

FINDING OF NO SIGNIFICANT IMPACT
ENVIRONMENTAL ASSESSMENT
DUCK HUNTING REGULATIONS FOR THE 2024–25 SEASON

In 1995, the U.S. Fish and Wildlife Service (USFWS) implemented the Adaptive Harvest Management (AHM) program for setting duck hunting regulations in the United States. The AHM approach provides a framework for making objective decisions in a setting of incomplete knowledge concerning waterfowl population dynamics and the impacts of regulations.

Harvest regulations were developed under the streamlined process specified in the Final Supplemental Environmental Impact Statement on the Issuance of Annual Regulations Permitting the Hunting of Migratory Birds (SEIS 2013) for the first time in 2016. As a result, AHM protocols now include a shift in timing such that regulations for the 2024–25 hunting season were determined in the fall of 2023. AHM optimization methods and decision frameworks have been adjusted to inform 2024–25 duck hunting regulations based on the 2023 breeding populations and habitat conditions, and the regulatory alternatives that were implemented for the 2023–24 hunting season.

USFWS and their partners successfully completed the Waterfowl Breeding Population and Habitat Survey (WBPHS), providing critical information necessary to update model weights and key population parameters that inform waterfowl AHM. For the 2023 regulatory process, technical changes were made to the American black duck AHM protocols including (i) removing eastern mallards as a state variable in the integrated population model and optimization, (ii) updating the spatial scale of breeding population abundance estimates from the core survey area to eastern Canada (WBPHS strata 51–53, 56, 62–72), and (iii) updating the total indicated pairs definition for black duck breeding population estimates.

Current AHM protocols are based on the population dynamics and status of two mallard (*Anas platyrhynchos*) stocks and a suite of waterfowl stocks in the Atlantic Flyway. Mid-continent mallards are defined as those breeding in the WBPHS strata 13–18, 20–50, and 75–77 plus mallards breeding in the states of Michigan, Minnesota, and Wisconsin (state surveys). The prescribed regulatory alternative for the Mississippi and Central Flyways depends exclusively on the status of these mallards. Western mallards are defined as those breeding in WBPHS strata 1–12 (hereafter Alaska) and in the states of California, Oregon, Washington, and the Canadian province of British Columbia (hereafter southern Pacific Flyway). The prescribed regulatory alternative for the Pacific Flyway depends exclusively on the status of these mallards. The Atlantic Flyway multi-stock AHM protocol recognizes 4 populations of eastern waterfowl [American green-winged teal (*Anas crecca*), wood ducks (*Aix sponsa*), ring-necked ducks (*Aythya collaris*), and goldeneyes (both *Bucephala clangula* and *B. islandica* combined)]. The regulatory choice for the Atlantic Flyway depends exclusively on the status of these waterfowl populations.

For the 2024–25 hunting season, USFWS considered the same regulatory alternatives as for the 2023–24 season. 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” alternatives since 2002. The AHM protocol is based on the population dynamics and status of two mallard (*Anas platyrhynchos*) stocks, the mid-continent and western, and a suite of waterfowl stocks in the Atlantic Flyway. Harvest rates associated with each of the regulatory alternatives were updated based on preseason banding and recovery data. The expected harvest rates of adult male mallards under “liberal” hunting seasons are 11% (SD = 1.6%), and 14% (SD = 2.7%) for mid-continent and western mallards, respectively. The estimated marginal effect of framework-date extensions has been an increase in the harvest rate of 3% (SD = .6%) for mid-continent mallards. For the Atlantic Flyway expected harvest rates under liberal hunting seasons are 11.7% for green-winged teal, 12.4% for wood ducks, 13% for ring-necked ducks, and 2.9% for goldeneyes.

Optimal regulatory strategies for the 2024–25 hunting season were calculated using: (1) harvest-management objectives specific to each stock; (2) the 2023 regulatory alternatives; (3) 2023 breeding population and habitat estimates and (4) current population models and their updated parameter estimates. Based on: liberal regulatory alternatives selected for the 2023 hunting season, the 2023 survey results of: 6.22 million mid-continent mallards, 4.98 million total ponds, 0.82 million western mallards (0.38 million in Alaska and 0.44 million in the southern Pacific Flyway), and 0.97 million wood ducks, 0.39 million American green-winged teal, 0.66 million ring-necked ducks, and 0.85 million goldeneyes observed in the eastern survey area and Atlantic Flyway, the optimal choice for the 2024–25 hunting season in all four Flyways is the liberal regulatory alternative.

