Draft Compatibility Determination

Title:

Fallon National Wildlife Refuge, Hunting – Big game; other migratory birds; upland game; waterfowl

Refuge:

Fallon National Wildlife Refuge

Refuge Use Category:

Hunting

Refuge Use Type(s):

Big game; Other migratory birds; Upland game; Waterfowl

Establishing and Acquisition Authorities and Refuge Purpose(s):

Fallon Wild-Life Refuge, Nevada (Executive Order 5606 – April 22, 1931)

Refuge Purpose:

"…reserved and set apart…as a refuge and breeding ground for birds and wild animals…"

NWRS Mission:

The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans (Pub. L. 105-57; 111 Stat. 1252)

Description of Use:

Is it a priority Public Use:

Yes.

What is the Use:

The use is hunting big game, upland game, waterfowl, and other migratory birds for recreation and/or food. Species hunted would include mule deer, antelope, mourning dove, California quail, ring-necked pheasant, mountain cottontail, black-tailed jackrabbit, wild turkey, coyote, ducks, geese, swans, coots, and moorhens. This use also includes youth hunts (17 years of age or younger) for waterfowl, upland game, and big game and veteran hunts for waterfowl.

Where would the Use be conducted:

All of Fallon National Wildlife Refuge (Refuge or NWR), located 18 miles northeast of the town of Fallon, Nevada would be open to hunting. The access road to the Refuge is fairly primitive and continues only a

short distance into the Refuge after which there are two dirt tracks. Roads on the Refuge are passable only when dry. There are no designated hunting areas, blinds, camping sites, restrooms, drinking water, trashcans, trails picnic areas, or other public use facilities on the Refuge.

When would the Use be conducted:

Hunting would occur primarily during the fall and winter in accordance with the Nevada Department of Wildlife (NDOW) hunt regulations and in accordance with the environmental conditions on the Refuge. During normal and dry water years, local springs that feed a small wetland area on the Refuge may provide enough water to support minimal numbers of shorebirds, wading birds, and waterfowl. Because water conditions and the areal extent and quality of aquatic habitats on the Refuge vary greatly from year to year, the Refuge does not provide adequate habitat to maintain an annual waterfowl hunt season. The Carson Delta provides less than 100 acres of wetland habitat during the fall and winter except on rare occasions. During flood event years, water may create expansive open water habitat over the playa of the Carson Sink and provide waterfowl hunting opportunities on the Refuge. At other times, hunters can pursue upland species throughout the Refuge's high desert habitat.

How would the Use be conducted:

Hunting would be permitted in accordance with NDOW regulations for seasons, licensing, legal shooting hours, and weapons restrictions. Boating would be allowed during the waterfowl hunt season. Hunters may use trained dogs to point and retrieve downed birds. Please see Section 4 in the Fallon-Stillwater Hunt Plan for a description of the conduct of the Hunting Program on Fallon NWR.

The U.S. Fish and Wildlife Service (Service) would continue to hold a post-season hunting meeting to gather concerns, suggestions, and other information about the hunt. This meeting would be open to all user groups and interested parties. The information gathered would be used to make appropriate adjustments to improve the quality of future hunts on the Refuge and ensure that they remain compatible.

Hunting on Fallon NWR is supported by both boating and overnight stays. Because they are interrelated, this compatibility determination includes an assessment of these activities in conjunction with waterfowl hunting.

Why would the Use be conducted:

Hunting is one of the six wildlife-dependent general public uses that is given special consideration in refuge planning and management. When determined to be compatible on a refuge-specific basis, a wildlife-dependent use becomes a priority public use for that refuge. The National Wildlife Refuge System Administration Act of 1966 strongly encourages refuges to facilitate priority public uses.

Resources:

Existing Management Capability Existing Funds – The Service has an adequate budget and staff to support the annual costs associated the proposed Refuge sport hunting program. The annual cost to administer a hunting program on Fallon NWR is $200.

Impacts:

Hunting would have direct, lethal effects on the target game species. The number of animals killed depends on hunting pressure (i.e., the number of hunters and days of effort) and hunter success rates. Hunting also results in injuries to animals that are hit, but not killed, or at least not immediately. Hunters could also cause death or injury to a non-target species. Hunter survey data are not available for this Refuge; however, due to the location, access, and known hunting pressure at the nearby Stillwater NWR, it is likely that hunting pressure would be light, and the number of individual animals killed (target and non-target) would be relatively small.

