



# COLORADO

## Department of Transportation

Division of Transportation Development  
Environmental Programs Branch  
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Denver, CO 80204-2305

TO: Transportation Commission

FROM: Rebecca White - Director, Division of Transportation Development (DTD)  
Jane Hann - DTD, Environmental Programs Branch Manager

DATE: February 17, 2021

RE: CDOT Environmental Program Overview

**Purpose:** The purpose of this memorandum is to provide a summary of a presentation on CDOT's Environmental Program.

**Action:** Informational. No action required.

**Background:**

CDOT's Environmental Program is managed statewide by a combination of headquarters and regional staff.

Headquarters staff in the Environmental Programs Branch (EPB) is part of the Division of Transportation Development under Rebecca White. EPB creates guidance, manuals, and trainings, provides permit compliance support, and adds staff to the regions to cover resources such as paleontology, archaeology, history, biology including wetlands and endangered species. EPA also supports water quality, sustainability, air quality, noise abatement, greenhouse gases, environmental documentation that satisfies the National Environmental Policy Act (NEPA), landscape architecture and revegetation/soil management support, visual resource impact assessment and mitigation, regulatory and compliance assistance, Section 4(f) of the Department of Transportation Act (parklands, recreation, historic resource, and wildlife study area protections), Section 6(f) of the Land and Water Conservation Act protections (protecting resources where these kinds of funds have been utilized).

Additionally, each region has its own environmental program that handles project development in planning and in construction, and provides input and support to EPB's efforts to create guidance, trainings, and templates that help streamline and support their efforts at the project level. There is a Regional Planning and Environmental Manager in each region (or in R1's case, both a Regional Environmental Manager and a Regional Planning Manager) that leads the regional program. Each region also has some specialists that are supplemented by specialists in EPB (e.g., EPB has the only paleontologist, and the only archaeologists in the state.)

**Details:**

CDOT's Environmental Program is successful because of the highly skilled and motivated staff that work in this program. The staff support each other regardless of region or HQ focus, work across division boundaries to make sure the program improvements are helpful and accepted across the board, work with outside agencies and municipalities including assisting in training them to understand the needs of the environmental regulations and the streamlining efforts that have been accomplished within CDOT's processes, and work with the regulators in a supportive and helpful fashion where they share their expertise with them to develop innovative and nationally-recognized programs, guidance, templates, and tools. Environmental has a great relationship with engineers, regulators, and other organizations because we keep our eye on the goal of doing what's right, but doing it in the most streamlined way possible to have a win-win for all concerned.

**Next Steps:** None

**Attachments:** Attachment A: Environmental Programs Presentation





**COLORADO**

**Department of Transportation**

# Environmental Programs Overview, Feb 17, 2021



# Environmental Statewide Program

## HQ & Region Planning and Environmental Managers

*HQ: Jane Hann*

R1: Vanessa Henderson

Jordan Rudel

R2: Rob Frei

R3: Dave Cesark

R4: Jim Eussen

R5: Tony Cady



# Environmental Programs | Key Messages

## What We Do:

Environmental helps CDOT transportation actions subject to 40+ federal and state environmental laws

- **Program Support:** Developing environmental policy, procedures, specs, templates, programmatic agreements, guidance, and training.
- **Project Support:** Provides additional environmental staff from HQ to the regions to help with actions that disturb structures or the ground.  
(e.g. paleontologist, archaeologists, landscape architects, water quality staff, biologists, etc. )

**And We Have Accomplished Some Great Things for Colorado's Environmental Resources!!**

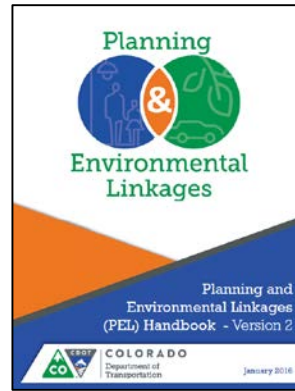




# Environmental Programs | Environmental Policy

This group includes NEPA Specialists that know about various regulations, Hazardous Materials Specialists, GIS

