million blue-winged teal from the traditional survey area (Federal survey strata 1–18, 20–50, and 75–77) and the criteria developed for the teal season harvest strategy. Thus, a 16-day September teal season in the Atlantic, Central, and Mississippi Flyways is appropriate for the 2016 season.

iii. Black Ducks

Council Recommendations: The Atlantic and Mississippi Flyway Councils recommended that the Service continue to follow the International Black Duck AHM Strategy for the 2016–17 season.

Service Response: In 2012, we adopted the International Black Duck AHM Strategy (77 FR 49868; August 17, 2012). The formal strategy is the result of 14 years of technical and policy decisions developed and agreed upon by both Canadian and U.S. agencies and waterfowl managers. The strategy clarifies what harvest levels each country will manage for and reduces conflicts over country-specific regulatory policies. Further, the strategy allows for attainment of fundamental objectives of black duck management: Resource conservation, perpetuation of hunting tradition, and equitable access to the black duck resource between Canada and the United States while accommodating the fundamental sources of uncertainty, which includes partial controllability and observability, structural uncertainty, and environmental variation. The underlying model performance is assessed annually, with a comprehensive evaluation of the entire strategy (objectives and model set) planned after 6 years.

A copy of the strategy is available at the address indicated under **FOR FURTHER INFORMATION CONTACT**, or from our Web site at *http://www.fws.gov/migratorybirds/NewsPublicationsReports.html.*

For the 2016–17 season, the optimal country-specific regulatory strategies were calculated using: (1) The black duck harvest objective (98 percent of long-term cumulative harvest); (2) 2016–17 country-specific regulatory alternatives; (3) current parameter estimates for mallard competition and additive mortality; and (4) 2015 survey results of 0.54 million breeding black ducks and 0.41 million breeding mallards in the core survey area. The optimal regulatory choices for the 2016–17 season are the ''moderate'' package in Canada and the ''restrictive'' package in the United States.

iv. Canvasbacks

Council Recommendations: The Mississippi, Central, and Pacific Flyway Councils recommended a full season for canvasbacks with a 2-bird daily bag limit. The Atlantic Flyway Council recommended a full season for canvasbacks with a 1-bird daily bag limit. Season lengths would be 60 days in the Atlantic and Mississippi Flyways, 74 days in the Central Flyway, and 107 days in the Pacific Flyway.

Service Response: Since 1994, we have followed a canvasback harvest strategy whereby if canvasback population status and production are sufficient to permit a harvest of one canvasback per day nationwide for the entire length of the regular duck season, while still attaining an objective of 500,000 birds the following spring, the season on canvasbacks should be opened. A partial season would be allowed if the estimated allowable harvest was below that associated with a 1-bird daily bag limit for the entire season. If neither of these conditions can be met, the harvest strategy calls for a closed season on canvasbacks nationwide. In 2008 (73 FR 43290; July 24, 2008), we announced our decision to modify the canvasback harvest strategy to incorporate the option for a 2-bird daily bag limit for canvasbacks when the predicted breeding population the subsequent year exceeds 725,000 birds.

As we discussed in the August 6, 2015, proposed rule, the current harvest strategy relies on information that is not yet available under this new regulatory process. Thus, the current canvasback harvest management strategy is no longer usable for the 2016–17 season and beyond. We further stated that we do not yet have a new harvest strategy to propose for use in the future and that we would review the most recent information on canvasback populations, habitat conditions, and harvests with the goal of compiling the best information available for use in making a harvest management decision for the 2016–17 season.

As such, we support the Mississippi, Central, and Pacific Flyways' recommendation for a 2-canvasback daily bag limit for the 2016–17 season and will offer the opportunity to all four Flyways. This past year's spring survey resulted in an estimate of 757,000 canvasbacks and 4.15 million Canadian ponds. The former canvasback harvest strategy predicts a 2016 canvasback breeding population of 727,000 birds under the current 2015–16 ''liberal'' duck season with a 2-canvasback daily bag limit. Our analysis indicates that the expected harvest associated with a 2-bird bag limit during the 2016 season poses a very small possibility of the spring 2017 canvasback abundance falling below 500,000 birds given the current abundance of canvasbacks. However, we also recognize that in previous years where 2 canvasbacks per day were allowed in the daily bag limit, the following year required a more restrictive daily bag limit, and we are prepared to recommend restrictions for the 2017–18 season if necessary. Thus, we strongly encourage the Flyways to begin working with Service staff to develop a process for informing canvasback harvest management decisions prior to the Flyway meetings next March.

v. Pintails

Council Recommendations: The Atlantic, Mississippi, Central, and Pacific Flyway Councils recommended a full season for pintails, consisting of a 2-bird daily bag limit and a 60-day season in the Atlantic and Mississippi Flyways, a 74-day season in the Central Flyway, and a 107-day season in the Pacific Flyway.

Service Response: The current derived pintail harvest strategy was adopted by the Service and Flyway Councils in 2010 (75 FR 44856; July 29, 2010). For the 2016–17 season, an optimal regulatory strategy for pintails was calculated with: (1) An objective of maximizing long-term cumulative harvest, including a closed-season constraint of 1.75 million birds; (2) the 2016–17 regulatory alternatives and associated predicted harvests; and (3) current population models and their relative weights. Based on a ''liberal'' regulatory alternative with a 2-bird daily bag limit in 2015, the 2015 survey results of 3.04 million pintails observed at a mean latitude of 55.9 and a latitude-adjusted breeding population of 4.16 million birds, the optimal regulatory choice for all four Flyways for the 2016–17 hunting season is the ''liberal'' alternative with a 2-bird daily bag limit.

vi. Scaup

Council Recommendations: The Atlantic, Mississippi, Central, and Pacific Flyway Councils recommended use of the ''moderate'' regulation package, consisting of a 60-day season with a 2-bird daily bag in the Atlantic Flyway and a 3-bird daily bag in the Mississippi Flyway, a 74-day season with a 3-bird daily bag limit in the Central Flyway, and an 86-day season with a 3-bird daily bag limit in the Pacific Flyway.

Service Response: In 2008, we adopted and implemented a new scaup harvest strategy (73 FR 43290 on July

24, 2008, and 73 FR 51124 on August 29, 2008) with initial ''restrictive,'' ''moderate,'' and ''liberal'' regulatory packages adopted for each Flyway.

For scaup, optimal regulatory strategies for the 2016–17 season were calculated using: (1) An objective to achieve 95 percent of long-term cumulative harvest, (2) current scaup regulatory alternatives, and (3) updated model parameters and weights. Based on a ''moderate'' regulatory alternative selected in 2015 and the 2015 survey results of 4.40 million scaup, the optimal regulatory choice for the 2016–17 season for all four Flyways is the ''moderate'' regulatory alternative.

ix. Youth Hunt

Council Recommendations: The Atlantic Flyway Council recommended allowing the States to use their definitions of age for youth hunters as the age requirement for participation in youth hunting days.

The Mississippi and Central Flyway Councils recommended that we allow States to use their established definitions of age for youth hunters as the age requirement for participation in youth hunting days, not to include anyone over the age of 17.

The Pacific Flyway Council recommended striking the participation restriction that youth hunters must be 15 years of age or younger and allowing each State to use their established definition for the age of youth hunters as long as it is 17 years of age or younger. The Council further recommended retaining other participation restrictions requiring that an adult at least 18 years of age must accompany the youth hunter into the field.

Service Response: Since its inception in 1996, the Special Youth Waterfowl Hunting Days have fostered greater involvement of youth in waterfowl hunting and conservation. However, we recognize that many States allow individuals 17 years and younger to participate in youth hunting seasons other than those for waterfowl, whereas the current Federal framework for the Youth Waterfowl Hunting Days is 15 years and younger. We further recognize that this difference has caused some confusion and frustration from youth hunters, especially those between the ages of 15 and 17. Thus, we agree that allowing individual States to have a common definition of youth age for all of their different youth hunting seasons would simplify the issue for many States. States would still have the option to adopt an age restriction younger than 17 if they so choose. For those youth hunters 16 years of age and older, the requirement to possess a Federal Migratory Bird Hunting and Conservation Stamp (also known as Federal Duck Stamp) would remain in effect, as would the requirement that any youth hunter must be accompanied by an adult at least 18 years of age.

2. Sea Ducks

Council Recommendations: The Atlantic Flyway Council recommended that sea ducks in the Atlantic Flyway be exposed to no more than 60 days of hunting in any Special Sea Duck Area, or regular duck hunting area or zone. They further recommended that in ''Special Sea Duck Areas,'' the bag limit for sea ducks would be 5, to include no more than 4 eiders, 4 scoters, or 4 long-tailed ducks. In regular duck season areas and in States with no special sea duck areas, sea ducks would count toward the total bag of 6 ducks, which could include no more than 4 eiders, 4 scoters, and 4 long-tailed ducks. Splits would be allowed in the Special Sea Duck Area if the sea duck season is set concurrently with the regular duck season; otherwise, season dates in the Special Sea Duck Area could not be split. Lastly, the Council recommended that the taking of crippled waterfowl under power be allowed to continue in Special Sea Duck Areas as they are currently delineated (50 CFR 20.105) (regardless of whether a special sea duck season is held).

Written Comments: The Massachusetts Division of Fisheries and Wildlife and several other commenters requested that we continue to allow the sea duck daily bag limit in the special sea duck area to be independent of the regular duck season daily bag limit, when the special sea duck season and the regular season are open concurrently. They noted that we have allowed this for more than 50 years, and stated that a change would result in both additional regulatory complexity and unnecessary loss of hunting opportunity in some Atlantic Ocean coastal areas.

Service Response: We agree with the Atlantic Flyway Council's recommendations to reduce the harvest of sea ducks. The recent Sea Duck Harvest Potential Assessment indicates that the likelihood of overharvest of scoter, Atlantic common eider, and long-tailed duck populations ranges from 48 percent (Eastern black scoter) to 95 percent (long-tailed duck) under current regulations. Further, sea ducks have a low reproduction rate, but a high longevity of adults. As such, hunting mortality is almost entirely additive. One of the incentives for sea duck hunting has been the opportunity for hunters to achieve a high daily bag limit (7 ducks). The Atlantic Flyway Council believes, and we concur, that reducing the general daily bag limit to 5 will reduce that incentive, but still allow special sea duck hunting opportunity. The recommended changes in season length, daily bag limits, and area restrictions are expected to achieve a harvest reduction of approximately 25 percent.

Regarding the commenters' request that we continue to allow hunters to take other ducks in addition to sea ducks in the special sea duck area when both seasons are open, we concur. We examined records of individual duck hunts from 2005–2014 that hunters reported to the annual Federal harvest surveys. Those records indicate that less than 1 percent of the reported daily duck bags that included sea ducks would have been illegal under our previous proposed change. Thus, reverting back to the status quo on this specific aspect from our previously identified proposed change would likely have minimal impact on the harvest of either sea ducks or other duck species while also removing any perceptions of additional regulatory complexity or unnecessary loss of hunting opportunities.

A copy of the sea duck harvest potential assessment is available at the address indicated under **FOR FURTHER INFORMATION CONTACT**, or from our Web site at *http://www.fws.gov/migratorybirds/NewsPublicationsReports.html.*

4. Canada Geese

A. Special [Early] Seasons

Council Recommendations: The Pacific Flyway Council recommended generalizing the special early Canada goose season frameworks in the Pacific Flyway to apply to all States except Alaska. Specifically, the Council recommended a Canada goose season of up to 15 days during September 1–20 with a daily bag limit of not more than 5 Canada geese, except in Pacific County, Washington, where the daily bag limit could not exceed 15 Canada geese. The Council recommended that all areas open to hunting of Canada geese in each State must be described, delineated, and designated as such in each State's hunting regulations.

Service Response: We agree with the Pacific Flyway Council's recommendation to generalize the special early Canada goose season framework to apply to all Pacific Flyway States except Alaska. The special early Canada goose hunting season is generally designed to reduce or control

overabundant resident Canada goose populations. Early Canada goose seasons are currently allowed in 6 of 11 Pacific Flyway States excluding Alaska. Allowing a general season length of up to 15 days during September 1–20 and a bag limit of up to 5 Canada geese in all of the Pacific Flyway States except Alaska will simplify and standardize the early Canada goose season framework among Pacific Flyway States and provide a tool to help reduce or control the abundance of resident Canada geese in all Pacific Flyway States. The Flyway-wide framework is more consistent with the frameworks for other species and the special early Canada goose season frameworks in other Flyways.

B. Regular Seasons

Council Recommendations: The Mississippi Flyway Council recommended that the opening and closing framework dates for all geese in the Mississippi Flyway be September 1 to February 15 beginning in 2016. They also recommended that the frameworks for Canada geese in the Mississippi Flyway, beginning in 2016, allow 107 days with up to a 5-bird daily bag limit September 1–30 (except in the Intensive Harvest Zone in Minnesota, which may have up to a 10-bird daily bag limit) and a 3-bird daily bag limit for the remainder of the season. Seasons could be split into 4 segments.

Service Response: As we have previously indicated (77 FR 58444, September 20, 2012), we support the Mississippi Flyway Council recommendations to move from State-specific frameworks to Flyway-wide Canada goose frameworks. Management of Canada geese in the Mississippi Flyway is complicated by the need to balance potentially conflicting objectives for arctic, subarctic, and temperate (resident) breeding populations. Increased abundance of temperate-breeding Canada geese has caused conflicts with people and human activities, and regulations have been gradually liberalized to increase harvest of such birds to reduce those conflicts. The Council believes that hunting is an important means of controlling goose populations in the Mississippi Flyway, but notes that Canada goose harvest has declined since 2006, even with recent liberalizations enacted in the flyway. The Council believes the recommended season structure will allow State managers additional flexibility in days, dates, and bag limits to meet management needs and the desires of goose hunters in their State, and we concur.

We also agree with the Council's recommendation to adjust the opening and closing framework dates for all geese in the Mississippi Flyway to September 1 through February 15 beginning in 2016. The Council's recommendation to change the goose framework opening date from the Saturday nearest September 24 to September 1 is compatible with the recent change in our regulatory schedule that combines the early and late season regulations processes (see also 5. White-Fronted Geese and 7. Snow and Ross's (Light) Geese, below).

Lastly, we note that the Council is developing a general Canada Goose Management Plan for the Flyway, which will incorporate aspects of existing management plans for migrant populations (Eastern Prairie Population (EPP), Mississippi Valley Population (MVP), and Southern James Bay Population (SJBP)) and the temperate-nesting Giant Canada Goose population. Although the Flyway no longer recognizes zones for EPP, MVP and SJBP populations, we note that portions of the SJBP population migrate to the Atlantic Flyway. Therefore, we urge the Mississippi Flyway Council to consult with the Atlantic Flyway Council as the general Canada goose management plan is being developed for the Mississippi Flyway.

5. White-Fronted Geese

Council Recommendations: The Mississippi Flyway Council recommended that the opening and closing framework dates for all geese in the Mississippi Flyway be September 1 to February 15 beginning in 2016.

Service Response: We agree with the Mississippi Flyway Council's recommendation to adjust the opening and closing framework dates for all geese in the Mississippi Flyway to September 1 through February 15 beginning in 2016. Currently, framework dates for white-fronted geese are from the Saturday nearest September 24 to the Sunday nearest February 15. Adjusting the framework dates for other geese (snow and white-fronted geese) will allow States flexibility to open and/or close all goose seasons on the same date. Since the numbers of white-fronted geese present in the Mississippi Flyway in September are low, we expect no impacts from this change.

6. Brant

Council Recommendations: The Atlantic Flyway Council recommends that the 2016–17 season for Atlantic brant follow the Atlantic Flyway Brant Hunt plan pending the results of the 2016 Atlantic Flyway mid-winter waterfowl survey. The Council also recommended that if the results of the 2016 mid-winter survey are not available, then the results of the most recent mid-winter survey should be used.

Service Response: As we discussed in the August 6, 2015, proposed rule, the current harvest strategy used to determine the Atlantic brant season frameworks does not fit well within the new regulatory process, similar to the Rocky Mountain Population sandhill crane issue discussed below under 9. Sandhill Cranes. In developing the annual proposed frameworks for Atlantic brant in the past, the Atlantic Flyway Council and the Service used the number of brant counted during the Mid-winter Waterfowl Survey (MWS) in the Atlantic Flyway, and took into consideration the brant population's expected productivity that summer. The MWS is conducted each January, and expected brant productivity is based on early-summer observations of breeding habitat conditions and nesting effort in important brant nesting areas. Thus, the data under consideration were available before the annual Flyway and SRC decision-making meetings took place in late July. Although the former regulatory alternatives for Atlantic brant were developed by factoring together long-term productivity rates (observed during November and December productivity surveys) with estimated observed harvest under different framework regulations, the primary decision-making criterion for selecting the annual frameworks was the MWS count.

Under the new regulatory schedule for the 2016–17 migratory bird hunting regulations, neither the expected 2016 brant production information (available summer 2016) nor the 2016 MWS count (conducted in January 2016) was available at the time of the December 11, 2015, proposed rule. However, we stated at that time that the 2016 MWS would be completed and winter brant data would be available by the expected publication of the final frameworks. Therefore, in the September 24, 2015, **Federal Register** (80 FR 57664), we adopted the Atlantic Flyway's changes to the then-current Atlantic brant hunt plan strategies. Current harvest packages (strategies) for Atlantic brant hunting seasons are as follows:

- If the mid-winter waterfowl survey (MWS) count is <100,000 Atlantic brant, the season would be closed.
- If the MWS count is between 100,000 and 115,000 brant, States could select a 30-day season with a 1-bird daily bag limit.
- If the MWS count is between 115,000 and 130,000 brant, States could

select a 30-day season with a 2-bird daily bag limit.

• If the MWS count is between 130,000 and 150,000 brant, States could select a 50-day season with a 2-bird daily bag limit.

• If the MWS count is between 150,000 and 200,000 brant, States could select a 60-day season with a 2-bird daily bag limit.

• If the MWS count is >200,000 brant, States could select a 60-day season with a 3-bird daily bag limit.

Under all the above open-season alternatives, seasons would be between the Saturday nearest September 24 and January 31. Further, States could split their seasons into 2 segments.

The recently completed 2016 MWS Atlantic brant count was 157,927 brant. Thus, utilizing the above Atlantic brant hunt strategies, the appropriate Atlantic brant hunting season for the 2016–17 season is a 60-day season with a 2-bird daily bag limit.

7. Snow and Ross's (Light) Geese

Council Recommendations: The Mississippi Flyway Council recommended that the opening and closing framework dates for all geese in the Mississippi Flyway be September 1 to February 15 beginning in 2016.

Service Response: As we stated above under 5. White-fronted Geese, we agree with the Mississippi Flyway Council's recommendation to adjust the opening and closing framework dates for all geese in the Mississippi Flyway to September 1 through February 15 beginning in 2016. Currently, framework dates for snow geese are from the Saturday nearest September 24 to the Sunday nearest February 15. Adjusting the framework dates for other geese (light and white-fronted geese) will allow States flexibility to open and/or close all goose seasons on the same date. Since there are low numbers of snow geese present in the Mississippi Flyway in September, we expect no impacts from this change.

9. Sandhill Cranes

Council Recommendations: The Mississippi Flyway Council recommended that Tennessee be allowed an additional year (2016–17) of their experimental sandhill crane hunting season under harvest guidelines set for their experimental season.

The Central and Pacific Flyway Councils recommended (1) the addition of a new Rocky Mountain Population (RMP) sandhill crane hunting unit in Carbon County, Montana; (2) a new hunt area for RMP sandhill cranes in Sheridan, Johnson, and Natrona Counties, Wyoming; and (3) that allowable harvest be determined based on the formula described in the Pacific and Central Flyway Management Plan for RMP sandhill cranes.

Service Response: We agree with the Mississippi Flyway Council to allow Tennessee an additional year under the existing experimental season. The Council notes that harvest during the first 2 years of the experiment was well below the permitted number, 342 and 393 cranes, respectively, in 2013 and 2014. The approved Tennessee sandhill crane hunt plan allows Tennessee to issue 775 hunters a total of 2,325 permits (3 per person). This permit allocation was based on a peak number of cranes observed in Tennessee (23,334 during 2009–13), so the continued allotment of permits would still fall within guidelines set by the Eastern Population Crane Management Plan. While the 2015–16 season marks the completion of Tennessee's experimental 3-year sandhill crane season, Tennessee will collect and analyze population and hunter data during the 2015–16 season and prepare a final report on the experimental season for distribution at the late summer 2016 Flyway meeting. We expect a proposal for an operational season will likely be made at that time.

We also agree with the Central and Pacific Flyway Council's recommendation for new RMP sandhill crane hunting areas in Montana (Carbon County) and Wyoming (Sheridan, Johnson, and Natrona Counties). The new hunt areas are consistent with the Pacific and Central Flyway Council's RMP sandhill crane management plan hunting area requirements.

Regarding the RMP crane harvest, as we discussed in the August 6, 2015, and December 11, 2015, proposed rules, the current harvest strategy used to calculate the allowable harvest of the RMP of sandhill cranes does not fit well within the new regulatory process, similar to the Atlantic brant issue discussed above under 6. Brant. Currently, results of the fall survey of RMP sandhill cranes, upon which the annual allowable harvest is based, will continue to be released between December 15 and January 31 each year, which is after the date for which proposed frameworks will be formulated in the new regulatory process. If the usual procedures for determining allowable harvest were used, data 2–4 years old would be used to determine the annual allocation for RMP sandhill cranes. Due to the variability in fall survey counts and recruitment for this population, and their impact on the annual harvest allocations, we agree that relying on data that is 2–4 years old is not ideal.

Thus, we agree that the formula to determine the annual allowable harvest for RMP sandhill cranes should be used under the new regulatory schedule and propose to utilize it as such. That formula uses information on abundance and recruitment collected annually through operational monitoring programs, as well as constant values based on past research or monitoring for survival of fledglings to breeding age and harvest retrieval rate. The formula is:

$$H = C \times P \times R \times L \times f$$

Where:

H = total annual allowable harvest;

C = the average of the three most recent, reliable fall population indices;

P = the average proportion of fledged chicks in the fall population in the San Luis Valley during the most recent 3 years for which data are available;

R = estimated recruitment of fledged chicks to breeding age (current estimate is 0.5);

L = retrieval rate of 0.80 (allowance for an estimated 20 percent crippling loss based on hunter interviews); and

$f = (C/16{,}000)^3$ (a variable factor used to adjust the total harvest to achieve a desired effect on the entire population)

The 2015 fall RMP sandhill crane abundance estimate was 24,330 cranes, resulting in a 3-year (2013–15) average of 21,453 cranes, an increase from the previous 3-year average of 18,482 cranes. The RMP crane recruitment estimate was 11.8 percent fledglings in the fall population, resulting in a 3-year (2013–15) average of 9.56 percent, an increase from the previous 3-year average of 8.23 percent. Using the above formula and the above most recent 3-year average abundance and recruitment estimates, the allowable harvest for the 2016–17 season is 1,978 cranes.

14. Woodcock

In 2011, we implemented a harvest strategy for woodcock (76 FR 19876, April 8, 2011). The harvest strategy provides a transparent framework for making regulatory decisions for woodcock season length and bag limit while we work to improve monitoring and assessment protocols for this species. Utilizing the criteria developed for the strategy, the 3-year average for the Singing Ground Survey indices and associated credible intervals fall within the ''moderate package'' for both the Eastern and Central Management Regions. As such, a ''moderate season'' for both management regions for the 2016–17 season is appropriate.

Specifics of the harvest strategy can be found at *http://www.fws.gov/migratorybirds/NewsPublicationsReports.html.*

16. Doves

Council Recommendations: The Atlantic and Mississippi Flyway Councils recommended use of the ''standard'' season framework comprising a 90-day season and 15-bird daily bag limit for States within the Eastern Management Unit.

The Mississippi and Central Flyway Councils recommended the use of the ''standard'' season package of a 15-bird daily bag limit and a 90-day season for the 2016–17 mourning dove season in the States within the Central Management Unit.