Some animals would be injured, but able to carry on; while others would be injured, but unable to perform critical life history activities like migrating and breeding; or would die following a hunting injury. Wounding rates can vary among game species, the types of weapons used, and the experience of the hunter. Studies suggest that the number of animals shot but not retrieved while hunting (sometimes referred to as the crippling loss rate) ranges broadly. For waterfowl, that rate may be as low as 10.3% or as high as 40% of all those shot (Barske, 1956; Bellrose, 1976; Gleason and Jenks, 1997; Hochbaum, 1980; Nelson, 1980; Norton and Thomas, 1994; Van Dyke, 1981). This rate increases when birds that are fired upon are at a greater distance from hunters (e.g., >27-38 yards) and decreases with the experience (skill) of the hunter (Hochbaum, 1980). Among deer hunters using archery equipment, wounding rates range from 14% to 50% (Pedersen et al., 2008). Use of tracking dogs can significantly reduce wounding loss to deer during archery hunting (Morton et al., 1995). Studies reveal crippling loss rates for mourning doves range from 18% to 50% (Haas, 1977; Schulz et al., 2013), for pheasants from 3.3% to 46% (Applegate and Scott, 2005), and for turkeys from 0% to 38% (Utah Division of Wildlife Resources, 2000; Williams et al., 1978). Hunters would be allowed to bring trained, retrieving dogs with them to increase the percent of downed birds that were retrieved and reduce the loss of crippled birds. Studies have shown that use of retrieving dogs can reduce loss of birds injured during hunting by 34% to more than 40% (Barske 1956). If one assumed 100% fatality among the animals injured but not retrieved by hunters, the total number of game animals taken by hunters would still be relatively small.

Hunting would not be expected to have any effects on populations of waterfowl because they are carefully managed by the State, by the Pacific Flyway Council, and by the U.S. Fish and Wildlife Service to ensure the long-term survival of the several species of game waterfowl at healthy, sustainable population levels. The State of Nevada regulates waterfowl hunting consistent with Federal migratory bird hunting framework regulations that are based on long-term and extensive surveys and monitoring of waterfowl populations and their habitats, and hunters across North America. These survey and monitoring data form the largest data set on any wildlife species group in the world (USFWS Migratory Bird Program, Surveys and Data). Using adaptive management principles to apply these data to the establishment of flyway regulations provides for waterfowl hunting opportunities across the Nation and helps to ensure the long-term health of waterfowl populations. The fact that waterfowl populations across the Pacific Flyway remain strong is testament to the effectiveness of this overall management approach. Hunting pressure on the Refuge is believed to be low and the number of animals taken (including crippling losses) is believed to be low. In addition, on this Refuge, climatic constraints limit opportunities for waterfowl hunting.

Similarly, hunting big game, other migratory birds, upland game, and other species on the Refuge would not be expected to have any effects on populations of these game species because the numbers of

hunters are low and because the State of Nevada regulates hunting to maintain hunting opportunities and sustain healthy wildlife populations.

Indirect impacts related to hunting would be expected to cause wildlife disturbance (activities include vehicle operation; overnight stays; walking; boating; construction and use of blinds; decoy placement and retrieval; use of pointing and retrieving dogs; noise, including that caused by gunfire). Of all the activities engaged in by waterfowl hunters, use of boats may cause the greatest disturbance to wildlife. This stems from the ability that boats readily provide for hunters to readily access to large areas of waterfowl habitat. However, on Fallon NWR boat use is limited to flood water events that inundate the alkali playa habitat. During dry or average years, wetland habitat is limited to a small area without boat access points.

Human disturbance has differential effects on wildlife and is dependent upon many variables, including the species involved and its age; the time of year; the breeding cycle stage (if applicable); the activity in which the animals are engaged (e.g., foraging versus nesting); prey density and nutritional requirements for feeding wildlife; flock size for birds (large flocks may be more easily disturbed); whether the species is hunted; the surrounding environment; whether the disturbing activity involves vehicles; the type, size, intensity, speed, noise, nature, and frequency of the disturbing activity (e.g., dogs versus humans or approaching animals by walking versus in a motorized boat); and the approach angle or directness of approach to an animal (Blanc et al., 2006; Goss-Custard and Verboven, 1993; Hammitt and Cole, 1998; Kirby et al., 1993; Knight and Cole, 1995a; Knight and Cole, 1995b; Lafferty, 2001a; Lafferty, 2001b; Rodgers, 1991; Rodgers and Schwikert, 2002; Rodgers and Smith, 1997; Smit and Visser, 1993). Disturbance and flushing of birds, or even raising their alert levels (which usually occurs at a greater distance than that for flushing), create stress and require animals to alter their normal behavior and expend energy that otherwise would be invested in essential life history activities such as foraging, migration, predator avoidance, mating, nesting, and brood-rearing. It can cause them to stop feeding; cause abandonment of nests and young; allow predators access to nests/young, reduce parental attention to young, and otherwise impact survival of individual animals, including eggs, nestlings, young, juveniles, and adults (Burger and Gochfeld, 1991; Haysmith and Hunt, 1995; Lafferty, 2001b). Breeding birds are especially sensitive to human disturbance (Hammitt and Cole, 1998; Trulio, 2005). A study of visitors to a colony of kittiwakes and guillemots revealed that nesting success was influenced by the distance observers were from the birds (positively correlated) and the number of observers involved (negatively correlated) (Beale and Monaghan, 2004). The effects of disturbance on individual animals are likely additive.