NEPA/PEL Programs



Hazardous Materials



Section 4(f) Dept. of Transportation Act

Section 6(f) Land & Water Conservation Act

Virtual Public Meetings





## Notable Successes

- 1) I-270 virtual meetings
- 2) Many Programmatic Agreements (PA)
- 3) *de minimis* Section 4(f) guidance document
- 4) Developed a Section 6(f) map of resources
- 5) CDOT's NEPA Manual - AASHTO's model
- 6) EA/FONSI/Catex Templates
- 7) Planning and Environmental Linkages (PEL) Program Handbook
- 8) Environmental Stewardship Guide
- 9) Environmental Template for design/build procurement - first in the nation



# Environmental Programs | Cultural Resources/Paleontology

Historians, archaeologists, and paleontologists work on these resources

History

**Irrigation Ditches**



**Old Bridges**



**Rock Walls**



Archaeology

**Pit Houses**



**Leaf Fossils**



Paleontology



## Notable Successes

- 1) CDOT's History Colorado Programmatic Agreement as a national example
- 2) Outstanding Award-Winning Cultural Resources Program; staff interviewed
- 3) Largest Archaeo Dig in CDOT history R5
- 4) 46 Bridges now on CO Most End Places
- 5) In lieu fee mitigation for historic truss bridge preservation = National Attention
- 6) Phase I of Historic Bridge Management Plan highlighted eligible bridges remaining
- 7) R2 Cimmaron Project incorporated old building rubble (decorative stones) into trail project nearby
- 8) Georgetown Historic District Rock Fall Mitigation - Netting Matched Rock Color





# Environmental Programs | Air Quality/Noise/GHG/Sustainability

This group includes air quality/GHG, sustainability, and noise specialists

Air Quality  
Improvement



Noise  
Abatement



Greenhouse Gas  
Reduction



Sustainability  
Program





# Environmental Programs | Air Quality/Noise/GHG/Sustainability

## Notable Successes

- 1) AQ Project-Level Analysis Guidance - More detail than most DOTs
- 2) Just hired a GHG Climate Action Specialist to develop this new GHG program
- 3) Major Update to Noise Analysis & Abatement Guidelines that may get a National Award Noise Report Template Developed/Revised
- 4) Sustainability Accomplishments: Community Solar Gardens Subscriptions, Sustainability On-Line Training, Electric Vehicle Charging Stations support, energy audit and resulting savings, Reclaimed Asphalt Pavement use, Auto Vehicle Locators.
- 5) 5) R2 Ilex Project - first ever Voluntary Clean Up (for hazardous material)
- 6) 6) Haz Mat Database subscription



# Environmental Programs | Biological Resources

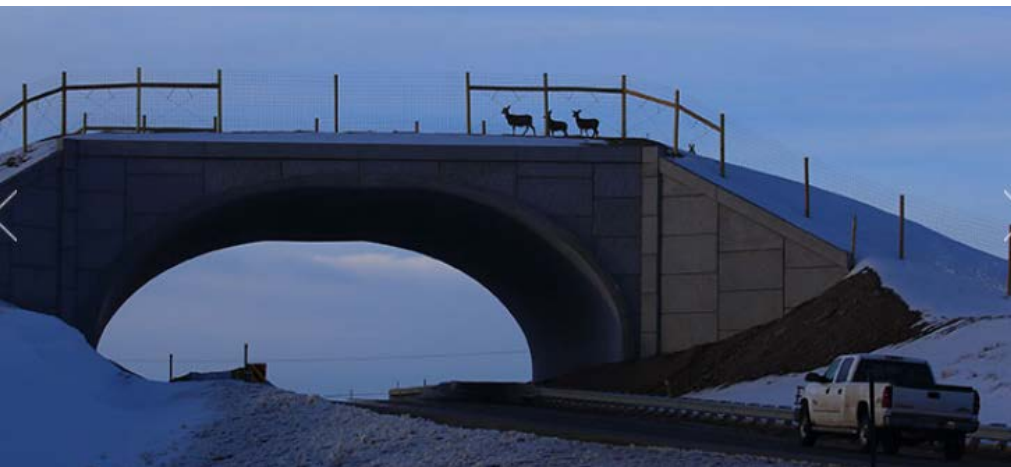
## Endangered Species



## Wetlands Tasks Requiring a Permit



## Wildlife/Vehicle Protections



## Bats on Bridges

Is a Bat Using This Bridge?





