

Concerns of the Lewis and Clark Trail Being Located on the Shillapoo Wildlife Area and the Ridgefield National Wildlife Refuge

- **Impacts to Wildlife**

- Increase use of the area by pedestrians and cyclists will impact multiple species of wildlife
- Disturbance by humans and pets chasing wildlife.
- Disturbances will increase wildlife energy uses, and decrease wildlife's ability to rest and feed in areas along the trail.
- Although some wildlife may become use to the traffic on the trail, overall there will be dispersal away from the trail and less use adjacent to it.
- Disturbances to nesting wildlife. Especially ground nesting birds. In addition, birds of prey as there are owl and hawk nests adjacent to the proposed route of the trail, and great blue herons as there is a rookery along the trail route.
- Streaked horned larks may also be disturbed from nesting and feeding sites.
- Disturbances to the rearing of wildlife. Young wildlife area not as mobile as adults, making them easier to be caught and injured by people and pets
- Columbia White-tailed deer fawns are in the area, with many deer observed in the areas along the trail route. CWTD are a threatened species and special restrictions apply to the management of the land around these species.
- The area along the proposed route through Shillapoo is adjacent to and goes through some of the only cover that provides protection to wildlife for a great distance.
- Proposed fencing along the trail could impede the travel of wildlife from one area to the next, as well as cause injury to wildlife that get caught in the fencing. This issue is of major concern to CWTD.
- Propose alignment through Ridgefield NWR would introduce human disturbance within 1000 feet of SW Washington's largest sandhill crane roost, a state endangered species. The alignment would be proximal to crane foraging habitat, staging sites, and auxillary roost locations.
- Proposed alignment would introduce human activity to core dusky Canada goose habitat within sanctuary areas of the Ridgefield NWR. The Ridgefield NWR was established expressly to manage and protect dusky Canada geese.
- Proposed alignment would serve to fragment and introduce human activity (and pets) to known Columbian white-tailed deer habitat within sanctuary areas within the Ridgefield NWR.
- Proposed alignment would introduce human activity to one of Ridgefield NWR's largest concentrations of wintering swans (tundra and trumpeter).

- **Impacts to Habitats**

- The trail becomes a corridor for the movement of invasive and noxious weeds.
- Removing of vegetation to build the trail
- Unauthorized trails coming off of the Lewis and Clark Trail
- Damage to vegetation and trees. Cutting of smaller trees and marking/girdling of larger ones.
- Waste and trash left being by trail users
- Illegal camping
- Upon completion, fish enhancement projects on Fazio and Anderson properties will place proposed trail alignments within restored floodplain and subject the alignment to seasonal flooding.
- Portions of proposed alignment are within the Columbia floodplain and would be impacted by 15-20 foot flood events.
- Portions of the proposed alignment are delineated as wetlands, and impacts to the wetland habitats would require mitigation.
- **Impacts to User Groups**
 - The area has very high hunting use and pedestrians using the trail would impact hunters and significantly alter and diminish the experience
 - Hunters would likely diminish the experiences of the pedestrians using the trail if it was constructed.
 - Dog training is very popular in this area. Pedestrians with their dogs traveling through the area would affect the trainers and the dogs they are training.
 - Farming takes place along the proposed route of the trail and pedestrians could cause crop damage, as well as the trail would decrease the amount of acres that could be farmed.
 - The trail could also restrict the crossing of farm equipment to get from one field to the next.
 - The proposed route of the trail also goes through cattle grazing areas, increasing the potential for fences to be cut, gates to be left open, and resulting in cattle getting out of their pastures and ending up in places they should not be.
 - The proposed trail route through Shillapoo is the main and sometimes the only viable travel route during many months of the year by WDFW and the Diking District, when large equipment is used including steel tracked machines. Moving large equipment on the trail would cause damage to it, especially from steel tracked equipment. Equipment could also be up to 20 feet wide, causing dangerous situations if pedestrians were on the trail at the same time.
 - How will the trail accommodate large and heavy equipment, especially in areas of the trail that may be elevated?
 - Although the trail would provide easier access into the Wildlife Area, it could affect birders that want to get away from disturbances and people in order to have an uninterrupted view birds and other wildlife.