The Pacific Flyway Council recommended use of the ''standard'' season framework for States in the Western Management Unit (WMU) population of mourning doves.

Service Response: Based on the harvest strategies and current population status, we agree with the recommended selection of the ''standard'' season frameworks for mourning doves in the Eastern, Central, and Western Management Units for the 2016–17 season.

17. Alaska

Council Recommendations: The Pacific Flyway Council recommended increasing the daily bag limit for brant from 2 to 3, and increasing the daily bag limit for light geese from 4 to 6.

Service Response: We agree with the Pacific Flyway Council's recommendation to increase the daily bag limit in Alaska from 2 to 3 brant. The Flyway management plan for Pacific brant allows harvest to increase by two times the current level if the 3-year average population index exceeds 135,000 brant based on the mid-winter waterfowl survey. The 3-year (2013–2015) average is 157,700 brant, and is near the population objective of 162,000 brant. Increasing the daily bag limit from 2 to 3 brant will allow additional hunting opportunity while maintaining the season length at the maximum of 107 days for brant, and is not expected to increase harvest appreciably from that anticipated with a 2-brant daily bag limit.

We also agree with the Pacific Flyway Council's recommendation to increase the light goose daily bag limit from 4 to 6 light geese in Alaska. Two populations of light geese occur in Alaska, and both are above Flyway management plan objectives based on the most recent breeding population indices. The population estimate for the Western Arctic Population (WAP) of lesser snow geese was 451,000 in 2013 (most recent estimate), which is above the objective of 200,000 geese. Most of WAP lesser snow geese nest in the Egg River colony on Banks Island, Canada, but there are small, but growing, nesting colonies along the Arctic Coastal Plain of Alaska. In 2015, biologists noted high lesser snow goose nest survival (>95%) on the Colville River Delta and Ikpikpuk colonies on the Alaskan Arctic Coastal Plain. Biologists also noted earlier gosling development than any prior documented instance at the later colony. Favorable nesting conditions were also observed across much of the North Slope of Alaska and western Arctic. The population estimate for Wrangel Island snow geese was 240,000 in 2015, which is above the objective of 120,000 geese.

National Environmental Policy Act (NEPA)

The programmatic document, ''Second Final Supplemental Environmental Impact Statement: Issuance of Annual Regulations Permitting the Sport Hunting of Migratory Birds (EIS 20130139),'' filed with the Environmental Protection Agency (EPA) on May 24, 2013, addresses NEPA compliance by the Service for issuance of the annual framework regulations for hunting of migratory game bird species. We published a notice of availability in the **Federal Register** on May 31, 2013 (78 FR 32686), and our Record of Decision on July 26, 2013 (78 FR 45376). We also address NEPA compliance for waterfowl hunting frameworks through the annual preparation of separate environmental assessments, the most recent being ''Duck Hunting Regulations for 2016–17,'' with its corresponding January 2016, finding of no significant impact. In addition, an August 1985 environmental assessment entitled ''Guidelines for Migratory Bird Hunting Regulations on Federal Indian Reservations and Ceded Lands'' is available from the person indicated under the caption **FOR FURTHER INFORMATION CONTACT**.

Endangered Species Act Consideration

Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*), provides that, ''The Secretary shall review other programs administered by him and utilize such programs in furtherance of the purposes of this Act'' (and) shall ''insure that any action authorized, funded, or carried out * * * is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat. * * *.'' Consequently, we conducted formal consultations to ensure that actions resulting from these regulations would not likely jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of their critical habitat. Findings from these consultations are included in a biological opinion, which concluded that the regulations are not likely to jeopardize the continued existence of any endangered or threatened species. Additionally, these findings may have caused modification of some regulatory measures previously proposed, and the final frameworks reflect any such modifications. Our biological opinions resulting from this section 7 consultation are public documents available for public inspection at the address indicated under **ADDRESSES**.

Regulatory Planning and Review (Executive Orders 12866 and 13563)

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) will review all significant rules. OIRA has reviewed this rule and has determined that this rule is significant because it would have an annual effect of $100 million or more on the economy.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

An updated economic analysis was prepared for the 2013–14 season. This analysis was based on data from the newly released 2011 National Hunting and Fishing Survey, the most recent year for which data are available (see discussion in Regulatory Flexibility Act section below). This analysis estimated consumer surplus for three alternatives for duck hunting (estimates for other species are not quantified due to lack of data). The alternatives were: (1) Issue restrictive regulations allowing fewer days than those issued during the 2012–13 season, (2) issue moderate regulations allowing more days than those in alternative 1, and (3) issue

liberal regulations identical to the regulations in the 2012–13 season. For the 2013–14 season, we chose Alternative 3, with an estimated consumer surplus across all flyways of $317.8–$416.8 million. For the 2016–17 season, we have also chosen alternative 3. We also chose alternative 3 for the 2009–10, the 2010–11, the 2011–12, the 2012–13, the 2014–15, and the 2015–16 seasons. The 2013–14 analysis is part of the record for this rule and is available at *http://www.regulations.gov* at Docket No. FWS–HQ–MB–2015–0034.

Regulatory Flexibility Act

The annual migratory bird hunting regulations have a significant economic impact on substantial numbers of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). We analyzed the economic impacts of the annual hunting regulations on small business entities in detail as part of the 1981 cost-benefit analysis. This analysis was revised annually from 1990–95. In 1995, the Service issued a Small Entity Flexibility Analysis (Analysis), which was subsequently updated in 1996, 1998, 2004, 2008, and 2013. The primary source of information about hunter expenditures for migratory game bird hunting is the National Hunting and Fishing Survey, which is conducted at 5-year intervals. The 2013 Analysis was based on the 2011 National Hunting and Fishing Survey and the U.S. Department of Commerce's County Business Patterns, from which it was estimated that migratory bird hunters would spend approximately $1.5 billion at small businesses in 2013. Copies of the Analysis are available upon request from the Division of Migratory Bird Management (see **FOR FURTHER INFORMATION CONTACT**) *or from our Web site at http://www.fws.gov/migratorybirds or at http://www.regulations.gov* at Docket No. FWS–HQ–MB–2015–0034.

Small Business Regulatory Enforcement Fairness Act

This rule is a major rule under 5 U.S.C. 804(2), the Small Business Regulatory Enforcement Fairness Act. For the reasons outlined above, this rule will have an annual effect on the economy of $100 million or more. However, because this rule establishes hunting seasons, we are not deferring the effective date under the exemption contained in 5 U.S.C. 808(1).

Paperwork Reduction Act

This final rule does not contain any new information collection that requires approval under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid Office of Management and Budget (OMB) control number. OMB has reviewed and approved the information collection requirements associated with migratory bird surveys and assigned the following OMB control numbers:

- 1018–0019—North American Woodcock Singing Ground Survey (expires 5/31/2018).
- 1018–0023—Migratory Bird Surveys (expires 6/30/2017). Includes Migratory Bird Harvest Information Program, Migratory Bird Hunter Surveys, Sandhill Crane Survey, and Parts Collection Survey.

Unfunded Mandates Reform Act

We have determined and certify, in compliance with the requirements of the Unfunded Mandates Reform Act, 2 U.S.C. 1502 *et seq.,* that this rulemaking will not impose a cost of $100 million or more in any given year on local or State government or private entities. Therefore, this rule is not a ''significant regulatory action'' under the Unfunded Mandates Reform Act.

Civil Justice Reform—Executive Order 12988

The Department, in promulgating this rule, has determined that this rule will not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of Executive Order 12988.

Takings Implication Assessment

In accordance with Executive Order 12630, this rule, authorized by the Migratory Bird Treaty Act (16 U.S.C. 703–711), does not have significant takings implications and does not affect any constitutionally protected property rights. This rule will not result in the physical occupancy of property, the physical invasion of property, or the regulatory taking of any property. In fact, this rule allows hunters to exercise otherwise unavailable privileges and, therefore, reduces restrictions on the use of private and public property.

Energy Effects—Executive Order 13211

Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. While this rule is a significant regulatory action under Executive Order 12866, it is not expected to adversely affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action and no Statement of Energy Effects is required.

Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994, ''Government-to-Government Relations with Native American Tribal Governments'' (59 FR 22951), Executive Order 13175, and 512 DM 2, we have evaluated possible effects on Federally recognized Indian tribes and have determined that there are no effects on Indian trust resources. However, in the August 6 **Federal Register**, we solicited proposals for special migratory bird hunting regulations for certain Tribes on Federal Indian reservations, off-reservation trust lands, and ceded lands for the 2016–17 migratory bird hunting season. The resulting proposals will be contained in a separate proposed rule. By virtue of these actions, we have consulted with affected Tribes.

Federalism Effects

Due to the migratory nature of certain species of birds, the Federal Government has been given responsibility over these species by the Migratory Bird Treaty Act. We annually prescribe frameworks from which the States make selections regarding the hunting of migratory birds, and we employ guidelines to establish special regulations on Federal Indian reservations and ceded lands. This process preserves the ability of the States and tribes to determine which seasons meet their individual needs. Any State or Indian tribe may be more restrictive than the Federal frameworks at any time. The frameworks are developed in a cooperative process with the States and the Flyway Councils. This process allows States to participate in the development of frameworks from which they will make selections, thereby having an influence on their own regulations. These rules do not have a substantial direct effect on fiscal capacity, change the roles or responsibilities of Federal or State governments, or intrude on State policy or administration. Therefore, in accordance with Executive Order 13132, these regulations do not have significant federalism effects and do not have sufficient federalism implications to warrant the preparation of a federalism summary impact statement.

Regulations Promulgation

The rulemaking process for migratory game bird hunting, by its nature, operates under a time constraint as seasons must be established each year or hunting seasons remain closed. However, we intend that the public be provided extensive opportunity for

public input and involvement in compliance with Administrative Procedure Act requirements. Thus, when the preliminary proposed rulemaking was published, we established what we believed were the longest periods possible for public comment and the most opportunities for public involvement. We also provided notification of our participation in multiple Flyway Council meetings, opportunities for additional public review and comment on all Flyway Council proposals for regulatory change, and opportunities for additional public review during the SRC meeting. Therefore, we believe that sufficient public notice and opportunity for involvement have been given to affected persons regarding the migratory bird hunting frameworks for the 2016–17 hunting seasons.

Further, after establishment of the final frameworks, States need sufficient time to conduct their own public processes to select season dates and limits; to communicate those selections to us; and to establish and publicize the necessary regulations and procedures to implement their decisions Thus, we believe that if there were a delay in the effective date of these regulations after this final rulemaking, States might not be able to meet their own administrative needs and requirements.

For the reasons cited above, we therefore find that ''good cause'' exists, within the terms of 5 U.S.C. 553(d)(3) of the Administrative Procedure Act, and these frameworks will, therefore, take effect immediately upon publication.

Therefore, under authority of the Migratory Bird Treaty Act (July 3, 1918), as amended (16 U.S.C. 703–711), we prescribe final frameworks setting forth the species to be hunted, the daily bag and possession limits, the shooting hours, the season lengths, the earliest opening and latest closing season dates, and hunting areas, from which State conservation agency officials will select hunting season dates and other options. Upon receipt of season selections from these officials, we will publish a final rulemaking amending 50 CFR part 20 to reflect seasons, limits, and shooting hours for the United States for the 2016–17 seasons.

List of Subjects in 50 CFR Part 20

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

The rules that eventually will be promulgated for the 2016–17 hunting seasons are authorized under 16 U.S.C. 703–712 and 16 U.S.C. 742 a–j.

Dated: March 11, 2016.

Michael J. Bean,

Principal Deputy Assistant Secretary for Fish and Wildlife and Parks.

Final Regulations Frameworks for 2016–17 Hunting Seasons on Certain Migratory Game Birds

Pursuant to the Migratory Bird Treaty Act and delegated authorities, the Department of the Interior approved the following frameworks for season lengths, shooting hours, bag and possession limits, and outside dates within which States may select seasons for hunting migratory game birds between the dates of September 1, 2016, and March 10, 2017. These frameworks are summarized below.

General

Dates: All outside dates noted below are inclusive.

Shooting and Hawking (taking by falconry) Hours: Unless otherwise specified, from one-half hour before sunrise to sunset daily.

Possession Limits: Unless otherwise specified, possession limits are three times the daily bag limit.

Permits: For some species of migratory birds, the Service authorizes the use of permits to regulate harvest or monitor their take by sport hunters, or both. In many cases (*e.g.,* tundra swans, some sandhill crane populations), the Service determines the amount of harvest that may be taken during hunting seasons during its formal regulations-setting process, and the States then issue permits to hunters at levels predicted to result in the amount of take authorized by the Service. Thus, although issued by States, the permits would not be valid unless the Service approved such take in its regulations.

These Federally authorized, State-issued permits are issued to individuals, and only the individual whose name and address appears on the permit at the time of issuance is authorized to take migratory birds at levels specified in the permit, in accordance with provisions of both Federal and State regulations governing the hunting season. The permit must be carried by the permittee when exercising its provisions and must be presented to any law enforcement officer upon request. The permit is not transferrable or assignable to another individual, and may not be sold, bartered, traded, or otherwise provided to another person. If the permit is altered or defaced in any way, the permit becomes invalid.

Flyways and Management Units

Waterfowl Flyways

Atlantic Flyway: Includes Connecticut, Delaware, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, and West Virginia.

Mississippi Flyway: Includes Alabama, Arkansas, Illinois, Indiana, Iowa, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Ohio, Tennessee, and Wisconsin.

Central Flyway: Includes Colorado (east of the Continental Divide), Kansas, Montana (Counties of Blaine, Carbon, Fergus, Judith Basin, Stillwater, Sweetgrass, Wheatland, and all counties east thereof), Nebraska, New Mexico (east of the Continental Divide except the Jicarilla Apache Indian Reservation), North Dakota, Oklahoma, South Dakota, Texas, and Wyoming (east of the Continental Divide).

Pacific Flyway: Includes Alaska, Arizona, California, Idaho, Nevada, Oregon, Utah, Washington, and those portions of Colorado, Montana, New Mexico, and Wyoming not included in the Central Flyway.

Duck Management Units

High Plains Mallard Management Unit: Roughly defined as that portion of the Central Flyway that lies west of the 100th meridian.

Columbia Basin Mallard Management Unit: In Washington, all areas east of the Pacific Crest Trail and east of the Big White Salmon River in Klickitat County; and in Oregon, the counties of Gilliam, Morrow, and Umatilla.

Mourning Dove Management Units

Eastern Management Unit: All States east of the Mississippi River, and Louisiana.

Central Management Unit: Arkansas, Colorado, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming.

Western Management Unit: Arizona, California, Idaho, Nevada, Oregon, Utah, and Washington.

Woodcock Management Regions

Eastern Management Region: Connecticut, Delaware, Florida, Georgia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia, and West Virginia.

Central Management Region: Alabama, Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana,

Michigan, Minnesota, Mississippi, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, Texas, and Wisconsin.

Other geographic descriptions are contained in a later portion of this document.

Definitions

For the purpose of hunting regulations listed below, the collective terms ''dark'' and ''light'' geese include the following species:

Dark geese: Canada geese, white-fronted geese, brant (except in Alaska, California, Oregon, Washington, and the Atlantic Flyway), and all other goose species except light geese.

Light geese: Snow (including blue) geese and Ross's geese.

Area, Zone, and Unit Descriptions: Geographic descriptions related to regulations are contained in a later portion of this document.

Area-Specific Provisions: Frameworks for open seasons, season lengths, bag and possession limits, and other special provisions are listed below by Flyway.

Waterfowl Seasons in the Atlantic Flyway

In the Atlantic Flyway States of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, North Carolina, and Pennsylvania, where Sunday hunting is prohibited Statewide by State law, all Sundays are closed to all take of migratory waterfowl (including mergansers and coots).

Special Youth Waterfowl Hunting Days

Outside Dates: States may select 2 days per duck-hunting zone, designated as ''Youth Waterfowl Hunting Days,'' in addition to their regular duck seasons. The days must be held outside any regular duck season on a weekend, holidays, or other non-school days when youth hunters would have the maximum opportunity to participate. The days may be held up to 14 days before or after any regular duck-season frameworks or within any split of a regular duck season, or within any other open season on migratory birds.

Daily Bag Limits: The daily bag limits may include ducks, geese, tundra swans, mergansers, coots, moorhens, and gallinules and would be the same as those allowed in the regular season. Flyway species and area restrictions would remain in effect.

Shooting Hours: One-half hour before sunrise to sunset.

Participation Restrictions: States may use their established definition of age for youth hunters. However, youth hunters may not be over the age of 17. In addition, an adult at least 18 years of age must accompany the youth hunter into the field. This adult may not duck hunt but may participate in other seasons that are open on the special youth day. Youth hunters 16 years of age and older must possess a Federal Migratory Bird Hunting and Conservation Stamp (also known as Federal Duck Stamp). Tundra swans may only be taken by participants possessing applicable tundra swan permits.

Special September Teal Season

Outside Dates: Between September 1 and September 30, an open season on all species of teal may be selected by the following States in areas delineated by State regulations:

Atlantic Flyway: Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, and Virginia.

Mississippi Flyway: Alabama, Arkansas, Illinois, Indiana, Iowa, Kentucky, Louisiana, Michigan, Mississippi, Missouri, Ohio, Tennessee, and Wisconsin. The seasons in Iowa, Michigan, and Wisconsin are experimental.

Central Flyway: Colorado (part), Kansas, Nebraska, New Mexico (part), Oklahoma, and Texas. The season in the northern portion of Nebraska is experimental.

Hunting Seasons and Daily Bag Limits: Not to exceed 16 consecutive hunting days in the Atlantic, Mississippi, and Central Flyways. The daily bag limit is 6 teal.

Shooting Hours

Atlantic Flyway: One-half hour before sunrise to sunset, except in South Carolina, where the hours are from sunrise to sunset.

Mississippi and Central Flyways: One-half hour before sunrise to sunset, except in the States of Arkansas, Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin, where the hours are from sunrise to sunset.

Special September Duck Seasons

Florida, Kentucky, and Tennessee: In lieu of a special September teal season, a 5-consecutive-day teal/wood duck season may be selected in September. The daily bag limit may not exceed 6 teal and wood ducks in the aggregate, of which no more than 2 may be wood ducks. In addition, a 4-consecutive-day experimental teal-only season may be selected in September either immediately before or immediately after the 5-consecutive-day teal/wood duck season. The daily bag limit is 6 teal.

Iowa: In lieu of an experimental special September teal season, Iowa may hold up to 5 days of its regular duck hunting season in September. All ducks that are legal during the regular duck season may be taken during the September segment of the season. The September season segment may commence no earlier than the Saturday nearest September 20 (September 17). The daily bag and possession limits will be the same as those in effect during the remainder of the regular duck season. The remainder of the regular duck season may not begin before October 10.

Waterfowl

Atlantic Flyway

Ducks, Mergansers, and Coots

Outside Dates: Between the Saturday nearest September 24 (September 24) and the last Sunday in January (January 29).

Hunting Seasons and Duck Limits: 60 days. The daily bag limit is 6 ducks, including no more than 4 mallards (no more than 2 of which can be females), 1 black duck, 2 pintails, 1 mottled duck, 1 fulvous whistling duck, 3 wood ducks, 2 redheads, 2 scaup, 2 canvasbacks, 4 scoters, 4 eiders, and 4 long-tailed ducks.

Closures: The season on harlequin ducks is closed.

Merganser Limits: The daily bag limit of mergansers is 5, only 2 of which may be hooded mergansers. In States that include mergansers in the duck bag limit, the daily limit is the same as the duck bag limit, only 2 of which may be hooded mergansers.

Coot Limits: The daily bag limit is 15 coots.

Lake Champlain Zone, New York: The waterfowl seasons, limits, and shooting hours should be the same as those selected for the Lake Champlain Zone of Vermont.

Connecticut River Zone, Vermont: The waterfowl seasons, limits, and shooting hours should be the same as those selected for the Inland Zone of New Hampshire.

Zoning and Split Seasons: Delaware, Florida, Georgia, Maryland, North Carolina, Rhode Island, South Carolina, Virginia, and West Virginia may split their seasons into three segments; Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, and Vermont may select hunting seasons by zones and may split their seasons into two segments in each zone.

Scoters, Eiders, and Long-Tailed Ducks

Special Sea Duck Seasons

Connecticut, Delaware, Georgia, Maine, Maryland, Massachusetts, New

Hampshire, New Jersey, New York, North Carolina, Rhode Island, South Carolina, and Virginia may select a Special Sea Duck Season in designated Special Sea Duck Areas. If a Special Sea Duck Season is selected, scoters, eiders, and long-tailed ducks may be taken in the designated Special Sea Duck Area(s) only during the Special Sea Duck Season dates; scoter, eiders, and long-tailed ducks may be taken outside of Special Sea Duck Area(s) during the regular duck season, in accordance with the frameworks for ducks, mergansers, and coots specified above.

Outside Dates: Between September 15 and January 31.

Special Sea Duck Seasons and Daily Bag Limits: 60 consecutive hunting days, or 60 days that are concurrent with the regular duck season, with a daily bag limit of 5, singly or in the aggregate, of the listed sea duck species, including no more than 4 scoters, 4 eiders, and 4 long-tailed ducks. Within the special sea duck areas, during the regular duck season in the Atlantic Flyway, States may choose to allow the above sea duck limits in addition to the limits applying to other ducks during the regular season. In all other areas, sea ducks may be taken only during the regular open season for ducks and are part of the regular duck season daily bag (not to exceed 4 scoters, 4 eiders, and 4 long-tailed ducks) and possession limits.

Special Sea Duck Areas: In all coastal waters and all waters of rivers and streams seaward from the first upstream bridge in Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, and New York; in New Jersey, all coastal waters seaward from the International Regulations for Preventing Collisions at Sea (COLREGS) Demarcation Lines shown on National Oceanic and Atmospheric Administration (NOAA) Nautical Charts and further described in 33 CFR 80.165, 80.501, 80.502, and 80.503; in any waters of the Atlantic Ocean and in any tidal waters of any bay that are separated by at least 1 mile of open water from any shore, island, and emergent vegetation in South Carolina and Georgia; and in any waters of the Atlantic Ocean and in any tidal waters of any bay that are separated by at least 800 yards of open water from any shore, island, and emergent vegetation in Delaware, Maryland, North Carolina, and Virginia; and provided that any such areas have been described, delineated, and designated as special sea duck hunting areas under the hunting regulations adopted by the respective States.

Canada Geese

Special Early Canada Goose Seasons

A Canada goose season of up to 15 days during September 1–15 may be selected for the Eastern Unit of Maryland. Seasons not to exceed 30 days during September 1–30 may be selected for Connecticut, Florida, Georgia, New Jersey, New York (Long Island Zone only), North Carolina, Rhode Island, and South Carolina. Seasons may not exceed 25 days during September 1–25 in the remainder of the Flyway. Areas open to the hunting of Canada geese must be described, delineated, and designated as such in each State's hunting regulations.

Daily Bag Limits: Not to exceed 15 Canada geese.

Shooting Hours: One-half hour before sunrise to sunset, except that during any special early Canada goose season, shooting hours may extend to one-half hour after sunset if all other waterfowl seasons are closed in the specific applicable area.

Regular Canada Goose Seasons

Season Lengths, Outside Dates, and Limits: Specific regulations for Canada geese are shown below by State. These seasons may also include white-fronted geese in an aggregate daily bag limit. Unless specified otherwise, seasons may be split into two segments.

Connecticut:

North Atlantic Population (NAP) Zone: Between October 1 and February 15, a 70-day season may be held with a 3-bird daily bag limit.

Atlantic Population (AP) Zone: A 50-day season may be held between October 10 and February 5, with a 3-bird daily bag limit.

South Zone: A special season may be held between January 15 and February 15, with a 5-bird daily bag limit.

Resident Population (RP) Zone: An 80-day season may be held between October 1 and February 15, with a 5-bird daily bag limit. The season may be split into 3 segments.

Delaware: A 50-day season may be held between November 15 and February 5, with a 2-bird daily bag limit.

