



Twin Tunnels EA and Frontage Road Project

AGENDA

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| Purpose: | ALIVE Meeting | | |
| Day: | Wednesday | Date: | November 9, 2011, 1:00 pm |
| Location: | CDOT Region 1 - Golden | Fox Hollow Conference Room | |

Introductions

Twin Tunnels EA and Frontage Road Project Overview (J. Bemelen)

- Project background
- Schedule

ALIVE MOU Review (J. Peterson)

- [MOU](#) development and commitments
- LIZ locations within the project and recommended mitigations

Current Information and Updates (D. Singer)

- [A Regional Ecosystem Framework for Terrestrial and Aquatic Wildlife along the I-70 Mountain Corridor in Colorado](#)
- [Guidelines for Improving Connectivity for Terrestrial and Aquatic Wildlife on the I-70 Mountain Corridor](#)

Role of ALIVE on the Twin Tunnels EA and Frontage Road Project (P. Noyes)

- Identify ALIVE related issues
- Develop recommendations through the ALIVE implementation process

Implementation Process (P. Noyes)

- Initial list of issues
- Identification of information and data needs
- Initial recommendations

Next Steps (P. Noyes)

- Assignments for next meeting
- Next meeting schedule

Twin Tunnels EA and Frontage Road Project ALIVE Committee

Implementing the ALIVE MOU on the I-70 Mountain Corridor

I-70 currently crosses several traditional wildlife movement and migration routes, limiting access or creating a barrier to critical habitat. These areas are known as wildlife linkage zones (LIZs). As part of the I-70 Mountain Corridor Programmatic Environmental Impact Statement (PEIS), the committee overseeing A Landscape Level Inventory of Valued Ecosystems (ALIVE) identified wildlife crossings and mitigations at critical wildlife LIZs along the corridor where wildlife movements are impeded. The ALIVE Memorandum of Understanding and the list of LIZs and their associated recommendations can be accessed for information on the agreements and recommendations developed by the ALIVE Committee. All projects in the corridor should review the LIZs to determine if the proposed work impacts a LIZ. If a project does involve a LIZ, opportunities to implement the recommendations for that LIZ should be considered.

The Evaluation Guidance details how I-70 Mountain Corridor alternatives will be evaluated. The Alternative Evaluation Guidance documents how healthy environment criteria will be used to determine how well an alternative is able to avoid, minimize, and mitigate impacts to wildlife. Criteria are provided for use at each level of alternative analysis.

During the I-70 Mountain Corridor Context Sensitive Solution Workshops, the stakeholders developed a list of critical issues to be considered during all future work on the corridor.

ALIVE Meetings

Meeting 1

- Confirm ALIVE Committee membership
- Review the ALIVE MOU, LIZs and Regional Ecosystem Framework
- Identify ALIVE issues associated with Twin Tunnels EA and the Frontage Road Project
- Develop initial recommendations and identify additional information/data needs

