# Draft Compatibility Determination

## Title

Draft Compatibility Determination for Bicycling, William L. Finley National Wildlife Refuge

## Refuge Use Category

Outdoor Recreation (General)

## Refuge Use Type(s)

Bicycling (including e-bikes)

## Refuge

William L. Finley National Wildlife Refuge

## Refuge Purpose(s) and Establishing and Acquisition Authority(ies)

“for use as an inviolate sanctuary, or for any other management purpose, for migratory birds…to conserve and protect migratory birds…and to restore or develop adequate wildlife habitat.” (Migratory Bird Conservation Act of 1929, 16 U.S.C. 715 et. seq.).

“protection for the western [dusky] Canada goose…for the protection of other migratory birds as well…and…habitat for upland migratory birds.” (MBCC Memo #4, February 19, 1963) All tracts of land acquired prior to March 10, 1972.

“to provide (1) feeding and nesting areas for migratory waterfowl; (2) wintering range primarily for the dusky Canada goose; and (3) production habitat for several species of ducks.” (MBCC Memo #9, March 10, 1972.) All tracts of land acquired subsequent to March 10, 1972.

“To protect, restore and enhance a diversity of Willamette Valley flood plain habitats for waterfowl and indigenous species.” (MBCC Memo #1, July 7, 2000). Purpose applies to the Snag Boat Bend Unit only.

## National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as Refuge 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 this an existing use?

Yes. This compatibility determination reviews and replaces the 2011 compatibility determination for bicycling, which was prepared concurrently with the CCP for the Willamette Valley National Wildlife Refuge Complex (Ankeny, Baskett Slough, and William L. Finley NWRs; USFWS 2011).

## What is the use?

We propose to allow bicycling as a recreational opportunity on Refuge roads. Bicycling will provide some opportunities for visitors to observe wildlife.

## Is the use a priority public use?

No

## Where would the use be conducted?

Bicycling would occur on Refuge roads. Bicycling is currently allowed on Finley Refuge Road as described in Section 6.10 of the CCP (USFWS 2011). Bicycling also occurs on County roads bordering or traversing the Refuges of the Willamette Valley Complex. Bicycling use on County roads is outside Refuge jurisdiction; hence, this CD only addresses use on Refuge roads and associated parking areas and pull-offs.

## When would the use be conducted?

Bicycling is allowed year-round, since Finley Refuge Road is open year-round to visitors and vehicles.

## How would the use be conducted?

Bicycling is limited to Finley Refuge Road and county roads. It is estimated that less than 20 visitors currently participate in bicycling on Finley Refuge Road annually. This use is commonly conducted by individuals or small groups of cyclists. Group numbers would be limited and organized training rides would not be permitted. The number of visitors engaging in this use would be expected to remain low, unless Finley Refuge Road is paved, in which case it would likely increase.

## Why is this use being proposed or reevaluated?

Bicycling was previously determined to be compatible (USFWS 2011). Bicycling is being revaluated per policy, 603 FW 2.11 H (2). Bicycling is a means for visitors to access the Refuge and wildlife observation opportunities.

## Availability of Resources

No facilities will be constructed or maintained expressly for the purposes of supporting this use, and less than $1000 per year is anticipated to be expended for law enforcement, information, and education associated with this use.

## Anticipated Impacts of the Use

The effects and impacts of the proposed use to refuge resources, whether adverse or beneficial, are those that are reasonably foreseeable and have a reasonably close causal relationship to the proposed use. This CD includes the written analyses of the environmental consequences on a resource only when the impacts on that resource could be more than negligible and therefore considered an "affected resource." Soils, air, water, wilderness, cultural resources, and socioeconomic resources will not be more than negligibly impacted by the action and have been dismissed from further analyses.

### Potential impacts of a proposed use on the refuge's purpose(s) and the Refuge System mission

Bicycling does not directly contribute to the mission of the National Wildlife Refuge System or to the purposes of the William L. Finley NWR. It does provide a means for visitors to access the Refuge, and some bicyclists would engage in wildlife observation, a priority wildlife-dependent use of the National Wildlife Refuge System. Though bicycling can cause disturbance to migratory birds, we believe that by limiting this activity to Refuge roads, limiting group size, prohibiting organized events and training, and by providing wildlife sanctuary from human disturbance in other areas of the Refuge, this activity will not interfere with the Refuge achieving its purposes to conserve and protect migratory birds.

### Short-term impacts

Although the bicycling poses the potential to cause flushing of birds from fields adjacent to Refuge roads, such impacts would generally be expected to be negligible, based on the expected level of use and assuming compliance to regulations. During winter months when migratory waterfowl are present in large numbers, the disturbance effect from bicycles is expected to be negligible because refuge roads where biking is permitted are located a far enough distance from where waterfowl congregate, and the minimal number of bicyclists expected. Bicyclists on roads would not directly approach areas where wildlife congregates. Moreover, experience has shown that groups of feeding geese in fields readily acclimate to the regular presence of vehicles, including bicycles, on roads.

One study showed that waterfowl are similarly impacted by walkers and bicycles. This disturbance impact was found to be relatively minor especially when birds are not

directly approached by visitors (McLeod et al. 2013). Due to the refuges road placement and low number of bicyclists the impact to waterfowl is expected to be minor.