Florida: An 80-day season may be held between October 1 and March 10, with a 5-bird daily bag limit. The season may be split into 3 segments.

Georgia: An 80-day season may be held between October 1 and March 10, with a 5-bird daily bag limit. The season may be split into 3 segments.

Maine: A 70-day season may be held Statewide between October 1 and February 15, with a 3-bird daily bag limit.

Maryland:

RP Zone: An 80-day season may be held between November 15 and March 10, with a 5-bird daily bag limit. The season may be split into 3 segments.

AP Zone: A 50-day season may be held between November 15 and February 5, with a 2-bird daily bag limit.

Massachusetts:

NAP Zone: A 70-day season may be held between October 1 and February 15, with a 3-bird daily bag limit. Additionally, a special season may be held from January 15 to February 15, with a 5-bird daily bag limit.

AP Zone: A 50-day season may be held between October 10 and February 5, with a 3-bird daily bag limit.

New Hampshire: A 70-day season may be held Statewide between October 1 and February 15, with a 3-bird daily bag limit.

New Jersey:

AP Zone: A 50-day season may be held between the fourth Saturday in October (October 22) and February 5, with a 3-bird daily bag limit.

RP Zone: An 80-day season may be held between the fourth Saturday in October (October 22) and February 15, with a 5-bird daily bag limit. The season may be split into 3 segments.

Special Late Goose Season Area: A special season may be held in designated areas of North and South New Jersey from January 15 to February 15, with a 5-bird daily bag limit.

New York:

NAP Zone: Between October 1 and February 15, a 70-day season may be held, with a 3-bird daily bag limit in both the High Harvest and Low Harvest areas.

AP Zone: A 50-day season may be held between the fourth Saturday in October (October 22), except in the Lake Champlain Area where the opening date is October 10, through February 5, with a 3-bird daily bag limit.

Western Long Island RP Zone: A 107-day season may be held between the Saturday nearest September 24 (September 24) and March 10, with an 8-bird daily bag limit. The season may be split into 3 segments.

Rest of State RP Zone: An 80-day season may be held between the fourth Saturday in October (October 22) and March 10, with a 5-bird daily bag limit. The season may be split into 3 segments.

North Carolina:

SJBP Zone: A 70-day season may be held between October 1 and December 31, with a 5-bird daily bag limit.

RP Zone: An 80-day season may be held between October 1 and March 10, with a 5-bird daily bag limit. The season may be split into 3 segments.

Northeast Hunt Unit: A 14-day season may be held between the Saturday prior

to December 25 (December 24) and January 31, with a 1-bird daily bag limit.

Pennsylvania:

SJBP Zone: A 78-day season may be held between the first Saturday in October (October 1) and February 15, with a 3-bird daily bag limit.

RP Zone: An 80-day season may be held between the fourth Saturday in October (October 22) and March 10, with a 5-bird daily bag limit. The season may be split into 3 segments.

AP Zone: A 50-day season may be held between the fourth Saturday in October (October 22) and February 5, with a 3-bird daily bag limit.

Rhode Island: A 70-day season may be held between October 1 and February 15, with a 3-bird daily bag limit. A special late season may be held in designated areas from January 15 to February 15, with a 5-bird daily bag limit.

South Carolina: In designated areas, an 80-day season may be held between October 1 and March 10, with a 5-bird daily bag limit. The season may be split into 3 segments.

Vermont:

Lake Champlain Zone and Interior Zone: A 50-day season may be held between October 10 and February 5 with a 3-bird daily bag limit.

Connecticut River Zone: A 70-day season may be held between October 1 and February 15, with a 3-bird daily bag limit.

Virginia:

SJBP Zone: A 40-day season may be held between November 15 and January 14, with a 3-bird daily bag limit. Additionally, a special late season may be held between January 15 and February 15, with a 5-bird daily bag limit.

AP Zone: A 50-day season may be held between November 15 and February 5, with a 2-bird daily bag limit.

RP Zone: An 80-day season may be held between November 15 and March 10, with a 5-bird daily bag limit. The season may be split into 3 segments.

West Virginia: An 80-day season may be held between October 1 and March 10, with a 5-bird daily bag limit. The season may be split into 3 segments in each zone.

Light Geese

Season Lengths, Outside Dates, and Limits: States may select a 107-day season between October 1 and March 10, with a 25-bird daily bag limit and no possession limit. States may split their seasons into three segments.

Brant

Season Lengths, Outside Dates, and Limits: States may select a 60-day season between the Saturday nearest September 24 (September 24) and January 31, with a 2-bird daily bag limit.

Mississippi Flyway

Ducks, Mergansers, and Coots

Outside Dates: Between the Saturday nearest September 24 (September 24) and the last Sunday in January (January 29).

Hunting Seasons and Duck Limits: The season may not exceed 60 days, with a daily bag limit of 6 ducks, including no more than 4 mallards (no more than 2 of which may be females), 1 mottled duck, 1 black duck, 2 pintails, 3 wood ducks, 2 canvasbacks, 3 scaup, and 2 redheads.

Merganser Limits: The daily bag limit is 5, only 2 of which may be hooded mergansers. In States that include mergansers in the duck bag limit, the daily limit is the same as the duck bag limit, only 2 of which may be hooded mergansers.

Coot Limits: The daily bag limit is 15 coots.

Zoning and Split Seasons: Illinois, Indiana, Iowa, Kentucky, Louisiana, Michigan, Minnesota, Missouri, Ohio, Tennessee, and Wisconsin may select hunting seasons by zones.

In Indiana, Iowa, Kentucky, Louisiana, Michigan, Minnesota, Missouri, Ohio, Tennessee, and Wisconsin, the season may be split into two segments in each zone.

In Alabama, Arkansas and Mississippi, the season may be split into three segments.

Geese

Season Lengths, Outside Dates, and Limits

Canada Geese: States may select seasons for Canada geese not to exceed 107 days with a 5-bird daily bag limit September 1–30 (except in the Intensive Harvest Zone in Minnesota, which may have up to a 10-bird daily bag limit) and a 3-bird daily bag limit for the remainder of the season. Seasons may be held between September 1 and February 15 and may be split into 4 segments.

White-fronted Geese and Brant: Arkansas, Illinois, Louisiana, Kentucky, Missouri, Mississippi, and Tennessee may select a season for white-fronted geese not to exceed 74 days with 3 geese daily, or 88 days with 2 geese daily, or 107 days with 1 goose daily between September 1 and February 15; Alabama, Iowa, Indiana, Michigan, Minnesota, Ohio, and Wisconsin may select a season for white-fronted geese not to exceed 107 days with 5 geese daily, in aggregate with dark geese between September 1 and February 15. States may select a season for brant not to exceed 70 days with 2 brant daily, or 107 days with 1 brant daily with outside dates the same as for Canada geese; alternately, States may include brant in an aggregate goose bag limit with either Canada geese, white-fronted geese, or dark geese.

Light Geese: States may select seasons for light geese not to exceed 107 days, with 20 geese daily between the September 1 and February 15. There is no possession limit for light geese.

Shooting Hours: One-half hour before sunrise to sunset, except that during September 1–15 shooting hours may extend to one-half hour after sunset for Canada geese if all other waterfowl and crane seasons are closed in the specific applicable area.

Split Seasons: Seasons for geese may be split into three segments unless otherwise indicated.

Central Flyway

Ducks, Mergansers, and Coots

Outside Dates: Between the Saturday nearest September 24 (September 24) and the last Sunday in January (January 29).

Hunting Seasons

High Plains Mallard Management Unit (roughly defined as that portion of the Central Flyway that lies west of the 100th meridian): 97 days. The last 23 days must run consecutively and may start no earlier than the Saturday nearest December 10 (December 10).

Remainder of the Central Flyway: 74 days.

Duck Limits: The daily bag limit is 6 ducks, with species and sex restrictions as follows: 5 mallards (no more than 2 of which may be females), 3 scaup, 2 redheads, 3 wood ducks, 2 pintails, and 2 canvasbacks. In Texas, the daily bag limit on mottled ducks is 1, except that no mottled ducks may be taken during the first 5 days of the season. In addition to the daily limits listed above, the States of Montana, North Dakota, South Dakota, and Wyoming, in lieu of selecting an experimental September teal season, may include an additional daily bag and possession limit of 2 and 6 blue-winged teal, respectively, during the first 16 days of the regular duck season in each respective duck hunting zone. These extra limits are in addition to the regular duck bag and possession limits.

Merganser Limits: The daily bag limit is 5 mergansers, only 2 of which may be hooded mergansers. In States that include mergansers in the duck daily bag limit, the daily limit may be the

same as the duck bag limit, only two of which may be hooded mergansers.

Coot Limits: The daily bag limit is 15 coots.

Zoning and Split Seasons: Colorado, Kansas (Low Plains portion), Montana, Nebraska, New Mexico, Oklahoma (Low Plains portion), South Dakota (Low Plains portion), Texas (Low Plains portion), and Wyoming may select hunting seasons by zones.

In Colorado, Kansas, Montana, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming, the regular season may be split into two segments.

Geese

Special Early Canada Goose Seasons

In Kansas, Nebraska, Oklahoma, South Dakota, and Texas, Canada goose seasons of up to 30 days during September 1–30 may be selected. In Colorado, New Mexico, North Dakota, Montana, and Wyoming, Canada goose seasons of up to 15 days during September 1–15 may be selected. The daily bag limit may not exceed 5 Canada geese, except in Kansas, Nebraska, and Oklahoma, where the daily bag limit may not exceed 8 Canada geese and in North Dakota and South Dakota, where the daily bag limit may not exceed 15 Canada geese. Areas open to the hunting of Canada geese must be described, delineated, and designated as such in each State's hunting regulations.

Shooting Hours: One-half hour before sunrise to sunset, except that during September 1–15 shooting hours may extend to one-half hour after sunset if all other waterfowl and crane seasons are closed in the specific applicable area.

Regular Goose Seasons

Split Seasons: Seasons for geese may be split into three segments. Three-way split seasons for Canada geese require Central Flyway Council and U.S. Fish and Wildlife Service approval, and a 3-year evaluation by each participating State.

Outside Dates: For dark geese, seasons may be selected between the outside dates of the Saturday nearest September 24 (September 24) and the Sunday nearest February 15 (February 12). For light geese, outside dates for seasons may be selected between the Saturday nearest September 24 (September 24) and March 10. In the Rainwater Basin Light Goose Area (East and West) of Nebraska, temporal and spatial restrictions that are consistent with the late-winter snow goose hunting strategy cooperatively developed by the Central Flyway Council and the Service are required.

Season Lengths and Limits

Light Geese: States may select a light goose season not to exceed 107 days. The daily bag limit for light geese is 50 with no possession limit.

Dark Geese: In Kansas, Nebraska, North Dakota, Oklahoma, South Dakota, and the Eastern Goose Zone of Texas, States may select a season for Canada geese (or any other dark goose species except white-fronted geese) not to exceed 107 days with a daily bag limit of 8. For white-fronted geese, these States may select either a season of 74 days with a bag limit of 3, or an 88-day season with a bag limit of 2, or a season of 107 days with a bag limit of 1.

In Colorado, Montana, New Mexico, and Wyoming, States may select seasons not to exceed 107 days. The daily bag limit for dark geese is 5 in the aggregate.

In the Western Goose Zone of Texas, the season may not exceed 95 days. The daily bag limit for Canada geese (or any other dark goose species except white-fronted geese) is 5. The daily bag limit for white-fronted geese is 2.

Pacific Flyway

Ducks, Mergansers, and Coots

Outside Dates: Between the Saturday nearest September 24 (September 24) and the last Sunday in January (January 29).

Hunting Seasons and Duck and Merganser Limits: 107 days. The daily bag limit is 7 ducks and mergansers, including no more than 2 female mallards, 2 pintails, 2 canvasbacks, 3 scaup, and 2 redheads. For scaup, the season length is 86 days, which may be split according to applicable zones and split duck hunting configurations approved for each State.

Coot, Common Moorhen, and Purple Gallinule Limits: The daily bag limit of coots, common moorhens, and purple gallinules is 25, singly or in the aggregate.

Zoning and Split Seasons: Arizona, California, Colorado, Idaho, Nevada, Oregon, Utah, Washington, and Wyoming may select hunting seasons by zones and may split their seasons into two segments.

Montana and New Mexico may split their seasons into three segments.

Colorado River Zone, California: Seasons and limits should be the same as seasons and limits selected in the adjacent portion of Arizona (South Zone).

Geese

Special Early Canada Goose Seasons

A Canada goose season of up to 15 days during September 1–20 may be selected. The daily bag limit may not exceed 5 Canada geese, except in Pacific County, Washington, where the daily bag limit may not exceed 15 Canada geese. Areas open to hunting of Canada geese in each State must be described, delineated, and designated as such in each State's hunting regulations.

Regular Goose Seasons

Season Lengths, Outside Dates, and Limits

Canada geese and brant: Except as subsequently noted, 107-day seasons may be selected with outside dates between the Saturday nearest September 24 (September 24) and the last Sunday in January (January 29). In Arizona, Colorado, Idaho, Montana, Nevada, and Utah, the daily bag limit is 4 Canada geese and brant in the aggregate. In New Mexico and Wyoming, the daily bag limit is 3 Canada geese and brant in the aggregate. In California, Oregon, and Washington, the daily bag limit is 4 Canada geese. For brant, Oregon and Washington may select a 16-day season and California a 37-day season. Days must be consecutive. Washington and California may select hunting seasons for up to two zones. The daily bag limit is 2 brant and is in addition to other goose limits. In Oregon and California, the brant season must end no later than December 15.

White-fronted geese: Except as subsequently noted, 107-day seasons may be selected with outside dates between the Saturday nearest September 24 (September 24) and March 10. The daily bag limit is 10.

Light geese: Except as subsequently noted, 107-day seasons may be selected with outside dates between the Saturday nearest September 24 (September 24) and March 10. The daily bag limit is 20.

Split Seasons: Unless otherwise specified, seasons for geese may be split into up to 3 segments. Three-way split seasons for Canada geese and white-fronted geese require Pacific Flyway Council and U.S. Fish and Wildlife Service approval and a 3-year evaluation by each participating State.

California: The daily bag limit for Canada geese is 10.

Balance of State Zone: A Canada goose season may be selected with outside dates between the Saturday nearest September 24 (September 24) and March 10. In the Sacramento Valley Special Management Area, the season on white-fronted geese must end on or before December 28, and the daily bag limit is 3 white-fronted geese. In the North Coast Special Management Area, hunting days that occur after the last Sunday in January (January 29) should be concurrent with Oregon's South Coast Zone.

Idaho:

Zone 2: Idaho will continue to monitor the snow goose hunt that occurs after the last Sunday in January (January 29) in the American Falls Reservoir/Fort Hall Bottoms and surrounding areas at 3-year intervals.

Oregon: The daily bag limit for light geese is 6 on or before the last Sunday in January (January 29).

Harney and Lake County Zone: For Lake County only, the daily white-fronted goose bag limit is 1.

Northwest Permit Zone: A Canada goose season may be selected with outside dates between the Saturday nearest September 24 (September 24) and March 10. Goose seasons may be split into 3 segments. The daily bag limit of light geese is 6. In the Tillamook County Management Area, the hunting season is closed on geese.

South Coast Zone: A Canada goose season may be selected with outside dates between the Saturday nearest September 24 (September 24) and March 10. The daily bag limit of Canada geese is 6. Hunting days that occur after the last Sunday in January (January 29) should be concurrent with California's North Coast Special Management Area. Goose seasons may be split into 3 segments.

Utah: A Canada goose and brant season may be selected in the Wasatch Front and Washington County Zones with outside dates between the Saturday nearest September 24 (September 24) and the first Sunday in February (February 5).

Washington: The daily bag limit is 4 geese.

Area 1: Goose season outside dates are between the Saturday nearest September 24 (September 24) and the last Sunday in January (January 29).

Areas 2A and 2B (Southwest Permit Zone): A Canada goose season may be selected with outside dates between the Saturday nearest September 24 (September 24) and March 10. Goose seasons may be split into 3 segments.

Area 4: Goose seasons may be split into 3 segments.

Permit Zones

In Oregon and Washington permit zones, the hunting season is closed on dusky Canada geese. A dusky Canada goose is any dark-breasted Canada goose (Munsell 10 YR color value five or less) with a bill length between 40 and 50 millimeters. Hunting of geese will only be by hunters possessing a State-issued permit authorizing them to do so. Shooting hours for geese may begin no earlier than sunrise. Regular Canada goose seasons in the permit zones of Oregon and Washington remain subject to the Memorandum of Understanding entered into with the Service regarding monitoring the impacts of take during the regular Canada goose season on the dusky Canada goose population.

Swans

In portions of the Pacific Flyway (Montana, Nevada, and Utah), an open season for taking a limited number of swans may be selected. Permits will be issued by the State and will authorize each permittee to take no more than 1 swan per season with each permit. Nevada may issue up to 2 permits per hunter. Montana and Utah may issue only 1 permit per hunter. Each State's season may open no earlier than the Saturday nearest October 1 (October 1). These seasons are also subject to the following conditions:

Montana: No more than 500 permits may be issued. The season must end no later than December 1. The State must implement a harvest-monitoring program to measure the species composition of the swan harvest and should use appropriate measures to maximize hunter compliance in reporting bill measurement and color information.

Utah: No more than 2,000 permits may be issued. During the swan season, no more than 10 trumpeter swans may be taken. The season must end no later than the second Sunday in December (December 11) or upon attainment of 10 trumpeter swans in the harvest, whichever occurs earliest. The Utah season remains subject to the terms of the Memorandum of Agreement entered into with the Service in August 2003, regarding harvest monitoring, season closure procedures, and education requirements to minimize the take of trumpeter swans during the swan season.

Nevada: No more than 650 permits may be issued. During the swan season, no more than 5 trumpeter swans may be taken. The season must end no later than the Sunday following January 1 (January 8) or upon attainment of 5 trumpeter swans in the harvest, whichever occurs earliest.

In addition, the States of Utah and Nevada must implement a harvest-monitoring program to measure the species composition of the swan harvest. The harvest-monitoring program must require that all harvested swans or their species-determinant parts be examined by either State or Federal biologists for the purpose of species classification. The States should use appropriate measures to maximize hunter compliance in providing bagged swans for examination. Further, the States of Montana, Nevada, and Utah must achieve at least an 80-percent hunter compliance rate, or subsequent permits will be reduced by 10 percent. All three States must provide to the Service by June 30, 2017, a report detailing harvest, hunter participation, reporting compliance, and monitoring of swan populations in the designated hunt areas.

Tundra Swans

In portions of the Atlantic Flyway (North Carolina and Virginia) and the Central Flyway (North Dakota, South Dakota [east of the Missouri River], and that portion of Montana in the Central Flyway), an open season for taking a limited number of tundra swans may be selected. Permits will be issued by the States that authorize the take of no more than 1 tundra swan per permit. A second permit may be issued to hunters from unused permits remaining after the first drawing. The States must obtain harvest and hunter participation data. These seasons are also subject to the following conditions:

In the Atlantic Flyway:

—The season may be 90 days, between October 1 and January 31.

—In North Carolina, no more than 5,000 permits may be issued.

—In Virginia, no more than 600 permits may be issued.

In the Central Flyway:

—The season may be 107 days, between the Saturday nearest October 1 (October 1) and January 31.

—In the Central Flyway portion of Montana, no more than 500 permits may be issued.

—In North Dakota, no more than 2,200 permits may be issued.

—In South Dakota, no more than 1,300 permits may be issued.

Sandhill Cranes

Regular Seasons in the Mississippi Flyway

Outside Dates: Between September 1 and February 28 in Minnesota, and between September 1 and January 31 in Kentucky.

Hunting Seasons: A season not to exceed 37 consecutive days may be selected in the designated portion of northwestern Minnesota (Northwest Goose Zone), and a season not to exceed 60 consecutive days, in Kentucky.

Daily Bag Limit: 2 sandhill cranes. In Kentucky, the seasonal bag limit is 3 sandhill cranes.

Permits: Each person participating in the regular sandhill crane seasons must have a valid Federal or State sandhill crane hunting permit.

Other Provisions: The number of permits (where applicable), open areas,

season dates, protection plans for other species, and other provisions of seasons must be consistent with the management plans and approved by the Mississippi Flyway Council.

Experimental Season in the Mississippi Flyway

Outside Dates: Between September 1 and January 31.

Hunting Seasons: A season not to exceed 60 consecutive days may be selected in Tennessee.

Bag Limit: Not to exceed 3 daily and 3 per season in Tennessee.

Permits: Each person participating in the regular sandhill crane season must have a valid Federal or State sandhill crane hunting permit.

Other Provisions: Numbers of permits, open areas, season dates, protection plans for other species, and other provisions of seasons must be consistent with the management plan and approved by the Mississippi Flyway Council.

Regular Seasons in the Central Flyway

Outside Dates: Between September 1 and February 28.

Hunting Seasons: Seasons not to exceed 37 consecutive days may be selected in designated portions of Texas (Area 2). Seasons not to exceed 58 consecutive days may be selected in designated portions of the following States: Colorado, Kansas, Montana, North Dakota, South Dakota, and Wyoming. Seasons not to exceed 93 consecutive days may be selected in designated portions of the following States: New Mexico, Oklahoma, and Texas.

Daily Bag Limits: 3 sandhill cranes, except 2 sandhill cranes in designated portions of North Dakota (Area 2) and Texas (Area 2).

Permits: Each person participating in the regular sandhill crane season must have a valid Federal or State sandhill crane hunting permit.

Special Seasons in the Central and Pacific Flyways

Arizona, Colorado, Idaho, Montana, New Mexico, Utah, and Wyoming may select seasons for hunting sandhill cranes within the range of the Rocky Mountain Population (RMP) subject to the following conditions:

Outside Dates: Between September 1 and January 31.

Hunting Seasons: The season in any State or zone may not exceed 30 consecutive days.

Bag limits: Not to exceed 3 daily and 9 per season.

Permits: Participants must have a valid permit, issued by the appropriate State, in their possession while hunting.

Other Provisions: Numbers of permits, open areas, season dates, protection plans for other species, and other provisions of seasons must be consistent with the management plan and approved by the Central and Pacific Flyway Councils, with the following exceptions:

A. In Utah, 100 percent of the harvest will be assigned to the RMP quota;

B. In Arizona, monitoring the racial composition of the harvest must be conducted at 3-year intervals;

C. In Idaho, 100 percent of the harvest will be assigned to the RMP quota; and

D. In New Mexico, the season in the Estancia Valley is experimental, with a requirement to monitor the level and racial composition of the harvest; greater sandhill cranes in the harvest will be assigned to the RMP quota.

Common Moorhens and Purple Gallinules

Outside Dates: Between September 1 and the last Sunday in January (January 29) in the Atlantic, Mississippi, and Central Flyways. States in the Pacific Flyway have been allowed to select their hunting seasons between the outside dates for the season on ducks, mergansers, and coots; therefore, frameworks for common moorhens and purple gallinules are included with the duck, merganser, and coot frameworks.

Hunting Seasons and Daily Bag Limits: Seasons may not exceed 70 days in the Atlantic, Mississippi, and Central Flyways. Seasons may be split into 2 segments. The daily bag limit is 15 common moorhens and purple gallinules, singly or in the aggregate of the two species.

Zoning: Seasons may be selected by zones established for duck hunting.

Rails

Outside Dates: States included herein may select seasons between September 1 and the last Sunday in January (January 29) on clapper, king, sora, and Virginia rails.

Hunting Seasons: Seasons may not exceed 70 days, and may be split into 2 segments.

Daily Bag Limits

Clapper and King Rails: In Connecticut, Delaware, Maryland, New Jersey, and Rhode Island, 10, singly or in the aggregate of the two species. In Alabama, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Texas, and Virginia, 15, singly or in the aggregate of the two species.

Sora and Virginia Rails: In the Atlantic, Mississippi, and Central Flyways and the Pacific Flyway portions of Colorado, Montana, New Mexico, and Wyoming, 25 rails, singly or in the aggregate of the two species. The season is closed in the remainder of the Pacific Flyway.