Meeting 2

- Review new data and information
- Provide recommendations on ALIVE elements

Table 4. ALIVE Implementation Matrix

| | Corridor Planning | Project Development | Project Design | Project Construction | Operations, Maintenance and Monitoring |
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| <p>WILDLIFE CONNECTIVITY AND HABITAT</p> <p><u>Objective:</u> To increase the permeability of the I-70 Corridor to terrestrial and aquatic species, including the development of management strategies that will result in the long-term protection and restoration of wildlife linkage areas that intersect the I-70 Corridor, improve habitat connectivity, and preserve essential ecosystem components. (MOU Purpose and Intent)</p> | <p><u>Inputs:</u></p> <ul style="list-style-type: none"> Wildlife data Land use information (incl. local land use, USFS management plans, BLM, etc.) Ownership data (incl. private lands) Existing LIZ and Ecological information and recommendations <u>Considerations</u> What opportunities exist to improve, protect or restore permeability and habitat components? How have wildlife habitat and populations changed since the original or last updated analyses? What types of changes in wildlife habitat, populations or movements might occur in the reasonably foreseeable future? <p>(continued on next page)</p> | <p><u>Inputs</u></p> <ul style="list-style-type: none"> Target species movements and habitats Wildlife guidelines and BMPs (I-70 Guidelines for Enhancing Wildlife Permeability) Avoidance and mitigation strategies (I-70 Connectivity Recommendations) Existing recovery efforts (USFWS/CDOW) Coordination with CDOW, USFWS, USFS, BLM, local governments, other stakeholders <u>Considerations</u> Are there permeability concerns outside of identified LIZs? Where are there existing barriers to wildlife movement? What opportunities exist to improve, protect or restore permeability and habitat components? <p>(continued on next page)</p> | <p><u>Inputs</u></p> <ul style="list-style-type: none"> Species specific needs and compatible project designs Terms and conditions from Biological Opinion, if applicable Will project designs improve or restore habitat and permeability? Will project designs minimize impacts to habitat and permeability during construction? Will project designs minimize impacts to habitat and permeability during operations and maintenance? <p>(continued on next page)</p> | <p><u>Inputs</u></p> <ul style="list-style-type: none"> Terms and conditions from Biological Opinion, if applicable New species & habitat data since PS&E relative to all target species (or new target species) NEPA re-evaluation <u>Considerations</u> Are there unforeseen issues affecting habitat & permeability during construction? Are there changes to the construction timeline that could affect habitat & permeability? <p><u>Outcomes and Products</u></p> <ul style="list-style-type: none"> Mitigation modifications | <p><u>Inputs</u></p> <ul style="list-style-type: none"> Implementation and Monitoring Plan Terms and conditions from Biological Opinion, if applicable Are the mitigations successful relative to the permeability goals set during corridor planning and project development? What could be done differently? How could a structure be built better, cheaper next time? <p><u>Outcomes and Products</u></p> <ul style="list-style-type: none"> Monitoring results Lessons learned |

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| WILDLIFE CONNECTIVITY AND HABITAT (continued) | <u>Outcomes and Products</u> <ul style="list-style-type: none"> Identify measurable permeability goals for the corridor Avoidance strategies (1-Mitigation strategies (1-70 Connectivity Recommendations) Revised or refined LIZ information for that corridor segment (LIZs-2011) Identify partnership and acquisition or easement opportunities (permanent protection opportunities for adjacent habitat) | <u>Considerations (con't)</u> <ul style="list-style-type: none"> How have wildlife habitat and populations changed since the original or last updated analyses? What types of changes in wildlife habitat, populations or movements might occur in the reasonably foreseeable future? Do opportunities exist to enhance recovery efforts (e.g., approved Recovery Plans for ESA-listed species and State analog)? Does the target species list include ESA-listed T&E species, species of state economic importance, USFS and BLM sensitive species, USFS MIS, & state spp. of concern? Are there potentially conflicting mitigation/BMPs actions (crosswalk proposed mitigations) <p>(continued on next page)</p> | <u>Considerations (con't)</u> <ul style="list-style-type: none"> Are there potentially conflicting mitigation/BMPs actions (crosswalk proposed mitigations) <u>Outcomes and Products</u> <ul style="list-style-type: none"> Final Plan Specifications and Estimates (i.e., final designs) including specific mitigation measures Monitoring plan, estimates and identified funding for monitoring & ongoing maintenance | | |

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| <p>INFORMATION NEEDS AND UPDATES</p> <p><u>Objective:</u> Identify and acquire information needed to inform decision-making and outcomes at each life cycle phase.</p> | <ul style="list-style-type: none"> • Changing and shifting habitats and wildlife populations • Ongoing LIZ revisions | <p><u>Outcomes and Products</u></p> <ul style="list-style-type: none"> • Biological Evaluation (USFS sensitive spp.), Biological Assessment (USFS), Biological Opinion (USFWS), Biological Report (USFS) - Identify project-specific mitigation strategies relative to all target species - Establish commitment to monitoring • General and species-specific BMPs | <ul style="list-style-type: none"> • Species-specific and site-specific monitoring needs – what protocols should be implemented to evaluate the functionality of mitigation measures? | <ul style="list-style-type: none"> • Surveys prior to implementation | <ul style="list-style-type: none"> • Are there new or improved monitoring techniques which could provide greater efficiency and effectiveness in monitoring? |