- **Other Concerns**

- Safety issues with having pedestrians in a heavily used hunting area
- Maintenance along the trail. Picking up of garbage, posting of signs
- More and more nature trail areas are being used by the homeless, resulting in illegal camping, garbage, and vandalism. How will this be minimized and who will clean it up?
- Illegal fires, becoming wildfires
- Conflicts between user groups. Hunters vs. other groups and hunter harassment
- Proposed trail alignment would create public access to USFWS, and Diking District 14 -owned pumping infrastructure. Vandalism to the pump station and associated high voltage electric service would be costly and potentially dangerous. The stairs, gang plank, and elevated pump platform and would be an attractive nuisance situated in a very remote location.
- Impacts to cultural resources. There are several cultural resource sites along the proposed route and WSDOT right of way.

- **Alternatives to Building the Trail on Shillapoo, or if it is built on Shillapoo**

- Build trail on the eastside of Lake River and on County property
- Do not use the WSDOT Easement through the North Unit, instead use Lower River Rd. and the North Dike on Shillapoo
- Have seasonal closures of the trail during hunting seasons: September 1st – Jan. 31st
- Have seasonal closures of the trail during waterfowl migration and over-wintering seasons: Sept. 10th – April 20th
- Have seasonal closures of the trail during nesting and rearing periods: April 15th– July 15th.
- No dogs allowed on the trail, except those used for hunting during the respected seasons.
- No dogs allowed April 15th- July 15th to protect ground nesting birds and fawns
- No dogs allowed February 1st- April 15th to lessen disturbance to wintering waterfowl
- Trails in the Roth and Ridgeport Dairy units of the Ridgefield NWR were considered but not proposed due to impacts to sensitive species in the Refuge's Comprehensive Conservation Plan (CCP). The CCP supported trail linkages and refuge overlooks from non-refuge lands to the east of Lake River.

- **Mapped Priority Habitat Species**

- Waterfowl concentrations
- Great blue heron rookery
- Cavity-nesting ducks
- Slender-billed white-breasted nuthatch
- Oregon white oak woodlands

- Any construction around such occurrences (or any unmapped occurrences) should follow relevant WDFW management recommendations.

- **Literature Citations**

Hennings, Lori. (2010). Wildlife corridors and permeability - a literature review.

https://www.researchgate.net/publication/265085554_Wildlife_corridors_and_permeability_-_a_literature_review

Hennings, Lori. (2017). Hiking, mountain biking and equestrian use in natural areas: A recreation ecology literature review.

https://www.researchgate.net/publication/320084633_Hiking_mountain_biking_and_equestrian_use_in_natural_areas_A_recreation_ecology_literature_review

Figure 9, below, is from the 2017 paper. It shows various distances reported for flight or alert responses observed in wildlife.

Also from the 2017 paper: “People with dogs appear to be most disturbing, and equestrians least disturbing to wildlife. Hikers and mountain bikers fall somewhere in between.”

From the 2010:

“A Colorado study showed reduced deer activity within 164 feet (50 meters) of trails where dogs were prohibited, but the distance doubled to 328 feet (100 meters) for trails that allowed dogs, with similar effects on a variety of small mammals [211].”

“Trails introduce human disturbance, causing a flight response in birds at various distances from people (the “flush distance”). Nearly all bird species will flush if approached too closely by humans, and larger species or those species active near the ground tend to be less disturbance- tolerant [107;116;148].

Energy that could be used for critical activities such as feeding, territory maintenance and breeding may

be spent on avoidance behavior. Trail planning efforts should consider these factors if species of

conservation concern are known or suspected to inhabit the study area.”

See page 16 of the 2010 publication for a nice summary.