Snipe

Outside Dates: Between September 1 and February 28, except in Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Vermont, and Virginia, where the season must end no later than January 31.

Hunting Seasons and Daily Bag Limits: Seasons may not exceed 107 days and may be split into two segments. The daily bag limit is 8 snipe.

Zoning: Seasons may be selected by zones established for duck hunting.

American Woodcock

Outside Dates: States in the Eastern Management Region may select hunting seasons between October 1 and January 31. States in the Central Management Region may select hunting seasons between the Saturday nearest September 22 (September 24) and January 31.

Hunting Seasons and Daily Bag Limits: Seasons may not exceed 45 days in the Eastern and Central Regions. The daily bag limit is 3. Seasons may be split into two segments.

Zoning: New Jersey may select seasons in each of two zones. The season in each zone may not exceed 36 days.

Band-Tailed Pigeons

Pacific Coast States (California, Oregon, Washington, and Nevada)

Outside Dates: Between September 15 and January 1.

Hunting Seasons and Daily Bag Limits: Not more than 9 consecutive days, with a daily bag limit of 2.

Zoning: California may select hunting seasons not to exceed 9 consecutive days in each of two zones. The season in the North Zone must close by October 3.

Four-Corners States (Arizona, Colorado, New Mexico, and Utah)

Outside Dates: Between September 1 and November 30.

Hunting Seasons and Daily Bag Limits: Not more than 14 consecutive days, with a daily bag limit of 2.

Zoning: New Mexico may select hunting seasons not to exceed 14 consecutive days in each of two zones. The season in the South Zone may not open until October 1.

Doves

Outside Dates: Between September 1 and January 15, except as otherwise

provided, States may select hunting seasons and daily bag limits as follows:

Eastern Management Unit

Hunting Seasons and Daily Bag Limits: Not more than 90 days, with a daily bag limit of 15 mourning and white-winged doves in the aggregate.

Zoning and Split Seasons: States may select hunting seasons in each of two zones. The season within each zone may be split into not more than three periods. Regulations for bag and possession limits, season length, and shooting hours must be uniform within specific hunting zones.

Central Management Unit

For all States except Texas:

Hunting Seasons and Daily Bag Limits: Not more than 90 days, with a daily bag limit of 15 mourning and white-winged doves in the aggregate.

Zoning and Split Seasons: States may select hunting seasons in each of two zones. The season within each zone may be split into not more than three periods.

Texas

Hunting Seasons and Daily Bag Limits: Not more than 90 days, with a daily bag limit of 15 mourning, white-winged, and white-tipped doves in the aggregate, of which no more than 2 may be white-tipped doves.

Zoning and Split Seasons: Texas may select hunting seasons for each of three zones subject to the following conditions:

A. The hunting season may be split into not more than two periods, except in that portion of Texas in which the special white-winged dove season is allowed, where a limited take of mourning and white-tipped doves may also occur during that special season (see Special White-Winged Dove Area).

B. A season may be selected for the North and Central Zones between September 1 and January 25; and for the South Zone between the Friday nearest September 20 (September 23), but not earlier than September 17, and January 25.

C. Except as noted above, regulations for bag and possession limits, season length, and shooting hours must be uniform within each hunting zone.

Special White-Winged Dove Area in Texas: In addition, Texas may select a hunting season of not more than 4 days for the Special White-Winged Dove Area of the South Zone between September 1 and September 19. The daily bag limit may not exceed 15 white-winged, mourning, and white-tipped doves in the aggregate, of which no more than 2 may be mourning doves and no more than 2 may be white-tipped doves.

Western Management Unit

Hunting Seasons and Daily Bag Limits

Idaho, Nevada, Oregon, Utah, and *Washington:* Not more than 60 consecutive days, with a daily bag limit of 15 mourning and white-winged doves in the aggregate.

Arizona and *California:* Not more than 60 days, which may be split between two periods, September 1–15 and November 1–January 15. In Arizona, during the first segment of the season, the daily bag limit is 15 mourning and white-winged doves in the aggregate, of which no more than 10 could be white-winged doves. During the remainder of the season, the daily bag limit is 15 mourning doves. In California, the daily bag limit is 15 mourning and white-winged doves in the aggregate, of which no more than 10 could be white-winged doves.

Alaska

Outside Dates: Between September 1 and January 26.

Hunting Seasons: Alaska may select 107 consecutive days for waterfowl, sandhill cranes, and common snipe in each of 5 zones. The season may be split without penalty in the Kodiak Zone. The seasons in each zone must be concurrent.

Closures: The hunting season is closed on emperor geese, spectacled eiders, and Steller's eiders.

Daily Bag and Possession Limits

Ducks: Except as noted, a basic daily bag limit of 7 ducks. Daily bag limits in the North Zone are 10, and in the Gulf Coast Zone, they are 8. The basic limits may include no more than 1 canvasback daily and may not include sea ducks.

In addition to the basic duck limits, Alaska may select sea duck limits of 10 daily, singly or in the aggregate, including no more than 6 each of either harlequin or long-tailed ducks. Sea ducks include scoters, common and king eiders, harlequin ducks, long-tailed ducks, and common and red-breasted mergansers.

Light Geese: The daily bag limit is 6.

Canada Geese: The daily bag limit is 4 with the following exceptions:

A. In Units 5 and 6, the taking of Canada geese is permitted from September 28 through December 16.

B. On Middleton Island in Unit 6, a special, permit-only Canada goose season may be offered. A mandatory goose identification class is required. Hunters must check in and check out. The bag limit is 1 daily and 1 in possession. The season will close if incidental harvest includes 5 dusky Canada geese. A dusky Canada goose is any dark-breasted Canada goose (Munsell 10 YR color value five or less) with a bill length between 40 and 50 millimeters.

C. In Units 9, 10, 17, and 18, the daily bag limit is 6 Canada geese.

White-fronted Geese: The daily bag limit is 4 with the following exceptions:

A. In Units 9, 10, and 17, the daily bag limit is 6 white-fronted geese.

B. In Unit 18, the daily bag limit is 10 white-fronted geese.

Brant: The daily bag limit is 3.

Snipe: The daily bag limit is 8.

Sandhill cranes: The daily bag limit is 2 in the Southeast, Gulf Coast, Kodiak, and Aleutian Zones, and Unit 17 in the North Zone. In the remainder of the North Zone (outside Unit 17), the daily bag limit is 3.

Tundra Swans: Open seasons for tundra swans may be selected subject to the following conditions:

A. All seasons are by registration permit only.

B. All season framework dates are September 1–October 31.

C. In Unit 17, no more than 200 permits may be issued during this operational season. No more than 3 tundra swans may be authorized per permit, with no more than 1 permit issued per hunter per season.

D. In Unit 18, no more than 500 permits may be issued during the operational season. No more than 3 tundra swans may be authorized per permit. No more than 1 permit may be issued per hunter per season.

E. In Unit 22, no more than 300 permits may be issued during the operational season. No more than 3 tundra swans may be authorized per permit. No more than 1 permit may be issued per hunter per season.

F. In Unit 23, no more than 300 permits may be issued during the operational season. No more than 3 tundra swans may be authorized per permit. No more than 1 permit may be issued per hunter per season.

Hawaii

Outside Dates: Between October 1 and January 31.

Hunting Seasons: Not more than 65 days (75 under the alternative) for mourning doves.

Bag Limits: Not to exceed 15 (12 under the alternative) mourning doves.

Note: Mourning doves may be taken in Hawaii in accordance with shooting hours and other regulations set by the State of Hawaii, and subject to the applicable provisions of 50 CFR part 20.

Puerto Rico

Doves and Pigeons

Outside Dates: Between September 1 and January 15.

Hunting Seasons: Not more than 60 days.

Daily Bag and Possession Limits: Not to exceed 20 Zenaida, mourning, and white-winged doves in the aggregate, of which not more than 10 may be Zenaida doves and 3 may be mourning doves. Not to exceed 5 scaly-naped pigeons.

Closed Seasons: The season is closed on the white-crowned pigeon and the plain pigeon, which are protected by the Commonwealth of Puerto Rico.

Closed Areas: There is no open season on doves or pigeons in the following areas: Municipality of Culebra, Desecheo Island, Mona Island, El Verde Closure Area, and Cidra Municipality and adjacent areas.

Ducks, Coots, Moorhens, Gallinules, and Snipe

Outside Dates: Between October 1 and January 31.

Hunting Seasons: Not more than 55 days may be selected for hunting ducks, common moorhens, and common snipe. The season may be split into two segments.

Daily Bag Limits

Ducks: Not to exceed 6.

Common moorhens: Not to exceed 6.

Common snipe: Not to exceed 8.

Closed Seasons: The season is closed on the ruddy duck, white-cheeked pintail, West Indian whistling duck, fulvous whistling duck, and masked duck, which are protected by the Commonwealth of Puerto Rico. The season also is closed on the purple gallinule, American coot, and Caribbean coot.

Closed Areas: There is no open season on ducks, common moorhens, and common snipe in the Municipality of Culebra and on Desecheo Island.

Virgin Islands

Doves and Pigeons

Outside Dates: Between September 1 and January 15.

Hunting Seasons: Not more than 60 days for Zenaida doves.

Daily Bag and Possession Limits: Not to exceed 10 Zenaida doves.

Closed Seasons: No open season is prescribed for ground or quail doves or pigeons.

Closed Areas: There is no open season for migratory game birds on Ruth Cay (just south of St. Croix).

Local Names for Certain Birds: Zenaida dove, also known as mountain dove; bridled quail-dove, also known as Barbary dove or partridge; common ground-dove, also known as stone dove, tobacco dove, rola, or tortolita; scaly-naped pigeon, also known as red-necked or scaled pigeon.

Ducks

Outside Dates: Between December 1 and January 31.

Hunting Seasons: Not more than 55 consecutive days.

Daily Bag Limits: Not to exceed 6.

Closed Seasons: The season is closed on the ruddy duck, white-cheeked pintail, West Indian whistling duck, fulvous whistling duck, and masked duck.

Special Falconry Regulations

Falconry is a permitted means of taking migratory game birds in any State meeting Federal falconry standards in 50 CFR 21.29. These States may select an extended season for taking migratory game birds in accordance with the following:

Extended Seasons: For all hunting methods combined, the combined length of the extended season, regular season, and any special or experimental seasons must not exceed 107 days for any species or group of species in a geographical area. Each extended season may be divided into a maximum of 3 segments.

Framework Dates: Seasons must fall between September 1 and March 10.

Daily Bag Limits: Falconry daily bag limits for all permitted migratory game birds must not exceed 3 birds, singly or in the aggregate, during extended falconry seasons, any special or experimental seasons, and regular hunting seasons in all States, including those that do not select an extended falconry season.

Regular Seasons: General hunting regulations, including seasons and hunting hours, apply to falconry in each State listed in 50 CFR 21.29. Regular season bag limits do not apply to falconry. The falconry bag limit is not in addition to gun limits.

Area, Unit, and Zone Descriptions

Ducks (Including Mergansers) and Coots

Atlantic Flyway

Connecticut

North Zone: That portion of the State north of I–95.

South Zone: Remainder of the State.

Maine

North Zone: That portion north of the line extending east along Maine State Highway 110 from the New Hampshire-Maine State line to the intersection of Maine State Highway 11 in Newfield; then north and east along Route 11 to the intersection of U.S. Route 202 in Auburn; then north and east on Route 202 to the intersection of I–95 in Augusta; then north and east along I–95 to Route 15 in Bangor; then east along Route 15 to Route 9; then east along Route 9 to Stony Brook in Baileyville; then east along Stony Brook to the United States border.

Coastal Zone: That portion south of a line extending east from the Maine–New Brunswick border in Calais at the Route 1 Bridge; then south along Route 1 to the Maine–New Hampshire border in Kittery.

South Zone: Remainder of the State.

Maryland

Special Teal Season Area: Calvert, Caroline, Cecil, Dorchester, Harford, Kent, Queen Anne's, St. Mary's, Somerset, Talbot, Wicomico, and Worcester Counties; that part of Anne Arundel County east of Interstate 895, Interstate 97, and Route 3; that part of Prince George's County east of Route 3 and Route 301; and that part of Charles County east of Route 301 to the Virginia State Line.

Massachusetts

Western Zone: That portion of the State west of a line extending south from the Vermont State line on I–91 to MA 9, west on MA 9 to MA 10, south on MA 10 to U.S. 202, south on U.S. 202 to the Connecticut State line.

Central Zone: That portion of the State east of the Berkshire Zone and west of a line extending south from the New Hampshire State line on I–95 to U.S. 1, south on U.S. 1 to I–93, south on I–93 to MA 3, south on MA 3 to U.S. 6, west on U.S. 6 to MA 28, west on MA 28 to I–195, west to the Rhode Island State line; except the waters, and the lands 150 yards inland from the high-water mark, of the Assonet River upstream to the MA 24 bridge, and the Taunton River upstream to the Center St.-Elm St. bridge shall be in the Coastal Zone.

Coastal Zone: That portion of Massachusetts east and south of the Central Zone.

New Hampshire

Northern Zone: That portion of the State east and north of the Inland Zone beginning at the Jct. of Rte. 10 and Rte. 25–A in Orford, east on Rte. 25A to Rte. 25 in Wentworth, southeast on Rte. 25 to Exit 26 of Rte. I–93 in Plymouth, south on Rte. I–93 to Rte. 3 at Exit 24 of Rte. I–93 in Ashland, northeast on Rte. 3 to Rte. 113 in Holderness, north on Rte. 113 to Rte. 113–A in Sandwich,

north on Rte. 113–A to Rte. 113 in Tamworth, east on Rte. 113 to Rte. 16 in Chocorua, north on Rte. 16 to Rte. 302 in Conway, east on Rte. 302 to the Maine–New Hampshire border.

Inland Zone: That portion of the State south and west of the Northern Zone, west of the Coastal Zone, and includes the area of Vermont and New Hampshire as described for hunting reciprocity. A person holding a New Hampshire hunting license that allows the taking of migratory waterfowl or a person holding a Vermont resident hunting license that allows the taking of migratory waterfowl may take migratory waterfowl and coots from the following designated area of the Inland Zone: The State of Vermont east of Rte. I–91 at the Massachusetts border, north on Rte. I–91 to Rte. 2, north on Rte. 2 to Rte. 102, north on Rte. 102 to Rte. 253, and north on Rte. 253 to the border with Canada and the area of New Hampshire west of Rte. 63 at the Massachusetts border, north on Rte. 63 to Rte. 12, north on Rte. 12 to Rte. 12–A, north on Rte. 12–A to Rte 10, north on Rte. 10 to Rte. 135, north on Rte. 135 to Rte. 3, north on Rte. 3 to the intersection with the Connecticut River.

Coastal Zone: That portion of the State east of a line beginning at the Maine–New Hampshire border in Rollinsford, then extending to Rte. 4 west to the city of Dover, south to the intersection of Rte. 108, south along Rte. 108 through Madbury, Durham, and Newmarket to the junction of Rte. 85 in Newfields, south to Rte. 101 in Exeter, east to Interstate 95 (New Hampshire Turnpike) in Hampton, and south to the Massachusetts border.

New Jersey

Coastal Zone: That portion of the State seaward of a line beginning at the New York State line in Raritan Bay and extending west along the New York State line to NJ 440 at Perth Amboy; west on NJ 440 to the Garden State Parkway; south on the Garden State Parkway to the shoreline at Cape May and continuing to the Delaware State line in Delaware Bay.

North Zone: That portion of the State west of the Coastal Zone and north of a line extending west from the Garden State Parkway on NJ 70 to the New Jersey Turnpike, north on the turnpike to U.S. 206, north on U.S. 206 to U.S. 1 at Trenton, west on U.S. 1 to the Pennsylvania State line in the Delaware River.

South Zone: That portion of the State not within the North Zone or the Coastal Zone.

New York

Lake Champlain Zone: That area east and north of a continuous line extending along U.S. 11 from the New York–Canada International boundary south to NY 9B, south along NY 9B to U.S. 9, south along U.S. 9 to NY 22 south of Keesville; south along NY 22 to the west shore of South Bay, along and around the shoreline of South Bay to NY 22 on the east shore of South Bay; southeast along NY 22 to U.S. 4, northeast along U.S. 4 to the Vermont State line.

Long Island Zone: That area consisting of Nassau County, Suffolk County, that area of Westchester County southeast of I–95, and their tidal waters.

Western Zone: That area west of a line extending from Lake Ontario east along the north shore of the Salmon River to I–81, and south along I–81 to the Pennsylvania State line.

Northeastern Zone: That area north of a continuous line extending from Lake Ontario east along the north shore of the Salmon River to I–81, south along I–81 to NY 31, east along NY 31 to NY 13, north along NY 13 to NY 49, east along NY 49 to NY 365, east along NY 365 to NY 28, east along NY 28 to NY 29, east along NY 29 to NY 22, north along NY 22 to Washington County Route 153, east along CR 153 to the New York–Vermont boundary, exclusive of the Lake Champlain Zone.

Southeastern Zone: The remaining portion of New York.

Pennsylvania

Lake Erie Zone: The Lake Erie waters of Pennsylvania and a shoreline margin along Lake Erie from New York on the east to Ohio on the west extending 150 yards inland, but including all of Presque Isle Peninsula.

Northwest Zone: The area bounded on the north by the Lake Erie Zone and including all of Erie and Crawford Counties and those portions of Mercer and Venango Counties north of I–80.

North Zone: That portion of the State east of the Northwest Zone and north of a line extending east on I–80 to U.S. 220, Route 220 to I–180, I–180 to I–80, and I–80 to the Delaware River.

South Zone: The remaining portion of Pennsylvania.

Vermont

Lake Champlain Zone: The U.S. portion of Lake Champlain and that area north and west of the line extending from the New York border along U.S. 4 to VT 22A at Fair Haven; VT 22A to U.S. 7 at Vergennes; U.S. 7 to VT 78 at Swanton; VT 78 to VT 36; VT 36 to Maquam Bay on Lake Champlain; along and around the shoreline of Maquam Bay and Hog Island to VT 78 at the West Swanton Bridge; VT 78 to VT 2 in Alburg; VT 2 to the Richelieu River in Alburg; along the east shore of the Richelieu River to the Canadian border.

Interior Zone: That portion of Vermont east of the Lake Champlain Zone and west of a line extending from the Massachusetts border at Interstate 91; north along Interstate 91 to U.S. 2; east along U.S. 2 to VT 102; north along VT 102 to VT 253; north along VT 253 to the Canadian border.

Connecticut River Zone: The remaining portion of Vermont east of the Interior Zone.

Mississippi Flyway

Illinois

North Zone: That portion of the State north of a line extending west from the Indiana border along Peotone-Beecher Road to Illinois Route 50, south along Illinois Route 50 to Wilmington-Peotone Road, west along Wilmington-Peotone Road to Illinois Route 53, north along Illinois Route 53 to New River Road, northwest along New River Road to Interstate Highway 55, south along I–55 to Pine Bluff-Lorenzo Road, west along Pine Bluff-Lorenzo Road to Illinois Route 47, north along Illinois Route 47 to I–80, west along I–80 to I–39, south along I–39 to Illinois Route 18, west along Illinois Route 18 to Illinois Route 29, south along Illinois Route 29 to Illinois Route 17, west along Illinois Route 17 to the Mississippi River, and due south across the Mississippi River to the Iowa border.

Central Zone: That portion of the State south of the North Duck Zone line to a line extending west from the Indiana border along I–70 to Illinois Route 4, south along Illinois Route 4 to Illinois Route 161, west along Illinois Route 161 to Illinois Route 158, south and west along Illinois Route 158 to Illinois Route 159, south along Illinois Route 159 to Illinois Route 3, south along Illinois Route 3 to St. Leo's Road, south along St. Leo's Road to Modoc Road, west along Modoc Road to Modoc Ferry Road, southwest along Modoc Ferry Road to Levee Road, southeast along Levee Road to County Route 12 (Modoc Ferry entrance Road), south along County Route 12 to the Modoc Ferry route and southwest on the Modoc Ferry route across the Mississippi River to the Missouri border.

South Zone: That portion of the State south and east of a line extending west from the Indiana border along Interstate 70, south along U.S. Highway 45, to Illinois Route 13, west along Illinois Route 13 to Greenbriar Road, north on

Greenbriar Road to Sycamore Road, west on Sycamore Road to N. Reed Station Road, south on N. Reed Station Road to Illinois Route 13, west along Illinois Route 13 to Illinois Route 127, south along Illinois Route 127 to State Forest Road (1025 N), west along State Forest Road to Illinois Route 3, north along Illinois Route 3 to the south bank of the Big Muddy River, west along the south bank of the Big Muddy River to the Mississippi River, west across the Mississippi River to the Missouri border.

South Central Zone: The remainder of the State between the south border of the Central Zone and the North border of the South Zone.

Indiana

North Zone: That part of Indiana north of a line extending east from the Illinois border along State Road 18 to U.S. 31; north along U.S. 31 to U.S. 24; east along U.S. 24 to Huntington; southeast along U.S. 224; south along State Road 5; and east along State Road 124 to the Ohio border.

Central Zone: That part of Indiana south of the North Zone boundary and north of the South Zone boundary.

South Zone: That part of Indiana south of a line extending east from the Illinois border along U.S. 40; south along U.S. 41; east along State Road 58; south along State Road 37 to Bedford; and east along U.S. 50 to the Ohio border.

Iowa

North Zone: That portion of Iowa north of a line beginning on the South Dakota-Iowa border at Interstate 29, southeast along Interstate 29 to State Highway 175, east along State Highway 175 to State Highway 37, southeast along State Highway 37 to State Highway 183, northeast along State Highway 183 to State Highway 141, east along State Highway 141 to U.S. Highway 30, and along U.S. Highway 30 to the Illinois border.

Missouri River Zone: That portion of Iowa west of a line beginning on the South Dakota-Iowa border at Interstate 29, southeast along Interstate 29 to State Highway 175, and west along State Highway 175 to the Iowa-Nebraska border.

South Zone: The remainder of Iowa.

Kentucky

West Zone: All counties west of and including Butler, Daviess, Ohio, Simpson, and Warren Counties.

East Zone: The remainder of Kentucky.

Louisiana

East Zone: That area of the State between the Mississippi State line and a line going south on Hwy 79 from the Arkansas border to Homer, then south on Hwy 9 to Arcadia, then south on Hwy 147 to Hodge, then south on Hwy 167 to Turkey Creek, then south on Hwy 13 to Eunice, then west on Hwy 190 to Kinder, then south on Hwy 165 to Iowa, then west on I–10 to its junction with Hwy 14 at Lake Charles, then south and east on Hwy 14 to its junction with Hwy 90 in New Iberia, then east on Hwy 90 to the Mississippi State line.

West Zone: That area between the Texas State line and a line going east on I–10 from the Texas border to Hwy 165 at Iowa, then north on Hwy 165 to Kinder, then east on Hwy 190 to Eunice, then north on Hwy 13 to Turkey Creek, then north on Hwy 167 to Hodge, then north on Hwy 147 to Arcadia, then north on Hwy 9 to Homer, then north on Hwy 79 to the Arkansas border.

Coastal Zone: Remainder of the State.

Michigan

North Zone: The Upper Peninsula.

Middle Zone: That portion of the Lower Peninsula north of a line beginning at the Wisconsin State line in Lake Michigan due west of the mouth of Stony Creek in Oceana County; then due east to, and easterly and southerly along the south shore of Stony Creek to Scenic Drive, easterly and southerly along Scenic Drive to Stony Lake Road, easterly along Stony Lake and Garfield Roads to Michigan Highway 20, east along Michigan 20 to U.S. Highway 10 Business Route (BR) in the city of Midland, easterly along U.S. 10 BR to U.S. 10, easterly along U.S. 10 to Interstate Highway 75/U.S. Highway 23, northerly along I–75/U.S. 23 to the U.S. 23 exit at Standish, easterly along U.S. 23 to the centerline of the Au Gres River, then southerly along the centerline of the Au Gres River to Saginaw Bay, then on a line directly east 10 miles into Saginaw Bay, and from that point on a line directly northeast to the Canadian border.

