

APPENDIX C: CUMULATIVE IMPACTS ANALYSIS

Introduction

This purpose of this Appendix is to provide a follow-up review and update of the Cumulative Impacts Analysis (CIA) prepared and submitted by the Wyoming Department of Transportation (WYDOT) under provisions of the National Environmental Policy Act (NEPA) (1970, as amended) for the Pathway Project (Path 22 East Segment), project number: WY11001 WY22. A review of the CIA for the Path 22 Middle Phase 2 Section was part of the SETTLEMENT AGREEMENT (Hereafter, "Agreement") among the parties listed in the pre-recital section of the Agreement and effective on June 22, 2015. The specific reference for this follow-up is found in Section 1.b. of the Agreement, "NEPA Categorical Exclusion Follow-Up".

There is no federal nexus such as federal funding or permitting for the Middle Phase 2 segment (the current project) hence no CatEx or application of the NEPA was required or appropriate since there was not a discretionary federal action. However, as a good faith effort in adhering to the Agreement, Teton County has provided the following review of cumulative impacts within approximately one-half mile of the proposed project.

Background

CUMULATIVE IMPACTS ANALYSIS

Cumulative impacts are defined under 40 CFR 1508.7 as:

"...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time".

Past and Future Impacts

In this case "past" is defined as within the previous 5 years. "Future" is defined as those impacts that have been specifically identified as likely to occur within the reasonable planning horizon of the next 5 to 10 years. Within the recent past there have been marginal impacts within a half mile of the Path 22 Middle Phase 2 Pathway Project, including the following:

- In 2007, the connector pathway and underpass near Teton Science Schools' were completed at the site of an old cattle underpass that dates back to the 1960s. Since then, signs have been installed along this section.
- In 2012, Silver Star Communications installed a fiber optic line along the north side of WY22. The fiber optic line was placed in conduit and buried with only minimal impacts to geology and soils and potential introduction of noxious species to disturbed areas. In 2014, Silver Star Communications added additional cabinets at intervals along the fiber optic line. Prior to 2012, other fiber optic and communication companies installed buried line on the south side of WY22.
- In 2010, Teton Search and Rescue constructed a 10,500 square foot facility, including a heliport with an enclosed helicopter storage, equipment storage, and a training area located on WY22.

- In 2014, the Spring Gulch intersection was modified to slow traffic to allow pedestrians and cyclists to safely cross Spring Gulch Road once the pathway is complete and to accommodate tractor trailers exceeding 70 feet long to make turns at that intersection. The modification of this intersection also enabled vehicles traveling south to turn right onto WY22 more efficiently. The modification of this intersection will continue through 2016 in various actions such as modifications of signals, lighting, and other associated construction activities. Some of those activities involve actions on or near the multiple-use pathway while others are adjacent to it.
- In 2014 and 2015, Lower Valley Energy Inc. installed a gas line coming up from Indian Springs primarily on the south side of WY22 near Skyline.
- Future impacts include proposed developments at the Thrifty Car Rental/Choice Meats sites, but the specifics are still under planning.
- Wyoming Department of Transportation (WYDOT) is likely to eventually expand WY22 into a four or five lane highway, but that expansion is also under long-term planning.

Cumulative Impacts Specific to Wildlife

The Path 22 Middle Phase 2 Pathway Project will include marginal impacts to wildlife in terms of the herd units that frequent the site. However, individual animals can be affected as they cross WY22.

Construction of retaining walls (segmented/terraced sections of keystone) and fencing (safety railings) may interfere with wildlife crossings. However, as a means of mitigation the wall has been designed in segmented/terraced sections which will allow wildlife opportunities to cross the site without obstacles. The safety railing has also been reduced to three separate locations that have steep drop-offs near the pathway in order to provide public safety for users. Additionally, the current density and growth of wetland shrubs growing in close proximity to an existing fence may already inhibit, and in some areas possibly do prohibit, the crossing of ungulates into habitats south of WY22.

Occasionally, moose forage within and along the willow patches on the southern boundary of the Project site. Foraging may decline during some diurnal periods due to human use of the pathway; however, crepuscular and nocturnal use will not be affected.

Elk crucial habitat and parturition habitat could be minimally influenced by the Path 22 Middle Phase 2 Pathway Project. According to Wyoming Game and Fish (WYGF), the outer boundary of parturition habitat currently lies within The Project area. Additionally, the property to the south of the proposed pathway (Poodle Ranch) includes migration corridors and movement habitat for elk. Elk use in this area is believed to be less than mule deer with movement between neighboring buttes to the north and west of the property, East Gros Ventre Butte and/or Poodle Ranch Hay Fields and High School Hill, although individual elk could be affected in terms of avoiding the site during exceptionally active periods. However, since migration generally occurs during fall (September – November) and spring (late March – April), it is unlikely that heavy use of the proposed pathway will occur during these periods due to snow and cold temperatures. Elk whose home ranges coincide with the project area during May – September are much fewer in number than the migrating herds and can often use the affected habitat during crepuscular or nocturnal hours.