Bicycling does have the potential to cause disturbance to ungulates (deer and elk) using Refuge fields, however, this disturbance is likely to be minor. One study showed that moving automobiles and trail bikes had little effect on elk resting in timber at distances of only 0.13 miles (Lyon and Ward 1982). Proximity of escape cover that breaks the line of sight between wildlife and the disturbance may reduce flight distances and consequently the amount of energy used in flight.

In a Canyonlands National Park study comparing effects of trail bikes, hikers, and vehicles to bighorn sheep behavioral responses, distances moved, and duration of responses, Papouchis et al. (2001) found that hikers caused the most severe responses in desert bighorn sheep (animals fled in 61 percent of encounters), followed by vehicles (17 percent fled) and mountain bikers (6 percent fled), apparently because hikers were more likely to be in unpredictable locations and often directly approached sheep. However, Taylor and Knight (2003), who found no difference in effects between hikers and bikers (see below), noted that Papouchis et al. (2001) compared the responses of sheep approached directly and off-trail by hikers with those of sheep approached tangentially on a road or trail by mountain bikers and vehicles. Generally, wildlife exhibit a stronger response to humans that approach them directly and to humans located off designated trails.

In a Utah study comparing mountain biking and hiking disturbance to mule deer, antelope and bison, both on- and off-trail, Taylor and Knight (2003) found little difference between the responses to hiking or biking. However, their results did show differences in species and whether the activity takes place on or off-trail (see Wildlife Observation CD for more discussion). They did suggest that, because bikers travel faster than hikers, they may cover more ground in a given time period than hikers, thus having the opportunity to disturb more wildlife per unit time.

Bicycling may occur adjacent to habitats occupied by listed plant species but since this use by definition occurs on the road, the activity would result in no direct impact to these species. No listed wildlife species are likely to be disturbed or impacted by bicycle use in the areas adjacent to Finley Refuge Road. Bicycles may spread invasive species, but this impact is expected to be negligible due to the limited number of bicycles expected on the Refuge and the fact that bicycling is allowed only on roads.

Bicycling may result in disturbance to other visitors. This effect is expected to be negligible, since the use is expected to remain light. If all visitors abide by the posted speed limits, safety conflicts between bicycles, automobiles, and the occasional pedestrian should be minimal. Bicycling provides an additional recreation opportunity for visitors to observe wildlife and enjoy the Refuge and the surrounding habitat with minimal impacts.

### Long-term impacts

Bicycling is expected to have negligible long term impacts. No significant effects to roads, trails, or other infrastructure from these activities are foreseen. Normal road, trail, and facility maintenance will continue to be necessary. Additional facility construction or upgrade, if needed, is addressed in the Availability of Resources section.

## Public Review and Comment

The draft compatibility determination will be available for public review and comment for 14 days. The public will be made aware of this comment opportunity through our social media outlets and letters to potentially interested people such as neighbors and partner agencies. A hard copy of this document will be posted at the Refuge Headquarters (26208 Finley Refuge Road, Corvallis, OR 97333). It will be made available electronically on the refuge website: www.fws.gov/refuge/william-l-finley. Please let us know if you need the documents in an alternative format. Concerns expressed during the public comment period will be addressed in the final Compatibility Determination.

## Determination

Yes

## Stipulations Necessary to Ensure Compatibility

The following stipulations are required to ensure that bicycling remains compatible:

1. Bicycling will be permitted only on Finley Refuge Road and the use is year-round. Bicycling will not be allowed on any Refuge roads not open to general public vehicle traffic.
2. All vehicles shall abide by posted speed limits.
3. The Complex shall post signs alerting drivers that bicyclists may be on the road.
4. Group size will be limited and organized bicycling training will not be permitted on the Refuge.
5. If Finley refuge road is improved, especially paved, then biking and walking should be re-analyzed.

## Justification

The stipulations outlined above would help ensure that the use is compatible at William L. Finley National Wildlife Refuge. Bicycling, as outlined in this compatibility determination, would not conflict with the national policy to maintain the biological diversity, integrity, and environmental health of the refuge. Based on available science and best professional judgement, the Service has determined that the bicycling at William L. Finley National Wildlife Refuge, in accordance with the stipulations provided here, would not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purpose of the William L. Finley National Wildlife Refuge. Rather, appropriate and compatible cropland cooperative farming contribute to the Refuge's recreational opportunities.

## Signature of Determination

Refuge Manager Signature and Date

## Signature of Concurrence

Assistant Regional Director Signature and Date

## Mandatory Reevaluation Date

2032

## Literature Cited/References

Lyon, L. J. and A. L. Ward. 1982. Elk and land management. In: J. W. Thomas and D. E. Toweill [EDS.]. Elk of North America: Ecology and management. Harrisburg, PA: Stackpole Books. p. 443– 477.

McLeod, E. M., P. J. Guay, A. J. Taysom, R.W. Robinson, and M. A Weston 2013. Buses, cars, bicycles, and walkers: The influence of the type of human transport on the flight responses of waterbirds. PLoS ONE, 8:1-11.

Papouchis, C. M., F. J. Singer, and W. B. Sloan. 2001. Responses of desert bighorn sheep to increased human recreation. Journal of Wildlife Management 65:573–582.

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