South Zone: The remainder of Michigan.

Minnesota

North Duck Zone: That portion of the State north of a line extending east from the North Dakota State line along State Highway 210 to State Highway 23 and east to State Highway 39 and east to the Wisconsin State line at the Oliver Bridge.

South Duck Zone: The portion of the State south of a line extending east from the South Dakota State line along U.S. Highway 212 to Interstate 494 and east to Interstate 94 and east to the Wisconsin State line.

Central Duck Zone: The remainder of the State.

Missouri

North Zone: That portion of Missouri north of a line running west from the Illinois border at Lock and Dam 25; west on Lincoln County Hwy. N to Mo. Hwy. 79; south on Mo. Hwy. 79 to Mo. Hwy. 47; west on Mo. Hwy. 47 to I–70; west on I–70 to the Kansas border.

Middle Zone: The remainder of Missouri not included in other zones.

South Zone: That portion of Missouri south of a line running west from the Illinois border on Mo. Hwy. 74 to Mo. Hwy. 25; south on Mo. Hwy. 25 to U.S. Hwy. 62; west on U.S. Hwy. 62 to Mo. Hwy. 53; north on Mo. Hwy. 53 to Mo. Hwy. 51; north on Mo. Hwy. 51 to U.S. Hwy. 60; west on U.S. Hwy. 60 to Mo. Hwy. 21; north on Mo. Hwy. 21 to Mo. Hwy. 72; west on Mo. Hwy. 72 to Mo. Hwy. 32; west on Mo. Hwy. 32 to U.S. Hwy. 65; north on U.S. Hwy. 65 to U.S. Hwy. 54; west on U.S. Hwy. 54 to U.S. Hwy. 71; south on U.S. Hwy. 71 to Jasper County Hwy. M (Base Line Blvd.); west on Jasper County Hwy. M (Base Line Blvd.) to CRD 40 (Base Line Blvd.); west on CRD 40 (Base Line Blvd.) to the Kansas border.

Ohio

Lake Erie Marsh Zone: Includes all land and water within the boundaries of the area bordered by a line beginning at the intersection of Interstate 75 at the Ohio-Michigan State line and continuing south to Interstate 280, then south on I–280 to the Ohio Turnpike (I–80/I–90), then east on the Ohio Turnpike to the Erie-Lorain county line, then north to Lake Erie, then following the Lake Erie shoreline at a distance of 200 yards offshore, then following the shoreline west toward and around the northern tip of Cedar Point Amusement Park, then continuing from the westernmost point of Cedar Point toward the southernmost tip of the sand bar at the mouth of Sandusky Bay and out into Lake Erie at a distance of 200 yards offshore continuing parallel to the Lake Erie shoreline north and west toward the northernmost tip of Cedar Point National Wildlife Refuge, then following a direct line toward the southernmost tip of Wood Tick Peninsula in Michigan to a point that intersects the Ohio-Michigan State line, then following the State line back to the point of the beginning.

North Zone: That portion of the State, excluding the Lake Erie Marsh Zone, north of a line extending east from the

Indiana State line along U.S. Highway 33 to State Route 127, then south along SR 127 to SR 703, then south along SR 703 and including all lands within the Mercer Wildlife Area to SR 219, then east along SR 219 to SR 364, then north along SR 364 and including all lands within the St. Mary's Fish Hatchery to SR 703, then east along SR 703 to SR 66, then north along SR 66 to U.S. 33, then east along U.S. 33 to SR 385, then east along SR 385 to SR 117, then south along SR 117 to SR 273, then east along SR 273 to SR 31, then south along SR 31 to SR 739, then east along SR 739 to SR 4, then north along SR 4 to SR 95, then east along SR 95 to SR 13, then southeast along SR 13 to SR 3, then northeast along SR 3 to SR 60, then north along SR 60 to U.S. 30, then east along U.S. 30 to SR 3, then south along SR 3 to SR 226, then south along SR 226 to SR 514, then southwest along SR 514 to SR 754, then south along SR 754 to SR 39/60, then east along SR 39/60 U.S. to SR 241, then north along SR 241 to U.S. 30, then east along U.S. 30 to SR 39, then east along SR 39 to the Pennsylvania State line.

South Zone: The remainder of Ohio not included in the Lake Erie Marsh Zone or the North Zone.

Tennessee

Reelfoot Zone: All or portions of Lake and Obion Counties.

Remainder of State: That portion of Tennessee outside of the Reelfoot Zone.

Wisconsin

North Zone: That portion of the State north of a line extending east from the Minnesota State line along U.S. Highway 10 into Portage County to County Highway HH, east on County Highway HH to State Highway 66 and then east on State Highway 66 to U.S. Highway 10, continuing east on U.S. Highway 10 to U.S. Highway 41, then north on U.S. Highway 41 to the Michigan State line.

Mississippi River Zone: That area encompassed by a line beginning at the intersection of the Burlington Northern & Santa Fe Railway and the Illinois State line in Grant County and extending northerly along the Burlington Northern & Santa Fe Railway to the city limit of Prescott in Pierce County, then west along the Prescott city limit to the Minnesota State line.

South Zone: The remainder of Wisconsin.

Central Flyway

Colorado (Central Flyway Portion)

Special Teal Season Area: Lake and Chaffee Counties and that portion of the State east of Interstate Highway 25.

Northeast Zone: All areas east of Interstate 25 and north of Interstate 70.

Southeast Zone: All areas east of Interstate 25 and south of Interstate 70, and all of El Paso, Pueblo, Huerfano, and Las Animas Counties.

Mountain/Foothills Zone: All areas west of Interstate 25 and east of the Continental Divide, except El Paso, Pueblo, Huerfano, and Las Animas Counties.

Kansas

High Plains Zone: That portion of the State west of U.S. 283.

Low Plains Early Zone: That part of Kansas bounded by a line from the federal highway U.S.–283 and State highway U.S.–96 junction, then east on federal highway U.S.–96 to its junction with federal highway U.S.–183, then north on federal highway U.S.–183 to its junction with federal highway U.S.–24, then east on federal highway U.S.–24 to its junction with federal highway U.S–.281, then north on federal highway U.S.–281 to its junction with federal highway U.S.–36, then east on federal highway U.S.–36 to its junction with State highway K–199, then south on State highway K–199 to its junction with Republic County 30th Road, then south on Republic County 30th Road to its junction with State highway K–148, then east on State highway K–148 to its junction with Republic County 50th Road, then south on Republic County 50th Road to its junction with Cloud County 40th Road, then south on Cloud County 40th Road to its junction with State highway K–9, then west on State highway K–9 to its junction with federal highway U.S.–24, then west on federal highway U.S.–24 to its junction with federal highway U.S.–181, then south on federal highway U.S.–181 to its junction with State highway K–18, then west on State highway K–18 to its junction with federal highway U.S.–281, then south on federal highway U.S.–281 to its junction with State highway K–4, then east on State highway K–4 to its junction with interstate highway I–135, then south on interstate highway I–135 to its junction with State highway K–61, then southwest on State highway K–61 to its junction with McPherson County 14th Avenue, then south on McPherson County 14th Avenue to its junction with McPherson County Arapaho Rd, then west on McPherson County Arapaho Rd to its junction with State highway K–61, then southwest on State highway K–61 to its junction with State highway K–96, then northwest on State highway K–96 to its junction with federal highway U.S.–56, then southwest on federal highway U.S.–56 to its junction with State highway K–19, then east on State highway K–19 to its junction with federal highway U.S.–281, then south on federal highway U.S.–281 to its junction with federal highway U.S.–54, then west on federal highway U.S.–54 to its junction with federal highway U.S.–183, then north on federal highway U.S.–183 to its junction with federal highway U.S.–56, then southwest on federal highway U.S.–56 to its junction with North Main Street in Spearville, then south on North Main Street to Davis Street, then east on Davis Street to Ford County Road 126 (South Stafford Street), then south on Ford County Road 126 to Garnett Road, then east on Garnett Road to Ford County Road 126, then south on Ford County Road 126 to Ford Spearville Road, then west on Ford Spearville Road to its junction with federal highway U.S.–400, then northwest on federal highway U.S.–400 to its junction with federal highway U.S.–283, and then north on federal highway U.S.–283 to its junction with federal highway U.S.–96.

Low Plains Late Zone: That part of Kansas bounded by a line from the federal highway U.S.–283 and federal highway U.S.–96 junction, then north on federal highway U.S.–283 to the Kansas-Nebraska State line, then east along the Kansas-Nebraska State line to its junction with the Kansas-Missouri State line, then southeast along the Kansas-Missouri State line to its junction with State highway K–68, then west on State highway K–68 to its junction with interstate highway I–35, then southwest on interstate highway I–35 to its junction with Butler County NE 150th Street, then west on Butler County NE 150th Street to its junction with federal highway U.S.–77, then south on federal highway U.S.–77 to its junction with the Kansas-Oklahoma State line, then west along the Kansas-Oklahoma State line to its junction with federal highway U.S.–283, then north on federal highway U.S.–283 to its junction with federal highway U.S.–400, then east on federal highway U.S.–400 to its junction with Ford Spearville Road, then east on Ford Spearville Road to Ford County Road 126 (South Stafford Street), then north on Ford County Road 126 to Garnett Road, then west on Garnett Road to Ford County Road 126, then north on Ford County Road 126 to Davis Street, then west on Davis Street to North Main Street, then north on North Main Street to its junction with federal highway U.S.–56, then east on federal highway U.S.–56 to its junction with federal highway U.S.–183, then south on federal highway U.S.–183 to its junction with federal highway U.S.–54, then east on federal highway U.S.–54 to

its junction with federal highway U.S.–281, then north on federal highway U.S.–281 to its junction with State highway K–19, then west on State highway K–19 to its junction with federal highway U.S.–56, then east on federal highway U.S.–56 to its junction with State highway K–96, then southeast on State highway K–96 to its junction with State highway K–61, then northeast on State highway K–61 to its junction with McPherson County Arapaho Road, then east on McPherson County Arapaho Road to its junction with McPherson County 14th Avenue, then north on McPherson County 14th Avenue to its junction with State highway K–61, then east on State highway K–61 to its junction with interstate highway I–135, then north on interstate highway I–135 to its junction with State highway K–4, then west on State highway K–4 to its junction with federal highway U.S.–281, then north on federal highway U.S.–281 to its junction with State highway K–18, then east on State highway K–18 to its junction with federal highway U.S.–181, then north on federal highway U.S.–181 to its junction with federal highway U.S.–24, then east on federal highway U.S.–24 to its junction with State highway K–9, then east on State highway K–9 to its junction with Cloud County 40th Road, then north on Cloud County 40th Road to its junction with Republic County 50th Road, then north on Republic County 50th Road to its junction with State highway K–148, then west on State highway K–148 to its junction with Republic County 30th Road, then north on Republic County 30th Road to its junction with State highway K–199, then north on State highway K–199 to its junction with federal highway U.S.–36, then west on federal highway U.S.–36 to its junction with federal highway U.S.–281, then south on federal highway U.S.–281 to its junction with federal highway U.S.–24, then west on federal highway U.S.–24 to its junction with federal highway U.S.–183, then south on federal highway U.S.–183 to its junction with federal highway U.S.–96, and then west on federal highway U.S.–96 to its junction with federal highway U.S.–283.

Southeast Zone: That part of Kansas bounded by a line from the Missouri-Kansas State line west on K–68 to its junction with I–35, then southwest on I–35 to its junction with Butler County, NE 150th Street, then west on NE 150th Street to its junction with federal highway U.S.–77, then south on federal highway U.S.–77 to the Oklahoma-Kansas State line, then east along the Kansas-Oklahoma State line to its junction with the Kansas-Missouri State line, then north along the Kansas-Missouri State line to its junction with State highway K–68.

Montana (Central Flyway Portion)

Zone 1: The Counties of Blaine, Carter, Daniels, Dawson, Fallon, Fergus, Garfield, Golden Valley, Judith Basin, McCone, Musselshell, Petroleum, Phillips, Powder River, Richland, Roosevelt, Sheridan, Stillwater, Sweet Grass, Valley, Wheatland, and Wibaux.

Zone 2: The Counties of Big Horn, Carbon, Custer, Prairie, Rosebud, Treasure, and Yellowstone.

Nebraska

Special Teal Season Area (south): That portion of the State south of a line beginning at the Wyoming State line; east along U.S. 26 to Nebraska Highway L62A east to U.S. 385; south to U.S. 26; east to NE 92; east along NE 92 to NE 61; south along NE 61 to U.S. 30; east along U.S. 30 to the Iowa border.

Special Teal Season Area (north): The remainder of the State.

High Plains: That portion of Nebraska lying west of a line beginning at the South Dakota-Nebraska border on U.S. Hwy. 183; south on U.S. Hwy. 183 to U.S. Hwy. 20; west on U.S. Hwy. 20 to NE Hwy. 7; south on NE Hwy. 7 to NE Hwy. 91; southwest on NE Hwy. 91 to NE Hwy. 2; southeast on NE Hwy. 2 to NE Hwy. 92; west on NE Hwy. 92 to NE Hwy. 40; south on NE Hwy. 40 to NE Hwy. 47; south on NE Hwy. 47 to NE Hwy. 23; east on NE Hwy. 23 to U.S. Hwy. 283; and south on U.S. Hwy. 283 to the Kansas-Nebraska border.

Zone 1: Area bounded by designated Federal and State highways and political boundaries beginning at the South Dakota-Nebraska border west of NE Hwy. 26E Spur and north of NE Hwy. 12; those portions of Dixon, Cedar, and Knox Counties north of NE Hwy. 12; that portion of Keya Paha County east of U.S. Hwy. 183; and all of Boyd County. Both banks of the Niobrara River in Keya Paha and Boyd counties east of U.S. Hwy. 183 shall be included in Zone 1.

Zone 2: The area south of Zone 1 and north of Zone 3.

Zone 3: Area bounded by designated Federal and State highways, County Roads, and political boundaries beginning at the Wyoming-Nebraska border at the intersection of the Interstate Canal; east along northern borders of Scotts Bluff and Morrill Counties to Broadwater Road; south to Morrill County Rd 94; east to County Rd 135; south to County Rd 88; southeast to County Rd 151; south to County Rd 80; east to County Rd 161; south to County Rd 76; east to County Rd 165; south to County Rd 167; south to U.S. Hwy 26; east to County Rd 171; north to County Rd 68; east to County Rd 183; south to County Rd 64; east to County Rd 189; north to County Rd 70; east to County Rd 201; south to County Rd 60A; east to County Rd 203; south to County Rd 52; east to Keith County Line; east along the northern boundaries of Keith and Lincoln Counties to NE Hwy 97; south to U.S. Hwy 83; south to E Hall School Rd; east to N Airport Road; south to U.S. Hwy 30; east to NE Hwy 47; north to Dawson County Rd 769; east to County Rd 423; south to County Rd 766; east to County Rd 428; south to County Rd 763; east to NE Hwy 21 (Adams Street); south to County Rd 761; east to the Dawson County Canal; south and east along the Dawson County Canal to County Rd 444; south to U.S. Hwy 30; east to U.S. Hwy 183; north to Buffalo County Rd 100; east to 46th Avenue; north to NE Hwy 40; south and east to NE Hwy 10; north to Buffalo County Rd 220 and Hall County Husker Hwy; east to Hall County Rd 70; north to NE Hwy 2; east to U.S. Hwy 281; north to Chapman Rd; east to 7th Rd; south to U.S. Hwy 30; east to Merrick County Rd 13; north to County Rd O; east to NE Hwy 14; north to NE Hwy 52; west and north to NE Hwy 91; west to U.S. Hwy 281; south to NE Hwy 22; west to NE Hwy 11; northwest to NE Hwy 91; west to U.S. Hwy 183; south to Round Valley Rd; west to Sargent River Rd; west to Drive 443; north to Sargent Rd; west to NE Hwy S21A; west to NE Hwy 2; west and north to NE Hwy 91; north and east to North Loup Spur Rd; north to North Loup River Rd; east to Pleasant Valley/Worth Rd; east to Loup County Line; north to Loup-Brown county line; east along northern boundaries of Loup and Garfield Counties to Cedar River Rd; south to NE Hwy 70; east to U.S. Hwy 281; north to NE Hwy 70; east to NE Hwy 14; south to NE Hwy 39; southeast to NE Hwy 22; east to U.S. Hwy 81; southeast to U.S. Hwy 30; east to U.S. Hwy 75; north to the Washington County line; east to the Iowa-Nebraska border; south to the Missouri-Nebraska border; south to Kansas-Nebraska border; west along Kansas-Nebraska border to Colorado-Nebraska border; north and west to Wyoming-Nebraska border; north to intersection of Interstate Canal; and excluding that area in Zone 4.

Zone 4: Area encompassed by designated Federal and State highways and County Roads beginning at the intersection of NE Hwy 8 and U.S. Hwy 75; north to U.S. Hwy 136; east to the intersection of U.S. Hwy 136 and the

Steamboat Trace (Trace); north along the Trace to the intersection with Federal Levee R–562; north along Federal Levee R–562 to the intersection with Nemaha County Rd 643A; south to the Trace; north along the Trace/Burlington Northern Railroad right-of-way to NE Hwy 2; west to U.S. Hwy 75; north to NE Hwy 2; west to NE Hwy 50; north to U.S. Hwy 34; west to NE Hwy 63; north to NE Hwy 66; north and west to U.S. Hwy 77; north to NE Hwy 92; west to NE Hwy Spur 12F; south to Butler County Rd 30; east to County Rd X; south to County Rd 27; west to County Rd W; south to County Rd 26; east to County Rd X; south to County Rd 21 (Seward County Line); west to NE Hwy 15; north to County Rd 34; west to County Rd H; south to NE Hwy 92; west to U.S. Hwy 81; south to NE Hwy 66; west to Polk County Rd C; north to NE Hwy 92; west to U.S. Hwy 30; west to Merrick County Rd 17; south to Hordlake Road; southeast to Prairie Island Road; southeast to Hamilton County Rd T; south to NE Hwy 66; west to NE Hwy 14; south to County Rd 22; west to County Rd M; south to County Rd 21; west to County Rd K; south to U.S. Hwy 34; west to NE Hwy 2; south to U.S. Hwy I–80; west to Gunbarrel Rd (Hall/Hamilton county line); south to Giltner Rd; west to U.S. Hwy 281; south to Lochland Rd; west to Holstein Avenue; south to U.S. Hwy 34; west to NE Hwy 10; north to Kearney County Rd R and Phelps County Rd 742; west to U.S. Hwy 283; south to U.S. Hwy 34; east to U.S. Hwy 136; east to U.S. Hwy 183; north to NE Hwy 4; east to NE Hwy 10; south to U.S. Hwy 136; east to NE Hwy 14; south to NE Hwy 8; east to U.S. Hwy 81; north to NE Hwy 4; east to NE Hwy 15; south to U.S. Hwy 136; east to Jefferson County Rd 578 Avenue; south to PWF Rd; east to NE Hwy 103; south to NE Hwy 8; east to U.S. Hwy 75.

New Mexico (Central Flyway Portion)

North Zone: That portion of the State north of I–40 and U.S. 54.

South Zone: The remainder of New Mexico.

North Dakota

High Plains Unit: That portion of the State south and west of a line from the South Dakota State line along U.S. 83 and I–94 to ND 41, north to U.S. 2, west to the Williams-Divide County line, then north along the County line to the Canadian border.

Low Plains Unit: The remainder of North Dakota.

Oklahoma

High Plains Zone: The Counties of Beaver, Cimarron, and Texas.

Low Plains Zone 1: That portion of the State east of the High Plains Zone and north of a line extending east from the Texas State line along OK 33 to OK 47, east along OK 47 to U.S. 183, south along U.S. 183 to I–40, east along I–40 to U.S. 177, north along U.S. 177 to OK 33, east along OK 33 to OK 18, north along OK 18 to OK 51, west along OK 51 to I–35, north along I–35 to U.S. 412, west along U.S. 412 to OK 132, then north along OK 132 to the Kansas State line.

Low Plains Zone 2: The remainder of Oklahoma.

South Dakota

High Plains Zone: That portion of the State west of a line beginning at the North Dakota State line and extending south along U.S. 83 to U.S. 14, east on U.S. 14 to Blunt, south on the Blunt-Canning Rd to SD 34, east and south on SD 34 to SD 50 at Lee's Corner, south on SD 50 to I–90, east on I–90 to SD 50, south on SD 50 to SD 44, west on SD 44 across the Platte-Winner bridge to SD 47, south on SD 47 to U.S. 18, east on U.S. 18 to SD 47, south on SD 47 to the Nebraska State line.

North Zone: That portion of northeastern South Dakota east of the High Plains Unit and north of a line extending east along U.S. 212 to the Minnesota State line.

South Zone: That portion of Gregory County east of SD 47 and south of SD 44; Charles Mix County south of SD 44 to the Douglas County line; south on SD 50 to Geddes; east on the Geddes Highway to U.S. 281; south on U.S. 281 and U.S. 18 to SD 50; south and east on SD 50 to the Bon Homme County line; the Counties of Bon Homme, Yankton, and Clay south of SD 50; and Union County south and west of SD 50 and I–29.

Middle Zone: The remainder of South Dakota.

Texas

High Plains Zone: That portion of the State west of a line extending south from the Oklahoma State line along U.S. 183 to Vernon, south along U.S. 283 to Albany, south along TX 6 to TX 351 to Abilene, south along U.S. 277 to Del Rio, then south along the Del Rio International Toll Bridge access road to the Mexico border.

Low Plains North Zone: That portion of northeastern Texas east of the High Plains Zone and north of a line beginning at the International Toll Bridge south of Del Rio, then extending east on U.S. 90 to San Antonio, then continuing east on I–10 to the Louisiana State line at Orange, Texas.

Low Plains South Zone: The remainder of Texas.

Wyoming (Central Flyway portion)

Zone C1: Big Horn, Converse, Goshen, Hot Springs, Natrona, Park, Platte, and Washakie Counties; and Fremont County excluding the portions west or south of the Continental Divide.

Zone C2: Campbell, Crook, Johnson, Niobrara, Sheridan, and Weston Counties.

Zone C3: Albany and Laramie Counties; and that portion of Carbon County east of the Continental Divide.

Pacific Flyway

Arizona

North Zone: Game Management Units 1–5, those portions of Game Management Units 6 and 8 within Coconino County, and Game Management Units 7, 9, and 12A.

South Zone: Those portions of Game Management Units 6 and 8 in Yavapai County, and Game Management Units 10 and 12B–45.

California

Northeastern Zone: In that portion of California lying east and north of a line beginning at the intersection of Interstate 5 with the California-Oregon line; south along Interstate 5 to its junction with Walters Lane south of the town of Yreka; west along Walters Lane to its junction with Easy Street; south along Easy Street to the junction with Old Highway 99; south along Old Highway 99 to the point of intersection with Interstate 5 north of the town of Weed; south along Interstate 5 to its junction with Highway 89; east and south along Highway 89 to Main Street Greenville; north and east to its junction with North Valley Road; south to its junction of Diamond Mountain Road; north and east to its junction with North Arm Road; south and west to the junction of North Valley Road; south to the junction with Arlington Road (A22); west to the junction of Highway 89; south and west to the junction of Highway 70; east on Highway 70 to Highway 395; south and east on Highway 395 to the point of intersection with the California-Nevada State line; north along the California-Nevada State line to the junction of the California-Nevada-Oregon State lines; west along the California-Oregon State line to the point of origin.

Colorado River Zone: Those portions of San Bernardino, Riverside, and Imperial Counties east of a line extending from the Nevada State line south along U.S. 95 to Vidal Junction; south on a road known as ''Aqueduct

Road'' in San Bernardino County through the town of Rice to the San Bernardino-Riverside County line; south on a road known in Riverside County as the ''Desert Center to Rice Road'' to the town of Desert Center; east 31 miles on I–10 to the Wiley Well Road; south on this road to Wiley Well; southeast along the Army-Milpitas Road to the Blythe, Brawley, Davis Lake intersections; south on the Blythe-Brawley paved road to the Ogilby and Tumco Mine Road; south on this road to U.S. 80; east 7 miles on U.S. 80 to the Andrade-Algodones Road; south on this paved road to the Mexican border at Algodones, Mexico.