Hunters, their vehicles, boats, and their dogs can trample native plants, cause erosion, and potentially introduce or spread exotic and invasive species, including fish, wildlife, invertebrates, and plants. Two factors minimize wildlife disturbance. First, hunting occurs during the fall and winter, seasons of the year when disturbance effects are less damaging to wildlife populations (compared with the spring breeding season). Second, although there is no designated sanctuary on this Refuge that will not prevent migratory birds and other hunted species from moving to areas of the Refuge that are not being hunted. The extremely limited access to this Refuge means that most of Fallon can be considered sanctuary without precluding hunters from a specific location. There is only one primitive road that leads to one location on the very edge of the Refuge. In a year when there is sufficient water on the Refuge for a waterfowl hunt, the Refuge is completely inaccessible to wheeled vehicles. There are no boat launches or any other amenities. Refuge staff estimate that an extremely determined hunter could

hunt maybe 10 percent of the refuge (Lunderstadt, 2019). Opening the Refuge to hunting would not detract from the Refuge purpose which is as a refuge and breeding ground for birds and wild animals.

Opening this Refuge to hunting would not affect any other public uses. The inaccessible nature of this refuge probably limits the number of visitors who come solely for wildlife observation and photography. The low number of hunters that are likely to use this Refuge means that visitors who come specifically for wildlife observation and photography could enjoy a sizable portion of the Refuge and its wildlife, while avoiding interaction with hunters and hunting activity.

Determination:

Determination Status:

Compatible

Mandatory Re-evaluation Date:

2035

Public Review and Comment:

This compatibility determination will be available for public review and comment along with the Environmental Assessment and the Hunt Plan. Comments received from the public will be considered prior to completing this compatibility determination.

Stipulations:

- Hunters are required to comply with Refuge System-related and other applicable laws, regulations, and policies, including Prohibited Acts listed in the Code of Federal Regulations (50 C.F.R. §27), Public Entry Regulations (50 C.F.R. §26), Migratory Bird Hunting regulations (50 C.F.R. §20), and Refuge-Specific Regulations for Hunting and Fishing (50 C.F.R. §32).
- While on the Refuge, hunters would be required to have in their possession all applicable licenses, permits, stamps, tags, and other authorizations and permissions to hunt for the species or species group(s) being pursued.

Justification:

By its nature, hunting would have direct, lethal effects on individual animals. However, hunting on the Refuge would generally not be expected to have any effects on most wildlife populations because the State of Nevada uses adaptive management principles to regulate hunting, maintain hunting opportunities, and sustain healthy wildlife populations. In addition, hunting pressure on this Refuge is likely to be very light.

In light of the low levels of hunting occurring on the Refuge and the stipulations listed above, hunting would not materially interfere with Refuge purposes. Hunting is a wildlife-dependent general public use of the Refuge System and is to be given special consideration in refuge planning and management. The Refuge System Administration Act states that the Refuge System, "…was created to conserve fish, wildlife, and plants and their habitats and this conservation mission has been facilitated by providing Americans opportunities to participate in compatible wildlife-dependent recreation, including fishing and hunting, on System lands and to better appreciate the value of and need for fish and wildlife

conservation." This Act goes on to state that the Refuge System is to provide increased, compatible opportunities, "…for parents and their children to safely engage in traditional outdoor activities, such as fishing and hunting…." As a wildlife-dependent public use, hunting can also reconnect people, including youth, with the natural world and help address nature-deficit disorder (Louv, 2005). This potential would be furthered through implementation of youth hunts on the Refuge.

Service policy states that hunting is, "…a healthy, traditional outdoor pastime, deeply rooted in the American heritage. Hunting can instill a unique understanding and appreciation of wildlife, their behavior, and their habitat needs." " Hunting programs can promote understanding and appreciation of natural resources and their management on lands and waters in the Refuge System" (Hunting). Service policy states that hunting is an appropriate use of the National Wildlife Refuge System (Appropriate Refuge Uses). The Refuge System Administration Act states that, "When managed in accordance with principles of sound fish and wildlife management and administration…[wildlife-dependent public uses, including hunting]…have been and are expected to continue to be generally compatible uses," and when determined compatible, quality hunting opportunities on refuges are to be facilitated, that is, strongly encouraged.

In our opinion, opening the Refuge to hunting would not materially interfere with or detract from maintenance of the Refuge's biological integrity, diversity, and environmental health; fulfillment of the Refuge purpose; or the Refuge System's mission.

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Signature Page:

Refuge Manager: _____ Approval Date: _____

Regional Chief: _____ Concurrence Date: _____