The retaining walls will have minimal impact on mule deer crossings into the existing habitat south of WY22 because of the segmented retaining wall design. The eastern section of the property adjacent to East Gros Ventre Butte includes crucial mule deer winter range. The adjacent Poodle Ranch also provides crucial winter range for mule deer. During the winter and early spring months, mule deer congregate on both East Gros Ventre Butte and High School Hill. Although the pathway will reduce the foraging habitat adjacent to WY22, it will encourage deer to pass through the area rather than linger near the highway with a potential for vehicle collision.

Growth in the general Wilson, Victor, and Jackson area will lead to increased traffic on WY22 and vehicular induced wildlife mortalities. An increase in wildlife-vehicle collisions along the property could also lead to increased scavenger use, such as ravens or birds of prey which can lead to additional collisions and loss. In contrast, increased human use of the pathway could have the effect of reducing traffic volume on WY22 during snow-free months, which may help to reduce the likelihood of wildlife-vehicle collisions. Additionally, this increased use of the pathway may also decrease mule deer foraging adjacent to the busy highway, reducing potential wildlife-vehicle collisions.

Amphibians such as the Columbia Spotted Frog (*Rana luteiventris*) are likely present downstream of the project area. If Best Management Practices (BMPs) are carefully followed during construction, any potential impact downstream will be reduced to a level of minor effect. The existing culvert for Spring Creek, a likely travel corridor for amphibians and reptiles, will remain in place and unaffected. Consequently, the cumulative effect for these species will not change significantly from the existing environment.

The loss of about 0.07 acre of wetlands will reduce habitat for species that require wet environments during portions or all of their life history. The loss of 0.07 acre of this habitat, particularly spread along or amongst several locations, does not significantly reduce this important habitat as evidenced by the USACE issuing a Nationwide Permit for the proposed action. It is important to note that avoiding impacts to avian wildlife will be facilitated by doing a species/nest survey of the site during April 1 – August 15.

Water Quality

There will be minimum impacts to water quality in Spring Creek by the construction of the Path 22 Middle Phase 2 Pathway Project. The increase in impervious surface of the bike path may result in increased storm water runoff. However, the added green space between the pathway and WY22 will serve as a buffer to reduce storm water runoff. Non-motorized traffic will have less impact on water quality than motorized traffic along WY22. During construction, storm water will be detained within 150 feet of The Project. Adverse effects of increased storm water during project construction will be controlled by installing silt fence with erosion logs along the entire southern boundary of The Project, especially near the existing culverts such as where Spring Creek crossing or diversions for irrigation exist.

Spring Creek drainage will be potentially affected by conservation, construction and operational activities upstream and downstream of The Project by possible upstream projects. About 3 miles north of The Project, the Box L Ranch property may be put under a conservation easement under the Neilson Ranch/Box L Noncontiguous Planned Residential Development (PRD). This easement would conserve

the 6 naturally occurring, isolated wetlands existing on the Box L property, helping to improve water quality.

Wetlands

The construction of the paved pathway with intermittently staggered retaining walls and safety railings would negatively affect approximately 3,113 square feet (0.07 acre) of scrub-shrub wetland habitat which includes 'Mesic Tall Shrub' (SWL). In addition, a small amount of 'Mesic Shrub' (SSD) and 'Natural and Introduced Grasslands' (HPG) vegetative cover types will be affected. In the past, fiber optic and other communication projects 'plowed' the fiber optic conduit into the buried communication route which, according to the USACE, is a technique that does not constitute a fill to Waters of the U.S (WOTUS). Any future plans for expanding WY22 must comply with conditions and stipulations in Section 404 of the Clean Water Act, which will include stringent avoidance and mitigation measures. Such future projects will also need to comply with other state and federal laws and regulations designed to minimize impacts to wetlands and the wildlife species that use them. All of these regulations are directed at reducing or eliminating impacts to wetlands and aquatic resources for both specific projects and cumulatively within the affected area.

Vegetation

The negative effects of ground-disturbing activities as part of the Path 22 Middle Phase 2 Pathway Project construction could potentially create recruitment for invasive species. Similarly, past projects are required to monitor weed and pest infestations until native vegetation has taken over the site. Future projects will be required to follow those same laws, regulations, and practices in order to avoid introducing noxious weeds, and to perpetuate native vegetation wherever practicable. Other projects that have recently been completed or anticipated to be implemented are required to adhere to County standards and requirements to contain and reduce the spread of noxious weeds. This uniform effort reduces the cumulative impact regarding this concern.

Summary

It is Pioneer's professional opinion that pathway construction within a half-mile of the Poodle Ranch will have minimal impacts on wildlife, water quality, wetlands, and vegetation. It is also Pioneer's opinion that the proposed project, when considered in total with the recently completed and potential future projects within the proposed project site, will not contribute to, nor produce a significant cumulative impact. Also, the required standards, regulations, and practices for reducing impacts to wetlands and other aquatic resources, vegetation (impacts by noxious weeds in particular), wildlife, and erosion for this project and others that preceded it or are contemplated for implementation in the future substantially reduce the potential for this project to create a significant cumulative impact to the resources affected by the pathway project.

In summary, based on review of the cumulative impacts for the Phase 2 East segment of the multi-use pathway, it is Pioneer's conclusion that none of the direct or indirect impacts associated with the

implementation of the proposed Path 22 Middle Phase 2 Pathway project will contribute to create a significant impact to the resources, habitats, or features within, adjacent, or near the project area.