Southern Zone: That portion of southern California (but excluding the Colorado River Zone) south and east of a line extending from the Pacific Ocean east along the Santa Maria River to CA 166 near the City of Santa Maria; east on CA 166 to CA 99; south on CA 99 to the crest of the Tehachapi Mountains at Tejon Pass; east and north along the crest of the Tehachapi Mountains to CA 178 at Walker Pass; east on CA 178 to U.S. 395 at the town of Inyokern; south on U.S. 395 to CA 58; east on CA 58 to I–15; east on I–15 to CA 127; north on CA 127 to the Nevada State line.

Southern San Joaquin Valley Zone: All of Kings and Tulare Counties and that portion of Kern County north of the Southern Zone.

Balance of State Zone: The remainder of California not included in the Northeastern, Colorado River, Southern, and the Southern San Joaquin Valley Zones.

Colorado (Pacific Flyway Portion)

Eastern Zone: Routt, Grand, Summit, Eagle, and Pitkin Counties, those portions of Saguache, San Juan, Hinsdale, and Mineral in the Pacific Flyway (*i.e.,* west of the Continental Divide), and Gunnison County except the following area: The portion of Gunnison County west of Curecanti Creek, west of the Gunnison River-North Fork of Gunnison River divide to Kebler Pass, west of Kebler Pass and the Ruby Range summit, and west and south of the Pitkin/Gunnison County line west of the Ruby Range. This area corresponds to the North Fork of Gunnison River Valley, and is already established by Colorado Division of Parks and Wildlife as the Gunnison County portions of GMU 521, 53, and 63.

Western Zone: The remainder of the Pacific Flyway portion of Colorado not included in the Eastern Zone.

Idaho

Zone 1: All lands and waters within the Fort Hall Indian Reservation, including private in-holdings; Bannock County; Bingham County, except that portion within the Blackfoot Reservoir drainage; Caribou County within the Fort Hall Indian Reservation; and Power County east of State Highway 37 and State Highway 39.

Zone 2: Adams, Bear Lake, Benewah, Blaine, Bonner, Bonneville, Boundary, Butte, Camas, Clark, Clearwater, Custer, Franklin, Fremont, Idaho, Jefferson, Kootenai, Latah, Lemhi, Lewis, Madison, Nez Perce, Oneida, Shoshone, Teton, and Valley Counties; Bingham County within the Blackfoot Reservoir drainage; Caribou County, except the Fort Hall Indian Reservation; and Power County west of State Highway 37 and State Highway 39.

Zone 3: Ada, Boise, Canyon, Cassia, Elmore, Gem, Gooding, Jerome, Lincoln, Minidoka, Owyhee, Payette, Twin Falls, and Washington Counties.

Nevada

Northeast Zone: Elko and White Pine Counties.

Northwest Zone: Carson City, Churchill, Douglas, Esmeralda, Eureka, Humboldt, Lander, Lyon, Mineral, Nye, Pershing, Storey, and Washoe Counties.

South Zone: Clark and Lincoln Counties.

Moapa Valley Special Management Area: That portion of Clark County including the Moapa Valley to the confluence of the Muddy and Virgin Rivers.

Oregon

Zone 1: Benton, Clackamas, Clatsop, Columbia, Coos, Curry, Douglas, Gilliam, Hood River, Jackson, Josephine, Lane, Lincoln, Linn, Marion, Morrow, Multnomah, Polk, Sherman, Tillamook, Umatilla, Wasco, Washington, and Yamhill, Counties.

Zone 2: The remainder of Oregon not included in Zone 1.

Utah

Zone 1: Box Elder, Cache, Daggett, Davis, Duchesne, Morgan, Rich, Salt Lake, Summit, Uintah, Utah, Wasatch, and Weber Counties, and that part of Toole County north of I–80.

Zone 2: The remainder of Utah not included in Zone 1.

Washington

East Zone: All areas east of the Pacific Crest Trail and east of the Big White Salmon River in Klickitat County.

West Zone: The remainder of Washington not included in the East Zone.

Wyoming (Pacific Flyway Portion)

Snake River Zone: Beginning at the south boundary of Yellowstone National Park and the Continental Divide; south along the Continental Divide to Union Pass and the Union Pass Road (U.S.F.S. Road 600); west and south along the Union Pass Road to U.S.F.S. Road 605; south along U.S.F.S. Road 605 to the Bridger-Teton National Forest boundary; along the national forest boundary to the Idaho State line; north along the Idaho State line to the south boundary of Yellowstone National Park; east along the Yellowstone National Park boundary to the Continental Divide.

Balance of State Zone: The remainder of the Pacific Flyway portion of Wyoming not included in the Snake River Zone.

Geese

Atlantic Flyway

Connecticut

Early Canada Goose Seasons:

South Zone: Same as for ducks.

North Zone: Same as for ducks.

Regular Seasons:

AP Unit: Litchfield County and the portion of Hartford County west of a line beginning at the Massachusetts border in Suffield and extending south along Route 159 to its intersection with Route 91 in Hartford, and then extending south along Route 91 to its intersection with the Hartford-Middlesex County line.

Atlantic Flyway Resident Population (AFRP) Unit: Starting at the intersection of I–95 and the Quinnipiac River, north on the Quinnipiac River to its intersection with I–91, north on I–91 to I–691, west on I–691 to the Hartford County line, and encompassing the rest of New Haven County and Fairfield County in its entirety.

NAP H–Unit: All of the rest of the State not included in the AP or AFRP descriptions above.

South Zone: Same as for ducks.

Maine

Same zones as for ducks.

Maryland

Early Canada Goose Seasons:

Eastern Unit: Calvert, Caroline, Cecil, Dorchester, Harford, Kent, Queen Anne's, St. Mary's, Somerset, Talbot, Wicomico, and Worcester Counties; and that part of Anne Arundel County east of Interstate 895, Interstate 97, and Route 3; that part of Prince George's County east of Route 3 and Route 301; and that part of Charles County east of Route 301 to the Virginia State line.

Western Unit: Allegany, Baltimore, Carroll, Frederick, Garrett, Howard, Montgomery, and Washington Counties and that part of Anne Arundel County west of Interstate 895, Interstate 97, and

Route 3; that part of Prince George's County west of Route 3 and Route 301; and that part of Charles County west of Route 301 to the Virginia State line.

Regular Seasons:

Resident Population (RP) Zone: Allegany, Frederick, Garrett, Montgomery, and Washington Counties; that portion of Prince George's County west of Route 3 and Route 301; that portion of Charles County west of Route 301 to the Virginia State line; and that portion of Carroll County west of Route 31 to the intersection of Route 97, and west of Route 97 to the Pennsylvania line.

AP Zone: Remainder of the State.

Massachusetts

NAP Zone: Central and Coastal Zones (see duck zones).

AP Zone: The Western Zone (see duck zones).

Special Late Season Area: The Central Zone and that portion of the Coastal Zone (see duck zones) that lies north of the Cape Cod Canal, north to the New Hampshire line.

New Hampshire

Same zones as for ducks.

New Jersey

AP Zone: North and South Zones (see duck zones).

RP Zone: The Coastal Zone (see duck zones).

Special Late Season Area: In northern New Jersey, that portion of the State within a continuous line that runs east along the New York State boundary line to the Hudson River; then south along the New York State boundary to its intersection with Route 440 at Perth Amboy; then west on Route 440 to its intersection with Route 287; then west along Route 287 to its intersection with Route 206 in Bedminster (Exit 18); then north along Route 206 to its intersection with Route 94: Then west along Route 94 to the tollbridge in Columbia; then north along the Pennsylvania State boundary in the Delaware River to the beginning point. In southern New Jersey, that portion of the State within a continuous line that runs west from the Atlantic Ocean at Ship Bottom along Route 72 to Route 70; then west along Route 70 to Route 206; then south along Route 206 to Route 536; then west along Route 536 to Route 322; then west along Route 322 to Route 55; then south along Route 55 to Route 553 (Buck Road); then south along Route 553 to Route 40; then east along Route 40 to route 55; then south along Route 55 to Route 552 (Sherman Avenue); then west along Route 552 to Carmel Road; then south along Carmel Road to Route 49; then east along Route 49 to Route 555; then south along Route 555 to Route 553; then east along Route 553 to Route 649; then north along Route 649 to Route 670; then east along Route 670 to Route 47; then north along Route 47 to Route 548; then east along Route 548 to Route 49; then east along Route 49 to Route 50; then south along Route 50 to Route 9; then south along Route 9 to Route 625 (Sea Isle City Boulevard); then east along Route 625 to the Atlantic Ocean; then north to the beginning point.

New York

Lake Champlain Goose Area: The same as the Lake Champlain Waterfowl Hunting Zone, which is that area of New York State lying east and north of a continuous line extending along Route 11 from the New York-Canada International boundary south to Route 9B, south along Route 9B to Route 9, south along Route 9 to Route 22 south of Keeseville, south along Route 22 to the west shore of South Bay along and around the shoreline of South Bay to Route 22 on the east shore of South Bay, southeast along Route 22 to Route 4, northeast along Route 4 to the New York-Vermont boundary.

Northeast Goose Area: The same as the Northeastern Waterfowl Hunting Zone, which is that area of New York State lying north of a continuous line extending from Lake Ontario east along the north shore of the Salmon River to Interstate 81, south along Interstate Route 81 to Route 31, east along Route 31 to Route 13, north along Route 13 to Route 49, east along Route 49 to Route 365, east along Route 365 to Route 28, east along Route 28 to Route 29, east along Route 29 to Route 22 at Greenwich Junction, north along Route 22 to Washington County Route 153, east along CR 153 to the New York-Vermont boundary, exclusive of the Lake Champlain Zone.

East Central Goose Area: That area of New York State lying inside of a continuous line extending from Interstate Route 81 in Cicero, east along Route 31 to Route 13, north along Route 13 to Route 49, east along Route 49 to Route 365, east along Route 365 to Route 28, east along Route 28 to Route 29, east along Route 29 to Route 147 at Kimball Corners, south along Route 147 to Schenectady County Route 40 (West Glenville Road), west along Route 40 to Touareuna Road, south along Touareuna Road to Schenectady County Route 59, south along Route 59 to State Route 5, east along Route 5 to the Lock 9 bridge, southwest along the Lock 9 bridge to Route 5S, southeast along Route 5S to Schenectady County Route 58, southwest along Route 58 to the NYS Thruway, south along the Thruway to Route 7, southwest along Route 7 to Schenectady County Route 103, south along Route 103 to Route 406, east along Route 406 to Schenectady County Route 99 (Windy Hill Road), south along Route 99 to Dunnsville Road, south along Dunnsville Road to Route 397, southwest along Route 397 to Route 146 at Altamont, west along Route 146 to Albany County Route 252, northwest along Route 252 to Schenectady County Route 131, north along Route 131 to Route 7, west along Route 7 to Route 10 at Richmondville, south on Route 10 to Route 23 at Stamford, west along Route 23 to Route 7 in Oneonta, southwest along Route 7 to Route 79 to Interstate Route 88 near Harpursville, west along Route 88 to Interstate Route 81, north along Route 81 to the point of beginning.

West Central Goose Area: That area of New York State lying within a continuous line beginning at the point where the northerly extension of Route 269 (County Line Road on the Niagara-Orleans County boundary) meets the International boundary with Canada, south to the shore of Lake Ontario at the eastern boundary of Golden Hill State Park, south along the extension of Route 269 and Route 269 to Route 104 at Jeddo, west along Route 104 to Niagara County Route 271, south along Route 271 to Route 31E at Middleport, south along Route 31E to Route 31, west along Route 31 to Griswold Street, south along Griswold Street to Ditch Road, south along Ditch Road to Foot Road, south along Foot Road to the north bank of Tonawanda Creek, west along the north bank of Tonawanda Creek to Route 93, south along Route 93 to Route 5, east along Route 5 to Crittenden-Murrays Corners Road, south on Crittenden-Murrays Corners Road to the NYS Thruway, east along the Thruway 90 to Route 98 (at Thruway Exit 48) in Batavia, south along Route 98 to Route 20, east along Route 20 to Route 19 in Pavilion Center, south along Route 19 to Route 63, southeast along Route 63 to Route 246, south along Route 246 to Route 39 in Perry, northeast along Route 39 to Route 20A, northeast along Route 20A to Route 20, east along Route 20 to Route 364 (near Canandaigua), south and east along Route 364 to Yates County Route 18 (Italy Valley Road), southwest along Route 18 to Yates County Route 34, east along Route 34 to Yates County Route 32, south along Route 32 to Steuben County Route 122, south along Route 122 to Route 53, south along Route 53 to Steuben County Route 74, east along Route 74 to Route 54A (near Pulteney), south along Route

54A to Steuben County Route 87, east along Route 87 to Steuben County Route 96, east along Route 96 to Steuben County Route 114, east along Route 114 to Schuyler County Route 23, east and southeast along Route 23 to Schuyler County Route 28, southeast along Route 28 to Route 409 at Watkins Glen, south along Route 409 to Route 14, south along Route 14 to Route 224 at Montour Falls, east along Route 224 to Route 228 in Odessa, north along Route 228 to Route 79 in Mecklenburg, east along Route 79 to Route 366 in Ithaca, northeast along Route 366 to Route 13, northeast along Route 13 to Interstate Route 81 in Cortland, north along Route 81 to the north shore of the Salmon River to shore of Lake Ontario, extending generally northwest in a straight line to the nearest point of the International boundary with Canada, south and west along the International boundary to the point of beginning.

Hudson Valley Goose Area: That area of New York State lying within a continuous line extending from Route 4 at the New York-Vermont boundary, west and south along Route 4 to Route 149 at Fort Ann, west on Route 149 to Route 9, south along Route 9 to Interstate Route 87 (at Exit 20 in Glens Falls), south along Route 87 to Route 29, west along Route 29 to Route 147 at Kimball Corners, south along Route 147 to Schenectady County Route 40 (West Glenville Road), west along Route 40 to Touareuna Road, south along Touareuna Road to Schenectady County Route 59, south along Route 59 to State Route 5, east along Route 5 to the Lock 9 bridge, southwest along the Lock 9 bridge to Route 5S, southeast along Route 5S to Schenectady County Route 58, southwest along Route 58 to the NYS Thruway, south along the Thruway to Route 7, southwest along Route 7 to Schenectady County Route 103, south along Route 103 to Route 406, east along Route 406 to Schenectady County Route 99 (Windy Hill Road), south along Route 99 to Dunnsville Road, south along Dunnsville Road to Route 397, southwest along Route 397 to Route 146 at Altamont, southeast along Route 146 to Main Street in Altamont, west along Main Street to Route 156, southeast along Route 156 to Albany County Route 307, southeast along Route 307 to Route 85A, southwest along Route 85A to Route 85, south along Route 85 to Route 443, southeast along Route 443 to Albany County Route 301 at Clarksville, southeast along Route 301 to Route 32, south along Route 32 to Route 23 at Cairo, west along Route 23 to Joseph Chadderdon Road, southeast along Joseph Chadderdon Road to Hearts Content Road (Greene County Route 31), southeast along Route 31 to Route 32, south along Route 32 to Greene County Route 23A, east along Route 23A to Interstate Route 87 (the NYS Thruway), south along Route 87 to Route 28 (Exit 19) near Kingston, northwest on Route 28 to Route 209, southwest on Route 209 to the New York-Pennsylvania boundary, southeast along the New York-Pennsylvania boundary to the New York-New Jersey boundary, southeast along the New York-New Jersey boundary to Route 210 near Greenwood Lake, northeast along Route 210 to Orange County Route 5, northeast along Orange County Route 5 to Route 105 in the Village of Monroe, east and north along Route 105 to Route 32, northeast along Route 32 to Orange County Route 107 (Quaker Avenue), east along Route 107 to Route 9W, north along Route 9W to the south bank of Moodna Creek, southeast along the south bank of Moodna Creek to the New Windsor-Cornwall town boundary, northeast along the New Windsor-Cornwall town boundary to the Orange-Dutchess County boundary (middle of the Hudson River), north along the county boundary to Interstate Route 84, east along Route 84 to the Dutchess-Putnam County boundary, east along the county boundary to the New York-Connecticut boundary, north along the New York-Connecticut boundary to the New York-Massachusetts boundary, north along the New York-Massachusetts boundary to the New York-Vermont boundary, north to the point of beginning.

Eastern Long Island Goose Area (NAP High Harvest Area): That area of Suffolk County lying east of a continuous line extending due south from the New York-Connecticut boundary to the northernmost end of Roanoke Avenue in the Town of Riverhead; then south on Roanoke Avenue (which becomes County Route 73) to State Route 25; then west on Route 25 to Peconic Avenue; then south on Peconic Avenue to County Route (CR) 104 (Riverleigh Avenue); then south on CR 104 to CR 31 (Old Riverhead Road); then south on CR 31 to Oak Street; then south on Oak Street to Potunk Lane; then west on Stevens Lane; then south on Jessup Avenue (in Westhampton Beach) to Dune Road (CR 89); then due south to international waters.

Western Long Island Goose Area (RP Area): That area of Westchester County and its tidal waters southeast of Interstate Route 95 and that area of Nassau and Suffolk Counties lying west of a continuous line extending due south from the New York-Connecticut boundary to the northernmost end of Sound Road (just east of Wading River Marsh); then south on Sound Road to North Country Road; then west on North Country Road to Randall Road; then south on Randall Road to Route 25A, then west on Route 25A to the Sunken Meadow State Parkway; then south on the Sunken Meadow Parkway to the Sagtikos State Parkway; then south on the Sagtikos Parkway to the Robert Moses State Parkway; then south on the Robert Moses Parkway to its southernmost end; then due south to international waters.

Central Long Island Goose Area (NAP Low Harvest Area): That area of Suffolk County lying between the Western and Eastern Long Island Goose Areas, as defined above.

South Goose Area: The remainder of New York State, excluding New York City.

North Carolina

SJBP Hunt Zone: Includes the following Counties or portions of Counties: Anson, Cabarrus, Chatham, Davidson, Durham, Halifax (that portion east of NC 903), Montgomery (that portion west of NC 109), Northampton, Richmond (that portion south of NC 73 and west of U.S. 220 and north of U.S. 74), Rowan, Stanly, Union, and Wake.

RP Hunt Zone: Includes the following Counties or portions of Counties: Alamance, Alleghany, Alexander, Ashe, Avery, Beaufort, Bertie (that portion south and west of a line formed by NC 45 at the Washington Co. line to U.S. 17 in Midway, U.S. 17 in Midway to U.S. 13 in Windsor, U.S. 13 in Windsor to the Hertford Co. line), Bladen, Brunswick, Buncombe, Burke, Caldwell, Carteret, Caswell, Catawba, Cherokee, Clay, Cleveland, Columbus, Craven, Cumberland, Davie, Duplin, Edgecombe, Forsyth, Franklin, Gaston, Gates, Graham, Granville, Greene, Guilford, Halifax (that portion west of NC 903), Harnett, Haywood, Henderson, Hertford, Hoke, Iredell, Jackson, Johnston, Jones, Lee, Lenoir, Lincoln, McDowell, Macon, Madison, Martin, Mecklenburg, Mitchell, Montgomery (that portion that is east of NC 109), Moore, Nash, New Hanover, Onslow, Orange, Pamlico, Pender, Person, Pitt, Polk, Randolph, Richmond (all of the county with exception of that portion that is south of NC 73 and west of U.S. 220 and north of U.S. 74), Robeson, Rockingham, Rutherford, Sampson, Scotland, Stokes, Surry, Swain, Transylvania, Vance, Warren, Watauga, Wayne, Wilkes, Wilson, Yadkin, and Yancey.

Northeast Hunt Unit: Includes the following Counties or portions of Counties: Bertie (that portion north and east of a line formed by NC 45 at the Washington County line to U.S. 17 in

Midway, U.S. 17 in Midway to U.S. 13 in Windsor, U.S. 13 in Windsor to the Hertford Co. line), Camden, Chowan, Currituck, Dare, Hyde, Pasquotank, Perquimans, Tyrrell, and Washington.

Pennsylvania

Resident Canada Goose Zone: All of Pennsylvania except for SJBP Zone and the area east of route SR 97 from the Maryland State Line to the intersection of SR 194, east of SR 194 to intersection of U.S. Route 30, south of U.S. Route 30 to SR 441, east of SR 441 to SR 743, east of SR 743 to intersection of I–81, east of I–81 to intersection of I–80, and south of I–80 to the New Jersey State line.

SJBP Zone: The area north of I–80 and west of I–79 including in the city of Erie west of Bay Front Parkway to and including the Lake Erie Duck zone (Lake Erie, Presque Isle, and the area within 150 yards of the Lake Erie Shoreline).

AP Zone: The area east of route SR 97 from Maryland State Line to the intersection of SR 194, east of SR 194 to intersection of U.S. Route 30, south of U.S. Route 30 to SR 441, east of SR 441 to SR 743, east of SR 743 to intersection of I–81, east of I–81 to intersection of I–80, south of I–80 to New Jersey State line.

Rhode Island

Special Area for Canada Geese: Kent and Providence Counties and portions of the towns of Exeter and North Kingston within Washington County (see State regulations for detailed descriptions).

South Carolina

Canada Goose Area: Statewide except for the following area:

East of U.S. 301: That portion of Clarendon County bounded to the North by S–14–25, to the East by Hwy 260, and to the South by the markers delineating the channel of the Santee River.

West of U.S. 301: That portion of Clarendon County bounded on the North by S–14–26 extending southward to that portion of Orangeburg County bordered by Hwy 6.

Vermont

Same zones as for ducks.

Virginia

AP Zone: The area east and south of the following line—the Stafford County line from the Potomac River west to Interstate 95 at Fredericksburg, then south along Interstate 95 to Petersburg, then Route 460 (SE) to City of Suffolk, then south along Route 32 to the North Carolina line.

SJBP Zone: The area to the west of the AP Zone boundary and east of the following line: The ''Blue Ridge'' (mountain spine) at the West Virginia-Virginia Border (Loudoun County-Clarke County line) south to Interstate 64 (the Blue Ridge line follows county borders along the western edge of Loudoun-Fauquier-Rappahannock-Madison-Greene-Albemarle and into Nelson Counties), then east along Interstate Rt. 64 to Route 15, then south along Rt. 15 to the North Carolina line.

RP Zone: The remainder of the State west of the SJBP Zone.

Mississippi Flyway

Arkansas

Northwest Zone: Baxter, Benton, Boone, Carroll, Conway, Crawford, Faulkner, Franklin, Johnson, Logan, Madison, Marion, Newton, Perry, Pope, Pulaski, Searcy, Sebastian, Scott, Van Buren, Washington, and Yell Counties.

Illinois

Early Canada Goose Seasons:

North September Canada Goose Zone: That portion of the State north of a line extending west from the Indiana border along Interstate 80 to I–39, south along I–39 to Illinois Route 18, west along Illinois Route 18 to Illinois Route 29, south along Illinois Route 29 to Illinois Route 17, west along Illinois Route 17 to the Mississippi River, and due south across the Mississippi River to the Iowa border.

Central September Canada Goose Zone: That portion of the State south of the North September Canada Goose Zone line to a line extending west from the Indiana border along I–70 to Illinois Route 4, south along Illinois Route 4 to Illinois Route 161, west along Illinois Route 161 to Illinois Route 158, south and west along Illinois Route 158 to Illinois Route 159, south along Illinois Route 159 to Illinois Route 3, south along Illinois Route 3 to St. Leo's Road, south along St. Leo's Road to Modoc Road, west along Modoc Road to Modoc Ferry Road, southwest along Modoc Ferry Road to Levee Road, southeast along Levee Road to County Route 12 (Modoc Ferry entrance Road), south along County Route 12 to the Modoc Ferry route and southwest on the Modoc Ferry route across the Mississippi River to the Missouri border.