In the traditional survey area, which includes strata 1–18, 20–50, and 75–77, the total duck population estimate (excluding scoters [*Melanitta* spp.], eiders [*Somateria* spp. and *Polysticta* spp.], long-tailed ducks [*Clangula hyemalis*], mergansers [*Mergus* spp. and *Lophodytes cucullatus*], and wood ducks [*Aix sponsa*]) was 32.3 ± 0.6 million birds. This estimate was 7% below the 2022 estimate of 34.7 ± 0.6 million and 9% below the long-term average of 35.5 ± 0.09 million. Estimated mallard (*Anas platyrhynchos*) abundance was 6.1 ± 0.2 million, which was 18% below the 2022 estimate of 7.4 ± 0.2 million and 23% below the long-term average of 7.9 ± 0.3 million. The estimate for blue-winged teal (*Spatula discors*; 5.3 ± 0.3 million) was 19% below the 2022 estimate of 6.5 ± 0.3 million and similar to the long-term average of 5.1 ± 0.04 million. Estimated abundance of gadwall (*Mareca strepera*; 2.6 ± 0.1 million) was similar to the 2022 estimate and 25% above the long-term average of 2.1 ± 0.02 million. The 2023 estimates of green-winged teal (*Anas crecca*), northern shoveler (*Spatula clypeata*), and canvasbacks (*Aythya valisineria*) were 2.5 ± 0.3 million, 2.9 ± 0.2 million, and 0.6 ± 0.06 million, respectively. All were similar to their 2022 estimates and their long-term averages. Estimated abundance of redheads (*A. americana*; 0.9 ± 0.08 million) was similar to the 2022 estimate and 27% above the long-term average of 0.7 ± 0.01 million. The Northern pintail (*Anas acuta*) estimate was 2.2 ± 0.1 million, which was 24% above the 2022 estimate of 1.8 ± 0.2 million and 43% below the long-term average of 3.9 ± 0.03 million. The

abundance estimate for American wigeon (*Mareca americana*; 1.9 ± 0.2 million) was similar to the 2022 estimate and 28% below the long-term average of 2.6 ± 0.02 million. The combined estimate of lesser and greater scaup (*Aythya affinis* and *A. marila*; 3.5 ± 0.2 million) was similar to the 2022 estimate and 29% lower than the long-term average of 5.0 ± 0.4 million. A time series for assessing changes in green-winged teal, ring-necked duck (*A. collaris*), goldeneye (*Bucephala clangula* and *B. islandica*), merganser, and American black duck (*A. rubripes*) population status in the eastern survey area is provided by breeding waterfowl surveys conducted by USFWS and Canadian Wildlife Service (CWS) in Maine and eastern Canada. The estimate of goldeneyes was 0.8 ± 0.2 million, which was 28% above the 2022 estimate and 28% above the long-term average. Ring-necked ducks (0.7 ± 0.1 million) and green-winged teal (0.4 ± 0.1 million) were similar to their 2022 estimates and the long-term averages. The estimate of mergansers was 0.9 ± 0.1 million, which was similar to the 2022 estimate and 24% above the long-term average. The 2023 estimate of American black ducks in the eastern survey area was 0.7 ± 0.07 million, which had not changed from the 2022 estimate and the long-term average. The black duck estimate at the plot survey scale, which is used for management, was 0.5 ± 0.04 million. Eastern mallard population status is derived by integrating data from the eastern survey area and ground plot surveys conducted in the northeastern U.S. states of Virginia north to New Hampshire. The estimated abundance of mallards in eastern North America was 1.2 ± 0.15 million, which was similar to the 2022 estimate and the long-term average.

Habitat conditions during the 2023 Waterfowl Breeding Population and Habitat Survey (WBPHS) generally declined over a large portion of the surveyed area relative to 2022. Much of the Canadian prairies were in abnormally dry to extreme drought, and the dry conditions extended into the eastern provinces. Most of the U.S. prairies had improved since 2022. Fall 2022 was generally warm before giving way to below-average temperatures over the winter. The prairies remained cooler-than-average whereas eastern Canada and the boreal regions were warmer, particularly starting in May when extreme temperatures and dry conditions sparked wildfires across Canada. Precipitation was average to slightly-below average in eastern Canada since fall 2022, and below average across the Canadian prairies. Habitat conditions in the Dakotas and Montana improved, aided by near-record snowfall in North Dakota. In 2023, spring phenology was very early in the central Arctic, early or average in other areas of the Canadian Arctic and Subarctic, and later than average in Alaska. Many areas across the Arctic and Subarctic experienced above-average temperatures during May or June. The total pond estimate (Prairie Canada and northcentral U.S. combined) was 5.0 ± 0.1 million, which was 9% lower than the 2022 estimate of 5.5 ± 0.2 million and 5% below the long-term average of 5.2 ± 0.03 million. The 2023 estimate of ponds in Prairie Canada was 3.3 ± 0.1 million. This estimate was similar to the 2022 estimate of 3.5 ± 0.2 million and 6% below the long-term average (3.5 ± 0.02 million). The 2023 pond estimate for the northcentral U.S. was 1.7 ± 0.08 million, which was 16% below the 2022 estimate (2.0 ± 0.01 million) and similar to the long-term average of 1.7 ± 0.01 million.

Based on review and evaluation of the information contained in the supporting documents below, I have determined that the proposed action to amend 50 CFR part 20 subpart K, to

allow the hunting of certain migratory birds during the 2024–25 season, will provide adequate protection to ducks and that this is not a major Federal action that would significantly affect the quality of the human environment within the meaning of Section 102(2)(C) of the National Environmental Policy Act of 1969. Accordingly, the preparation of an environmental impact statement on the proposed action is not required.

Supporting Documents

1. Environmental Assessment: Duck Hunting Regulations for 2024–25
2. Waterfowl Population Status, 2023
3. Adaptive Harvest Management: 2024 Hunting Season
4. Migratory Bird Hunting Activity and Harvest during the 2021–22 and 2022–23 Hunting Seasons
5. Economic Analysis of the Migratory Bird Hunting Regulations for the 2023–24 Season

Date

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