South September Canada Goose Zone: That portion of the State south and east of a line extending west from the Indiana border along Interstate 70, south along U.S. Highway 45, to Illinois Route 13, west along Illinois Route 13 to Greenbriar Road, north on Greenbriar Road to Sycamore Road, west on Sycamore Road to N. Reed Station Road, south on N. Reed Station Road to Illinois Route 13, west along Illinois Route 13 to Illinois Route 127, south along Illinois Route 127 to State Forest Road (1025 N), west along State Forest Road to Illinois Route 3, north along Illinois Route 3 to the south bank of the Big Muddy River, west along the south bank of the Big Muddy River to the Mississippi River, west across the Mississippi River to the Missouri border.

South Central September Canada Goose Zone: The remainder of the State between the south border of the Central September Canada Goose Zone and the North border of the South September Canada Goose Zone.

Regular Seasons:

North Zone: That portion of the State north of a line extending west from the Indiana border along Interstate 80 to I–39, south along I–39 to Illinois Route 18, west along Illinois Route 18 to Illinois Route 29, south along Illinois Route 29 to Illinois Route 17, west along Illinois Route 17 to the Mississippi River, and due south across the Mississippi River to the Iowa border.

Central Zone: That portion of the State south of the North Goose Zone line to a line extending west from the Indiana border along I–70 to Illinois Route 4, south along Illinois Route 4 to Illinois Route 161, west along Illinois Route 161 to Illinois Route 158, south and west along Illinois Route 158 to Illinois Route 159, south along Illinois Route 159 to Illinois Route 3, south along Illinois Route 3 to St. Leo's Road, south along St. Leo's Road to Modoc Road, west along Modoc Road to Modoc Ferry Road, southwest along Modoc Ferry Road to Levee Road, southeast along Levee Road to County Route 12 (Modoc Ferry entrance Road), south along County Route 12 to the Modoc Ferry route and southwest on the Modoc Ferry route across the Mississippi River to the Missouri border.

South Zone: Same zone as for ducks.

South Central Zone: Same zone as for ducks.

Indiana

Same zones as for ducks but in addition:

Late Canada Goose Season Zone: That part of the State encompassed by the following Counties: Adams, Allen, Boone, Clay, De Kalb, Elkhart, Greene, Hamilton, Hancock, Hendricks, Huntington, Johnson, Kosciusko, Lagrange, La Porte, Madison, Marion, Marshall, Morgan, Noble, Parke, Shelby, Starke, Steuben, St. Joseph, Sullivan, Vermillion, Vigo, Wells, and Whitley.

Iowa

Early Canada Goose Seasons:

Cedar Rapids/Iowa City Goose Zone: Includes portions of Linn and Johnson Counties bounded as follows: Beginning at the intersection of the west border of Linn County and Linn County Road E2W; then south and east along County Road E2W to Highway 920; then north along Highway 920 to County Road E16; then east along County Road E16 to County Road W58; then south along County Road W58 to County Road E34; then east along County Road E34 to Highway 13; then south along Highway 13 to Highway 30; then east along Highway 30 to Highway 1; then south along Highway 1 to Morse Road in Johnson County; then east along Morse Road to Wapsi Avenue; then south along Wapsi Avenue to Lower West Branch Road; then west along Lower West Branch Road to Taft Avenue; then south along Taft Avenue to County Road F62; then west along County Road F62 to Kansas Avenue; then north along Kansas Avenue to Black Diamond Road; then west on Black Diamond Road to Jasper Avenue; then north along Jasper Avenue to Rohert Road; then west along Rohert Road to Ivy Avenue; then north along Ivy Avenue to 340th Street; then west along 340th Street to Half Moon Avenue; then north along Half Moon Avenue to Highway 6; then west along Highway 6 to Echo Avenue; then north along Echo Avenue to 250th Street; then east on 250th Street to Green Castle Avenue; then north along Green Castle Avenue to County Road F12; then west along County Road F12 to County Road W30; then north along County Road W30 to Highway 151; then north along the Linn-Benton County line to the point of beginning.

Des Moines Goose Zone: Includes those portions of Polk, Warren, Madison and Dallas Counties bounded as follows: Beginning at the intersection of Northwest 158th Avenue and County Road R38 in Polk County; then south along R38 to Northwest 142nd Avenue; then east along Northwest 142nd Avenue to Northeast 126th Avenue; then east along Northeast 126th Avenue to Northeast 46th Street; then south along Northeast 46th Street to Highway 931; then east along Highway 931 to Northeast 80th Street; then south along Northeast 80th Street to Southeast 6th Avenue; then west along Southeast 6th Avenue to Highway 65; then south and west along Highway 65 to Highway 69 in Warren County; then south along Highway 69 to County Road G24; then west along County Road G24 to Highway 28; then southwest along Highway 28 to 43rd Avenue; then north along 43rd Avenue to Ford Street; then west along Ford Street to Filmore Street; then west along Filmore Street to 10th Avenue; then south along 10th Avenue to 155th Street in Madison County; then west along 155th Street to Cumming Road; then north along Cumming Road to Badger Creek Avenue; then north along Badger Creek Avenue to County Road F90 in Dallas County; then east along County Road F90 to County Road R22; then north along County Road R22 to Highway 44; then east along Highway 44 to County Road R30; then north along County Road R30 to County Road F31; then east along County Road F31 to Highway 17; then north along Highway 17 to Highway 415 in Polk County; then east along Highway 415 to Northwest 158th Avenue; then east along Northwest 158th Avenue to the point of beginning.

Cedar Falls/Waterloo Goose Zone: Includes those portions of Black Hawk County bounded as follows: Beginning at the intersection of County Roads C66 and V49 in Black Hawk County, then south along County Road V49 to County Road D38, then west along County Road D38 to State Highway 21, then south along State Highway 21 to County Road D35, then west along County Road D35 to Grundy Road, then north along Grundy Road to County Road D19, then west along County Road D19 to Butler Road, then north along Butler Road to County Road C57, then north and east along County Road C57 to U.S. Highway 63, then south along U.S. Highway 63 to County Road C66, then east along County Road C66 to the point of beginning.

Regular Seasons:

Same zones as for ducks.

Kentucky

Western Zone: That portion of the State west of a line beginning at the Tennessee State line at Fulton and extending north along the Purchase Parkway to Interstate Highway 24, east along I–24 to U.S. Highway 641, north along U.S. 641 to U.S. 60, northeast along U.S. 60 to the Henderson County line, then south, east, and northerly along the Henderson County line to the Indiana State line.

Pennyroyal/Coalfield Zone: Butler, Daviess, Ohio, Simpson, and Warren Counties and all counties lying west to the boundary of the Western Goose Zone.

Louisiana

North Zone: That portion of the State north of the line from the Texas border at Hwy 190/12 east to Hwy 49, then south on Hwy 49 to I–10, then east on I–10 to I–12, then east on I–12 to 1–10, then east on I–10 to the Mississippi State line.

South Zone: Remainder of the State.

Michigan

North Zone: Same as North duck zone.

Middle Zone: Same as Middle duck zone.

South Zone: Same as South duck zone.

Tuscola/Huron Goose Management Unit (GMU): Those portions of Tuscola and Huron Counties bounded on the south by Michigan Highway 138 and Bay City Road, on the east by Colwood and Bay Port Roads, on the north by Kilmanagh Road and a line extending directly west off the end of Kilmanagh Road into Saginaw Bay to the west boundary, and on the west by the Tuscola-Bay County line and a line extending directly north off the end of the Tuscola-Bay County line into Saginaw Bay to the north boundary.

Allegan County GMU: That area encompassed by a line beginning at the junction of 136th Avenue and Interstate Highway 196 in Lake Town Township and extending easterly along 136th Avenue to Michigan Highway 40, southerly along Michigan 40 through the city of Allegan to 108th Avenue in Trowbridge Township, westerly along 108th Avenue to 46th Street, northerly along 46th Street to 109th Avenue, westerly along 109th Avenue to I–196 in Casco Township, then northerly along I–196 to the point of beginning.

Saginaw County GMU: That portion of Saginaw County bounded by Michigan Highway 46 on the north; Michigan 52 on the west; Michigan 57 on the south; and Michigan 13 on the east.

Muskegon Wastewater GMU: That portion of Muskegon County within the boundaries of the Muskegon County wastewater system, east of the Muskegon State Game Area, in sections 5, 6, 7, 8, 17, 18, 19, 20, 29, 30, and 32, T10N R14W, and sections 1, 2, 10, 11, 12, 13, 14, 24, and 25, T10N R15W, as posted.

Southern Michigan Late Season Canada Goose Zone: Same as the South Duck Zone excluding Tuscola/Huron Goose Management Unit (GMU), Allegan County GMU, Saginaw County GMU, and Muskegon Wastewater GMU.

Minnesota

Early Canada Goose Seasons:

Northwest Goose Zone: That portion of the State encompassed by a line extending east from the North Dakota border along U.S. Highway 2 to State Trunk Highway (STH) 32, north along STH 32 to STH 92, east along STH 92 to County State Aid Highway (CSAH) 2 in Polk County, north along CSAH 2 to

CSAH 27 in Pennington County, north along CSAH 27 to STH 1, east along STH 1 to CSAH 28 in Pennington County, north along CSAH 28 to CSAH 54 in Marshall County, north along CSAH 54 to CSAH 9 in Roseau County, north along CSAH 9 to STH 11, west along STH 11 to STH 310, and north along STH 310 to the Manitoba border.

Intensive Harvest Zone: That portion of the State encompassed by a line extending east from the junction of US 2 and the North Dakota border, US 2 east to MN 32, MN 32 north to MN 92, MN 92 south to MN 200, MN 200 east to US 71, US 71 south to US 10, US 10 east to MN 101, MN 101 south to Interstate 94, Interstate 94 east to US 494, US 494 south to US 212, US 212 west to MN 23, MN 23 south to US 14, US 14 west to the South Dakota border, South Dakota Border north to the North Dakota border, North Dakota border north to US 2.

Rest of State: Remainder of Minnesota.

Regular Seasons:

Same zones as for ducks but in addition:

Rochester Goose Zone: That part of the State within the following described boundary:

Beginning at the intersection of State Trunk Highway (STH) 247 and County State Aid Highway (CSAH) 4, Wabasha County; thence along CSAH 4 to CSAH 10, Olmsted County; thence along CSAH 10 to CSAH 9, Olmsted County; thence along CSAH 9 to CSAH 22, Winona County; thence along CSAH 22 to STH 74; thence along STH 74 to STH 30; thence along STH 30 to CSAH 13, Dodge County; thence along CSAH 13 to U.S. Highway 14; thence along U.S. Highway 14 to STH 57; thence along STH 57 to CSAH 24, Dodge County; thence along CSAH 24 to CSAH 13, Olmsted County; thence along CSAH 13 to U.S. Highway 52; thence along U.S. Highway 52 to CSAH 12, Olmsted County; thence along CSAH 12 to STH 247; thence along STH 247 to the point of beginning.

Missouri

Same zones as for ducks.

Ohio

Same zones as for ducks.

Tennessee

Northwest Goose Zone: Lake, Obion, and Weakley Counties and those portions of Gibson and Dyer Counties north of State Highways 20 and 104 and east of U.S. Highways 45 and 45W.

Remainder of State: That portion of Tennessee outside of the Northwest Goose Zone.

Wisconsin

Early Canada Goose Seasons:

Early-Season Subzone A: That portion of the State encompassed by a line beginning at the intersection of U.S. Highway 141 and the Michigan border near Niagara, then south along U.S. 141 to State Highway 22, west and southwest along State 22 to U.S. 45, south along U.S. 45 to State 22, west and south along State 22 to State 110, south along State 110 to U.S. 10, south along U.S. 10 to State 49, south along State 49 to State 23, west along State 23 to State 73, south along State 73 to State 60, west along State 60 to State 23, south along State 23 to State 11, east along State 11 to State 78, then south along State 78 to the Illinois border.

Early-Season Subzone B: The remainder of the State.

Regular Seasons:

Same zones as for ducks but in addition:

Horicon Zone: That portion of the State encompassed by a boundary beginning at the intersection of State 23 and State 73 and moves south along State 73 until the intersection of State 73 and State 60, then moves east along State 60 until the intersection of State 60 and State 83, and then moves north along State 83 until the intersection of State 83 and State 33 at which point it moves east until the intersection of State 33 and U.S .45, then moves north along U.S. 45 until the intersection of U.S. 45 and State 23, at which point it moves west along State 23 until the intersection of State 23 and State 73.

Central Flyway

Colorado (Central Flyway Portion)

Northern Front Range Area: All areas in Boulder, Larimer, and Weld Counties from the Continental Divide east along the Wyoming border to U.S. 85, south on U.S. 85 to the Adams County line, and all lands in Adams, Arapahoe, Broomfield, Clear Creek, Denver, Douglas, Gilpin, and Jefferson Counties.

North Park Area: Jackson County.

South Park and San Luis Valley Area: All of Alamosa, Chaffee, Conejos, Costilla, Custer, Fremont, Lake, Park, Rio Grande, and Teller Counties, and those portions of Saguache, Mineral and Hinsdale Counties east of the Continental Divide.

Remainder: Remainder of the Central Flyway portion of Colorado.

Eastern Colorado Late Light Goose Area: That portion of the State east of Interstate Highway 25.

Montana (Central Flyway Portion)

Zone 1: Same as Zone 1 for ducks and coots.

Zone 2: Same as Zone 2 for ducks and coots.

Nebraska

Dark Geese

Niobrara Unit: That area contained within and bounded by the intersection of the South Dakota State line and the eastern Cherry County line, south along the Cherry County line to the Niobrara River, east to the Norden Road, south on the Norden Road to U.S. Hwy 20, east along U.S. Hwy 20 to NE Hwy 14, north along NE Hwy 14 to NE Hwy 59 and County Road 872, west along County Road 872 to the Knox County Line, north along the Knox County Line to the South Dakota State line. Where the Niobrara River forms the boundary, both banks of the river are included in the Niobrara Unit.

East Unit: That area north and east of U.S. 81 at the Kansas-Nebraska State line, north to NE Hwy 91, east to U.S. 275, south to U.S. 77, south to NE 91, east to U.S. 30, east to Nebraska-Iowa State line.

Platte River Unit: That area north and west of U.S. 81 at the Kansas-Nebraska State line, north to NE Hwy 91, west along NE 91 to NE 11, north to the Holt County line, west along the northern border of Garfield, Loup, Blaine and Thomas Counties to the Hooker County line, south along the Thomas-Hooker County lines to the McPherson County line, east along the south border of Thomas County to the western line of Custer County, south along the Custer-Logan County line to NE 92, west to U.S. 83, north to NE 92, west to NE 61, south along NE 61 to NE 92, west along NE 92 to U.S. Hwy 26, south along U.S. Hwy 26 to Keith County Line, south along Keith County Line to the Colorado State line.

Panhandle Unit: That area north and west of Keith-Deuel County Line at the Nebraska-Colorado State line, north along the Keith County Line to U.S. Hwy 26, west to NE Hwy 92, east to NE Hwy 61, north along NE Hwy 61 to NE Hwy 2, west along NE 2 to the corner formed by Garden-Grant-Sheridan Counties, west along the north border of Garden, Morrill, and Scotts Bluff Counties to the intersection of the Interstate Canal, west to the Wyoming State line.

North-Central Unit: The remainder of the State.

Light Geese

Rainwater Basin Light Goose Area: The area bounded by the junction of NE Hwy. 92 and NE Hwy. 15, south along NE Hwy. 15 to NE Hwy. 4, west along NE Hwy. 4 to U.S. Hwy. 34, west along

U.S. Hwy. 34 to U.S. Hwy. 283, north along U.S. Hwy. 283 to U.S. Hwy. 30, east along U.S. Hwy. 30 to NE Hwy. 92, east along NE Hwy. 92 to the beginning.

Remainder of State: The remainder portion of Nebraska.

New Mexico (Central Flyway Portion)

Dark Geese

Middle Rio Grande Valley Unit: Sierra, Socorro, and Valencia Counties.

Remainder: The remainder of the Central Flyway portion of New Mexico.

North Dakota

Missouri River Canada Goose Zone: The area within and bounded by a line starting where ND Hwy 6 crosses the South Dakota border; then north on ND Hwy 6 to I–94; then west on I–94 to ND Hwy 49; then north on ND Hwy 49 to ND Hwy 200; then north on Mercer County Rd. 21 to the section line between sections 8 and 9 (T146N–R87W); then north on that section line to the southern shoreline to Lake Sakakawea; then east along the southern shoreline (including Mallard Island) of Lake Sakakawea to U.S. Hwy 83; then south on U.S. Hwy 83 to ND Hwy 200; then east on ND Hwy 200 to ND Hwy 41; then south on ND Hwy 41 to U.S. Hwy 83; then south on U.S. Hwy 83 to I–94; then east on I–94 to U.S. Hwy 83; then south on U.S. Hwy 83 to the South Dakota border; then west along the South Dakota border to ND Hwy 6.

Rest of State: Remainder of North Dakota.

South Dakota

Early Canada Goose Seasons:

Special Early Canada Goose Unit: The Counties of Campbell, Marshall, Roberts, Day, Clark, Codington, Grant, Hamlin, Deuel, Walworth; that portion of Perkins County west of State Highway 75 and south of State Highway 20; that portion of Dewey County north of Bureau of Indian Affairs Road 8, Bureau of Indian Affairs Road 9, and the section of U.S. Highway 212 east of the Bureau of Indian Affairs Road 8 junction; that portion of Potter County east of U.S. Highway 83; that portion of Sully County east of U.S. Highway 83; portions of Hyde, Buffalo, Brule, and Charles Mix counties north and east of a line beginning at the Hughes-Hyde County line on State Highway 34, east to Lees Boulevard, southeast to State Highway 34, east 7 miles to 350th Avenue, south to Interstate 90 on 350th Avenue, south and east on State Highway 50 to Geddes, east on 285th Street to U.S. Highway 281, and north on U.S. Highway 281 to the Charles Mix-Douglas County boundary; that portion of Bon Homme County north of State Highway 50; McPherson, Edmunds, Kingsbury, Brookings, Lake, Moody, Miner, Faulk, Hand, Jerauld, Douglas, Hutchinson, Turner, Union, Clay, Yankton, Aurora, Beadle, Davison, Hanson, Sanborn, Spink, Brown, Harding, Butte, Lawrence, Meade, Oglala Lakota (formerly Shannon), Jackson, Mellette, Todd, Jones, Haakon, Corson, Ziebach, and McCook Counties; and those portions of Minnehaha and Lincoln counties outside of an area bounded by a line beginning at the junction of the South Dakota-Minnesota State line and Minnehaha County Highway 122 (254th Street) west to its junction with Minnehaha County Highway 149 (464th Avenue), south on Minnehaha County Highway 149 (464th Avenue) to Hartford, then south on Minnehaha County Highway 151 (463rd Avenue) to State Highway 42, east on State Highway 42 to State Highway 17, south on State Highway 17 to its junction with Lincoln County Highway 116 (Klondike Road), and east on Lincoln County Highway 116 (Klondike Road) to the South Dakota-Iowa State line, then north along the South Dakota-Iowa and South Dakota-Minnesota border to the junction of the South Dakota-Minnesota State line and Minnehaha County Highway 122 (254th Street).

Regular Seasons:

Unit 1: Same as that for the September Canada Goose Season.

Unit 2: Remainder of South Dakota.

Unit 3: Bennett County.

Texas

Northeast Goose Zone: That portion of Texas lying east and north of a line beginning at the Texas-Oklahoma border at U.S. 81, then continuing south to Bowie and then southeasterly along U.S. 81 and U.S. 287 to I–35W and I–35 to the juncture with I–10 in San Antonio, then east on I–10 to the Texas-Louisiana border.

Southeast Goose Zone: That portion of Texas lying east and south of a line beginning at the International Toll Bridge at Laredo, then continuing north following I–35 to the juncture with I–10 in San Antonio, then easterly along I–10 to the Texas-Louisiana border.

West Goose Zone: The remainder of the State.

Wyoming (Central Flyway Portion)

Dark Geese

Zone G1: Big Horn, Converse, Hot Springs, Natrona, Park, and Washakie Counties; and Fremont County excluding those portions south or west of the Continental Divide.

Zone G1A: Goshen and Platte Counties.

Zone G2: Campbell, Crook, Johnson, Niobrara, Sheridan, and Weston Counties.

Zone G3: Albany and Laramie Counties; and that portion of Carbon County east of the Continental Divide.

Pacific Flyway

Arizona

Same zones as for ducks.

California

Northeastern Zone: In that portion of California lying east and north of a line beginning at the intersection of Interstate 5 with the California-Oregon line; south along Interstate 5 to its junction with Walters Lane south of the town of Yreka; west along Walters Lane to its junction with Easy Street; south along Easy Street to the junction with Old Highway 99; south along Old Highway 99 to the point of intersection with Interstate 5 north of the town of Weed; south along Interstate 5 to its junction with Highway 89; east and south along Highway 89 to main street Greenville; north and east to its junction with North Valley Road; south to its junction of Diamond Mountain Road; north and east to its junction with North Arm Road; south and west to the junction of North Valley Road; south to the junction with Arlington Road (A22); west to the junction of Highway 89; south and west to the junction of Highway 70; east on Highway 70 to Highway 395; south and east on Highway 395 to the point of intersection with the California-Nevada State line; north along the California-Nevada State line to the junction of the California-Nevada-Oregon State lines west along the California-Oregon State line to the point of origin.

Colorado River Zone: Those portions of San Bernardino, Riverside, and Imperial Counties east of a line extending from the Nevada border south along U.S. 95 to Vidal Junction; south on a road known as ''Aqueduct Road'' in San Bernardino County through the town of Rice to the San Bernardino-Riverside County line; south on a road known in Riverside County as the ''Desert Center to Rice Road'' to the town of Desert Center; east 31 miles on I–10 to the Wiley Well Road; south on this road to Wiley Well; southeast along the Army-Milpitas Road to the Blythe, Brawley, Davis Lake intersections; south on the Blythe-Brawley paved road to the Ogilby and Tumco Mine Road; south on this road to U.S. 80; east 7 miles on U.S. 80 to the Andrade-Algodones Road; south on this paved road to the Mexican border at Algodones, Mexico.

Southern Zone: That portion of southern California (but excluding the Colorado River Zone) south and east of a line extending from the Pacific Ocean east along the Santa Maria River to CA 166 near the City of Santa Maria; east on CA 166 to CA 99; south on CA 99 to the crest of the Tehachapi Mountains at Tejon Pass; east and north along the crest of the Tehachapi Mountains to CA 178 at Walker Pass; east on CA 178 to U.S. 395 at the town of Inyokern; south on U.S. 395 to CA 58; east on CA 58 to I–15; east on I–15 to CA 127; north on CA 127 to the Nevada border.

Imperial County Special Management Area: The area bounded by a line beginning at Highway 86 and the Navy Test Base Road; south on Highway 86 to the town of Westmoreland; continue through the town of Westmoreland to Route S26; east on Route S26 to Highway 115; north on Highway 115 to Weist Rd.; north on Weist Rd. to Flowing Wells Rd.; northeast on Flowing Wells Rd. to the Coachella Canal; northwest on the Coachella Canal to Drop 18; a straight line from Drop 18 to Frink Rd.; south on Frink Rd. to Highway 111; north on Highway 111 to Niland Marina Rd.; southwest on Niland Marina Rd. to the old Imperial County boat ramp and the water line of the Salton Sea; from the water line of the Salton Sea, a straight line across the Salton Sea to the Salinity Control Research Facility and the Navy Test Base Road; southwest on the Navy Test Base Road to the point of beginning.

Balance of State Zone: The remainder of California not included in the Northeastern, Colorado River, and Southern Zones.

North Coast Special Management Area: Del Norte and Humboldt Counties.

Sacramento Valley Special Management Area: That area bounded by a line beginning at Willows south on I–5 to Hahn Road; easterly on Hahn Road and the Grimes-Arbuckle Road to Grimes; northerly on CA 45 to the junction with CA 162; northerly on CA 45/162 to Glenn; and westerly on CA 162 to the point of beginning in Willows.

Colorado (Pacific Flyway Portion)

Same zones as for ducks.

Idaho

Canada Geese and Brant

Zone 1: All lands and waters within the Fort Hall Indian Reservation, including private in-holdings; Bannock County; Bingham County, except that portion within the Blackfoot Reservoir drainage; Caribou County within the Fort Hall Indian Reservation; and Power County east of State Highway 37 and State Highway 39.

Zone 2: Adams, Benewah, Blaine, Bonner, Bonneville, Boundary, Butte, Camas, Clark, Clearwater, Custer, Franklin, Fremont, Idaho, Jefferson, Kootenai, Latah, Lemhi, Lewis, Madison, Nez Perce, Oneida, Shoshone, Teton, and Valley Counties; and Power County west of State Highway 37 and State Highway 39.

Zone 3: Ada, Boise, Canyon, Cassia, Elmore, Gem, Gooding, Jerome, Lincoln, Minidoka, Owyhee, Payette, Twin Falls, and Washington Counties.

Zone 4: Bear Lake County; Bingham County within the Blackfoot Reservoir drainage; and Caribou County, except that portion within the Fort Hall Indian Reservation.

White-Fronted Geese

Same zones as for ducks.

Light Geese

Zone 1: All lands and waters within the Fort Hall Indian Reservation, including private in-holdings; Bannock County; Bingham County east of the west bank of the Snake River, west of the McTucker boat ramp access road, and east of the American Falls Reservoir bluff, except that portion within the Blackfoot Reservoir drainage; Caribou County within the Fort Hall Indian Reservation; and Power County below the American Falls Reservoir bluff, and within the Fort Hall Indian Reservation.

Zone 2: Bingham County west of the west bank of the Snake River, east of the McTucker boat ramp access road, and west of the American Falls Reservoir bluff; Power County, except below the American Falls Reservoir bluff and those lands and waters within the Fort Hall Indian Reservation.

Zone 3: Ada, Boise, Canyon, Cassia, Elmore, Gem, Gooding, Jerome, Lincoln, Minidoka, Owyhee, Payette, Twin Falls, and Washington Counties.

Zone 4: Adams, Bear Lake, Benewah, Blaine, Bonner, Bonneville, Boundary, Butte, Camas, Clark, Clearwater, Custer, Franklin, Fremont, Idaho, Jefferson, Kootenai, Latah, Lemhi, Lewis, Madison, Nez Perce, Oneida, Shoshone, Teton, and Valley Counties; Caribou County, except the Fort Hall Indian Reservation; Bingham County within the Blackfoot Reservoir drainage.

Nevada

Same zones as for ducks.

New Mexico (Pacific Flyway Portion)

North Zone: The Pacific Flyway portion of New Mexico located north of I–40.

South Zone: The Pacific Flyway portion of New Mexico located south of I–40.

Oregon

Northwest Permit Zone: Benton, Clackamas, Clatsop, Columbia, Lane, Lincoln, Linn, Marion, Multnomah, Polk, Tillamook, Washington, and Yamhill Counties.

Lower Columbia/N. Willamette Valley Management Area: Those portions of Clatsop, Columbia, Multnomah, and Washington Counties within the Northwest Special Permit Zone.

Tillamook County Management Area: That portion of Tillamook County beginning at the point where Old Woods Rd crosses the south shores of Horn Creek, north on Old Woods Rd to Sand Lake Rd at Woods, north on Sand Lake Rd to the intersection with McPhillips Dr, due west (~200 yards) from the intersection to the Pacific coastline, south on the Pacific coastline to Neskowin Creek, east along the north shores of Neskowin Creek and then Hawk Creek to Salem Ave, east on Salem Ave in Neskowin to Hawk Ave, east on Hawk Ave to Hwy 101, north on Hwy 101 to Resort Dr, north on Resort Dr to a point due west of the south shores of Horn Creek at its confluence with the Nestucca River, due east (~80 yards) across the Nestucca River to the south shores of Horn Creek, east along the south shores of Horn Creek to the point of beginning.

Southwest Zone: Those portions of Douglas, Coos, and Curry Counties east of Highway 101, and Josephine and Jackson Counties.

South Coast Zone: Those portions of Douglas, Coos, and Curry Counties west of Highway 101.

Eastern Zone: Baker, Crook, Deschutes, Gilliam, Grant, Hood River, Jefferson, Morrow, Sherman, Umatilla, Union, Wallowa, Wasco, and Wheeler Counties.

Klamath County Zone: Klamath County.

Harney and Lake County Zone: Harney and Lake Counties.

Malheur County Zone: Malheur County.

Utah

Northern Zone: Boundary begins at the intersection of the eastern boundary of Public Shooting Grounds Waterfowl Management Area and SR–83 (Promontory Road); east along SR–83 to I–15; south on I–15 to the Perry access road; southwest along this road to the Bear River Bird Refuge boundary; west, north, and then east along the refuge boundary until it intersects the Public Shooting Grounds Waterfowl

Management Area boundary; east and north along the Public Shooting Grounds Waterfowl Management Area boundary to SR–83.

Wasatch Front Zone: Boundary begins at the Weber-Box Elder county line at I–15; east along Weber county line to U.S.–89; south on U.S.–89 to I–84; east and south and along I–84 to I–80; south along I–80 to U.S.–189; south and west along U.S.–189 to the Utah County line; southeast and then west along this line to I–15; north on I–15 to U.S.–6; west on U.S.–6 to SR–36; north on SR–36 to I–80; north along a line from this intersection to the southern tip of Promontory Point and Promontory Road; east and north along this road to the causeway separating Bear River Bay from Ogden Bay; east on this causeway to the southwest corner of Great Salt Lake Mineral Corporations (GSLMC) west impoundment; north and east along GSLMC's west impoundment to the northwest corner of the impoundment; directly north from this point along an imaginary line to the southern boundary of Bear River Migratory Bird Refuge; east along this southern boundary to the Perry access road; northeast along this road to I–15; south along I–15 to the Weber-Box Elder county line.

Washington County Zone: Washington County.

Balance of State Zone: The remainder of Utah not included in the Northern, Wasatch Front, and Washington County Zones.

Washington

Area 1: Skagit, Island, and Snohomish Counties.

Area 2A (Southwest Permit Zone): Clark, Cowlitz, and Wahkiakum Counties.

Area 2B (Southwest Permit Zone): Grays Harbor and Pacific Counties.

Area 3: All areas west of the Pacific Crest Trail and west of the Big White Salmon River that are not included in Areas 1, 2A, and 2B.

Area 4: Adams, Benton, Chelan, Douglas, Franklin, Grant, Kittitas, Lincoln, Okanogan, Spokane, and Walla Walla Counties.

Area 5: All areas east of the Pacific Crest Trail and east of the Big White Salmon River that are not included in Area 4.

Brant

Pacific Flyway

California

Northern Zone: Del Norte, Humboldt, and Mendocino Counties.

Balance of State Zone: The remainder of the State not included in the Northern Zone.

Washington

Puget Sound Zone: Skagit County.

Coastal Zone: Pacific County.

Swans

Central Flyway

South Dakota: Aurora, Beadle, Brookings, Brown, Brule, Buffalo, Campbell, Clark, Codington, Davison, Day, Deuel, Edmunds, Faulk, Grant, Hamlin, Hand, Hanson, Hughes, Hyde, Jerauld, Kingsbury, Lake, Marshall, McCook, McPherson, Miner, Minnehaha, Moody, Potter, Roberts, Sanborn, Spink, Sully, and Walworth Counties.

Pacific Flyway

Montana (Pacific Flyway Portion)

Open Area: Cascade, Chouteau, Hill, Liberty, and Toole Counties and those portions of Pondera and Teton Counties lying east of U.S. 287–89.

Nevada

Open Area: Churchill, Lyon, and Pershing Counties.

Utah

Open Area: Those portions of Box Elder, Weber, Davis, Salt Lake, and Toole Counties lying west of I–15, north of I–80, and south of a line beginning from the Forest Street exit to the Bear River National Wildlife Refuge boundary; then north and west along the Bear River National Wildlife Refuge boundary to the farthest west boundary of the Refuge; then west along a line to Promontory Road; then north on Promontory Road to the intersection of SR 83; then north on SR 83 to I–84; then north and west on I–84 to State Hwy 30; then west on State Hwy 30 to the Nevada-Utah State line; then south on the Nevada-Utah State line to I–80.

Doves

Alabama

South Zone: Baldwin, Barbour, Coffee, Covington, Dale, Escambia, Geneva, Henry, Houston, and Mobile Counties.

North Zone: Remainder of the State.

Florida

Northwest Zone: The Counties of Bay, Calhoun, Escambia, Franklin, Gadsden, Gulf, Holmes, Jackson, Liberty, Okaloosa, Santa Rosa, Walton, Washington, Leon (except that portion north of U.S. 27 and east of State Road 155), Jefferson (south of U.S. 27, west of State Road 59 and north of U.S. 98), and Wakulla (except that portion south of U.S. 98 and east of the St. Marks River).

South Zone: Remainder of State.

Louisiana

North Zone: That portion of the State north of a line extending east from the Texas border along State Highway 12 to U.S. Highway 190, east along U.S. 190 to Interstate Highway 12, east along Interstate Highway 12 to Interstate Highway 10, then east along Interstate Highway 10 to the Mississippi border.

South Zone: The remainder of the State.

Mississippi

North Zone: That portion of the State north and west of a line extending west from the Alabama State line along U.S. Highway 84 to its junction with State Highway 35, then south along State Highway 35 to the Louisiana State line.

South Zone: The remainder of Mississippi.

Texas

North Zone: That portion of the State north of a line beginning at the International Bridge south of Fort Hancock; north along FM 1088 to TX 20; west along TX 20 to TX 148; north along TX 148 to I–10 at Fort Hancock; east along I–10 to I–20; northeast along I–20 to I–30 at Fort Worth; northeast along I–30 to the Texas-Arkansas State line.

South Zone: That portion of the State south and west of a line beginning at the International Bridge south of Del Rio, proceeding east on U.S. 90 to State Loop 1604 west of San Antonio; then south, east, and north along Loop 1604 to I–10 east of San Antonio; then east on I–10 to Orange, Texas.

Special White-winged Dove Area in the South Zone: That portion of the State south and west of a line beginning at the International Toll Bridge in Del Rio; then northeast along U.S. Highway 277 Spur to U.S. Highway 90 in Del Rio; then east along U.S. Highway 90 to State Loop 1604; then along Loop 1604 south and east to Interstate Highway 37; then south along Interstate Highway 37 to U.S. Highway 181 in Corpus Christi; then north and east along U.S. 181 to the Corpus Christi Ship Channel, then eastwards along the south shore of the Corpus Christi Ship Channel to the Gulf of Mexico.

Central Zone: That portion of the State lying between the North and South Zones.

Band-Tailed Pigeons

California

North Zone: Alpine, Butte, Del Norte, Glenn, Humboldt, Lassen, Mendocino,

Modoc, Plumas, Shasta, Sierra, Siskiyou, Tehama, and Trinity Counties.

South Zone: The remainder of the State not included in the North Zone.

New Mexico

North Zone: North of a line following U.S. 60 from the Arizona State line east to I–25 at Socorro and then south along I–25 from Socorro to the Texas State line.

South Zone: The remainder of the State not included in the North Zone.

Washington

Western Washington: The State of Washington excluding those portions lying east of the Pacific Crest Trail and east of the Big White Salmon River in Klickitat County.

Woodcock

New Jersey

North Zone: That portion of the State north of NJ 70.

South Zone: The remainder of the State.

Sandhill Cranes

Mississippi Flyway

Minnesota

Northwest Goose Zone: That portion of the State encompassed by a line extending east from the North Dakota border along U.S. Highway 2 to State Trunk Highway (STH) 32, north along STH 32 to STH 92, east along STH 92 to County State Aid Highway (CSAH) 2 in Polk County, north along CSAH 2 to CSAH 27 in Pennington County, north along CSAH 27 to STH 1, east along STH 1 to CSAH 28 in Pennington County, north along CSAH 28 to CSAH 54 in Marshall County, north along CSAH 54 to CSAH 9 in Roseau County, north along CSAH 9 to STH 11, west along STH 11 to STH 310, and north along STH 310 to the Manitoba border.

Tennessee

Hunt Zone: That portion of the State south of Interstate 40 and east of State Highway 56.

Closed Zone: Remainder of the State.

Central Flyway

Colorado: The Central Flyway portion of the State except the San Luis Valley (Alamosa, Conejos, Costilla, Hinsdale, Mineral, Rio Grande, and Saguache Counties east of the Continental Divide) and North Park (Jackson County).

Kansas: That portion of the State west of a line beginning at the Oklahoma border, north on I–35 to Wichita, north on I–135 to Salina, and north on U.S. 81 to the Nebraska border.

Montana

Regular Season Open Area: The Central Flyway portion of the State except for that area south and west of Interstate 90, which is closed to sandhill crane hunting.

Special Season Open Area: Carbon County.

New Mexico

Regular-Season Open Area: Chaves, Curry, De Baca, Eddy, Lea, Quay, and Roosevelt Counties.

Special Season Open Areas:

Middle Rio Grande Valley Area: The Central Flyway portion of New Mexico in Socorro and Valencia Counties.

Estancia Valley Area: Those portions of Santa Fe, Torrance, and Bernallilo Counties within an area bounded on the west by New Mexico Highway 55 beginning at Mountainair north to NM 337, north to NM 14, north to I–25; on the north by I–25 east to U.S. 285; on the east by U.S. 285 south to U.S. 60; and on the south by U.S. 60 from U.S. 285 west to NM 55 in Mountainair.

Southwest Zone: Area bounded on the south by the New Mexico-Mexico border; on the west by the New Mexico-Arizona border north to Interstate 10; on the north by Interstate 10 east to U.S. 180, north to N.M. 26, east to N.M. 27, north to N.M. 152, and east to Interstate 25; on the east by Interstate 25 south to Interstate 10, west to the Luna County line, and south to the New Mexico-Mexico border.

North Dakota

Area 1: That portion of the State west of U.S. 281.

Area 2: That portion of the State east of U.S. 281.

Oklahoma: That portion of the State west of I–35.

South Dakota: That portion of the State west of U.S. 281.

Texas

Zone A: That portion of Texas lying west of a line beginning at the international toll bridge at Laredo, then northeast along U.S. Highway 81 to its junction with Interstate Highway 35 in Laredo, then north along Interstate Highway 35 to its junction with Interstate Highway 10 in San Antonio, then northwest along Interstate Highway 10 to its junction with U.S. Highway 83 at Junction, then north along U.S. Highway 83 to its junction with U.S. Highway 62, 16 miles north of Childress, then east along U.S. Highway 62 to the Texas-Oklahoma State line.

Zone B: That portion of Texas lying within boundaries beginning at the junction of U.S. Highway 81 and the Texas-Oklahoma State line, then southeast along U.S. Highway 81 to its junction with U.S. Highway 287 in Montague County, then southeast along U.S. Highway 287 to its junction with Interstate Highway 35W in Fort Worth, then southwest along Interstate Highway 35 to its junction with Interstate Highway 10 in San Antonio, then northwest along Interstate Highway 10 to its junction with U.S. Highway 83 in the town of Junction, then north along U.S. Highway 83 to its junction with U.S. Highway 62, 16 miles north of Childress, then east along U.S. Highway 62 to the Texas-Oklahoma State line, then south along the Texas-Oklahoma State line to the south bank of the Red River, then eastward along the vegetation line on the south bank of the Red River to U.S. Highway 81.

Zone C: The remainder of the State, except for the closed areas.

Closed areas: (A) That portion of the State lying east and north of a line beginning at the junction of U.S. Highway 81 and the Texas-Oklahoma State line, then southeast along U.S. Highway 81 to its junction with U.S. Highway 287 in Montague County, then southeast along U.S. Highway 287 to its junction with I–35W in Fort Worth, then southwest along I–35 to its junction with U.S. Highway 290 East in Austin, then east along U.S. Highway 290 to its junction with Interstate Loop 610 in Harris County, then south and east along Interstate Loop 610 to its junction with Interstate Highway 45 in Houston, then south on Interstate Highway 45 to State Highway 342, then to the shore of the Gulf of Mexico, and then north and east along the shore of the Gulf of Mexico to the Texas-Louisiana State line.

(B) That portion of the State lying within the boundaries of a line beginning at the Kleberg-Nueces County line and the shore of the Gulf of Mexico, then west along the County line to Park Road 22 in Nueces County, then north and west along Park Road 22 to its junction with State Highway 358 in Corpus Christi, then west and north along State Highway 358 to its junction with State Highway 286, then north along State Highway 286 to its junction with Interstate Highway 37, then east along Interstate Highway 37 to its junction with U.S. Highway 181, then north and west along U.S. Highway 181 to its junction with U.S. Highway 77 in Sinton, then north and east along U.S. Highway 77 to its junction with U.S. Highway 87 in Victoria, then south and east along U.S. Highway 87 to its junction with State Highway 35 at Port Lavaca, then north and east along State Highway 35 to the south end of the Lavaca Bay Causeway, then south and

east along the shore of Lavaca Bay to its junction with the Port Lavaca Ship Channel, then south and east along the Lavaca Bay Ship Channel to the Gulf of Mexico, and then south and west along the shore of the Gulf of Mexico to the Kleberg-Nueces County line.

Wyoming

Regular Season Open Area: Campbell, Converse, Crook, Goshen, Laramie, Niobrara, Platte, and Weston Counties.

Special Season Open Areas:

Riverton-Boysen Unit: Portions of Fremont County.

Park and Big Horn County Unit: All of Big Horn, Hot Springs, Park, and Washakie Counties.

Johnson, Natrona, and Sheridan County Unit: All of Johnson, Natrona, and Sheridan Counties.

Pacific Flyway

Arizona

Special Season Area: Game Management Units 28, 30A, 30B, 31, and 32.

Idaho

Area 1: All of Bear Lake County and all of Caribou County except that portion lying within the Grays Lake Basin.

Area 2: All of Teton County except that portion lying west of State Highway 33 and south of Packsaddle Road (West 400 North) and north of the North Cedron Road (West 600 South) and east of the west bank of the Teton River.

Area 3: All of Fremont County except the Chester Wetlands Wildlife Management Area.

Area 4: All of Jefferson County.

Area 5: All of Bannock County east of Interstate–15 and south of U.S. Highway 30; and all of Franklin County.

Montana

Zone 1 (Warm Springs Portion of Deer Lodge County): Those portions of Deer Lodge County lying within the following described boundary: Beginning at the intersection of I–90 and Highway 273, then westerly along Highway 273 to the junction of Highway 1, then southeast along said highway to Highway 275 at Opportunity, then east along said highway to East Side County road, then north along said road to Perkins Lake, then west on said lane to I–90, then north on said interstate to the junction of Highway 273, the point of beginning. Except for sections 13 and 24, T5N, R10W; and Warm Springs Pond number 3.

Zone 2 (Ovando-Helmville Area): That portion of the Pacific Flyway, located in Powell County lying within the following described boundary: Beginning at the junction of State Routes 141 and 200, then west along Route 200 to its intersection with the Blackfoot River at Russell Gates Fishing Access Site (Powell-Missoula County line), then southeast along said river to its intersection with the Ovando-Helmville Road (County Road 104) at Cedar Meadows Fishing Access Site, then south and east along said road to its junction with State Route 141, then north along said route to its junction with State Route 200, the point of beginning.

Zone 3 (Dillon/Twin Bridges/Cardwell Areas): That portion of Beaverhead, Madison, and Jefferson Counties lying within the following described boundaries: Beginning at Dillon, then northerly along U.S. Hwy 91 to its intersection with the Big Hole River at Brown's Bridge north of Glen, then southeasterly and northeasterly along the Big Hole River to High Road, then east along High Road to State Highway 41, then east along said highway to the Beaverhead River, then north along said river to the Jefferson River and north along the Jefferson River to the Ironrod Bridge, then northeasterly along State Highway 41 to the junction with State Highway 55, then northeasterly along said highway to the junction with I–90, then east along I–90 to Cardwell and Route 359 then south along Route 359 to the Parrot Hill/Cedar Hill Road then southwesterly along said road and the Cemetery Hill Road to the Parrot Ditch road to the Point of Rocks Road to Carney Lane to the Bench Road to the Waterloo Road and Bayers Lanes, to State Highway 41, then east along State Highway 41 to the Beaverhead River, then south along the Beaverhead River to the mouth of the Ruby River, then southeasterly along the Ruby River to the East Bench Road, then southwesterly along the East Bench Road to the East Bench Canal, then southwesterly along said canal to the Sweetwater Road, then west along Sweetwater Road to Dillon, the point of beginning, plus the remainder of Madison County and all of Gallatin County.

Zone 4 (Broadwater County): Broadwater County.

Utah

Cache County: Cache County.

East Box Elder County: That portion of Box Elder County beginning on the Utah-Idaho State line at the Box Elder-Cache County line; west on the State line to the Pocatello Valley County Road; south on the Pocatello Valley County Road to I–15; southeast on I–15 to SR–83; south on SR–83 to Lamp Junction; west and south on the Promontory Point County Road to the tip of Promontory Point; south from Promontory Point to the Box Elder-Weber County line; east on the Box Elder-Weber County line to the Box Elder-Cache County line; north on the Box Elder-Cache County line to the Utah-Idaho State line.

Rich County: Rich County.

Uintah County: Uintah County.

Wyoming

Area 1 (Bear River): All of the Bear River and Ham's Fork River drainages in Lincoln County.

Area 2 (Salt River Area): All of the Salt River drainage in Lincoln County south of the McCoy Creek Road.

Area 3 (Eden Valley Area): All lands within the Bureau of Reclamation's Eden Project in Sweetwater County.

Area 5 (Uintah County Area): Uinta County.

All Migratory Game Birds in Alaska

North Zone: State Game Management Units 11–13 and 17–26.

Gulf Coast Zone: State Game Management Units 5–7, 9, 14–16, and 10 (Unimak Island only).

Southeast Zone: State Game Management Units 1–4.

Pribilof and Aleutian Islands Zone: State Game Management Unit 10 (except Unimak Island).

Kodiak Zone: State Game Management Unit 8.

All Migratory Game Birds in the Virgin Islands

Ruth Cay Closure Area: The island of Ruth Cay, just south of St. Croix.

All Migratory Game Birds in Puerto Rico

Municipality of Culebra Closure Area: All of the municipality of Culebra.

Desecheo Island Closure Area: All of Desecheo Island.

Mona Island Closure Area: All of Mona Island.

El Verde Closure Area: Those areas of the municipalities of Rio Grande and Loiza delineated as follows: (1) All lands between Routes 956 on the west and 186 on the east, from Route 3 on the north to the juncture of Routes 956 and 186 (Km 13.2) in the south; (2) all lands between Routes 186 and 966 from the juncture of 186 and 966 on the north, to the Caribbean National Forest Boundary on the south; (3) all lands lying west of Route 186 for 1 kilometer from the juncture of Routes 186 and 956 south to Km 6 on Route 186; (4) all lands within Km 14 and Km 6 on the west and the Caribbean National Forest Boundary on the east; and (5) all lands within the Caribbean National Forest Boundary whether private or public.

Cidra Municipality and adjacent areas: All of Cidra Municipality and portions of Aguas Buenas, Caguas, Cayey, and Comerio Municipalities as encompassed within the following boundary: Beginning on Highway 172 as it leaves the municipality of Cidra on the west edge, north to Highway 156, east on Highway 156 to Highway 1, south on Highway 1 to Highway 765, south on Highway 765 to Highway 763, south on Highway 763 to the Rio Guavate, west along Rio Guavate to Highway 1, southwest on Highway 1 to Highway 14, west on Highway 14 to Highway 729, north on Highway 729 to Cidra Municipality boundary to the point of the beginning.

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