## Notable Successes

- 1) USFWS Liaison
- 2) PMJM mitigation success standard IDed and Mitigation Banks established
- 3) Statewide Impact Findings Tables (SWIFT)
- 4) Bats and Bridges Training Video 2020
- 5) CDOT Pollinator Videos and Plan 2020
- 6) In lieu fee mitigation program for the endangered Canada Lynx
- 7) Wetland Mitigation Fund that pre-purchases wetland mitigation credits
- 8) Pollinator Highway (I-76) established
- 9) Successful Prairie Dog Relocations
- 10) Westslope Wildlife Transportation Study





# Environmental Programs | Water Quality

This group includes Water Pollution Control Managers and Stormwater Specialists and are responsible for:

- Construction Monitoring for Erosion and Sediment Control
- Permanent Water Quality Facility Installation & Maintenance
- Public Education and Outreach
- Pollution Prevention & Good Housekeeping at CDOT facilities
- Wet-Weather Monitoring
- Illicit Discharges by others in our ROW and Highway Spills





## Notable Successes

- 1) Old WQ Training Facility was built as a result of an audit/2005; sunsetted the audit; and our new “Tom Boyce Water Quality Training Facility” is now in Aurora
- 2) EPA just bragged about CDOT’s success story on cleaning up Straight Creek from sediment impairment
- 3) CDOT has built a strong WQ program that withstood an EPA audit in 2015 without fines. Yet, we continue to improve on it, impressing the regulators and building trust.
- 4) Our stormwater program has a relationship with Colorado Stormwater Council and the Colorado Infrastructure Catalog now complete.
- 5) Use of Survey 123 aps and GIS to strengthen regulatory compliance, and streamline processes.



# Environmental Programs | Landscape Architecture

This group includes licensed Landscape Architects and Landscape Specialists

Urban and Corridor Design



Protecting Landscapes

Stabilizing Disturbed Areas



Visual Resources



## Notable Successes

- 1) Visual Impact Assessment Guidance - simplified FHWA's guidance for CDOT
- 2) Stormwater Management Plan Preparation and Review Classes to communicate what is required by regulation by CDOT-created templates.
- 3) Improvement of revegetation specifications on projects to close out projects sooner; piloted this on a number of projects before implementing. This is borrowed by others.
- 4) Developed standardized seed lists by ecotype to assist projects in seed-mix selection.
- 5) Create corridor visions and landscaping successes, as well as select artwork for projects





# Environmental Programs | Emergency Event Planning

TERC - Transportation  
Environmental Resources  
Council since 2002

Environmental Flood Response/Environmental  
Compliance Assistance - 2013  
(link and offer to mail hard copy)

Environmental Fire Response/Revegetation - 2020





## Notable Successes

- 1) The River and the Road publication after the Big Thompson Flood in 2013
- 2) FEMA was so impressed with the quickness of response by CDOT - and credited this to our relationship with TERC
- 3) Vegetation regrowth already showing up from the 2020 burns along I-70 due to CDOT's rapid and innovative response to soil management
- 4) CDOT Environmental Staff is efficient at collaboratively working across divisional, regional/HQ groups, local governments, and agency regulators.



# Environmental Programs | Wrap Up Future Features Being Worked On

- 1) Statewide Paleo Database being built
- 2) Visual Impact Assessment Preparer Training
- 3) East-slope Wildlife Transportation Study
- 4) Phase II Bridge Management Plan
- 5) Drone research for water quality compliance and wetland mapping
- 6) Look at fiber optics as a way to detect wildlife
- 7) Moving the e-inspections for stormwater to a new system that will be even more supportive of program and project compliance.
- 8) Studies to improve stormwater compliance - product evaluation and facility review such as for infiltration basins and median filter drains
- 9) Revegetation & soil prep training videos for use in the field
- 10) GHG reduction regulations coming and CDOT working to figure out how this can be implemented
- 11) Sustainable Construction (GHG, PM2.5, dust)



## Environmental Programs | Wrap Up Future Features Being Worked On, cont.

- 12) Ozone standards are getting tougher, so working on how this affects CDOT projects
- 13) Virtual meetings and how to use them better - working on templates to do this in-house
- 14) Increased partnership with DNR/Dept of Ag/Colorado Land Board - living snow fences/pollinator study
- 15) Air monitoring for various construction projects
- 16) Changes in US/DOT administration direction - CDOT will be working with FHWA to implement changes as soon as guidance comes out of FHWA HQ

***The ask - do you have a focus or goal that we have not mentioned that you would like us to look into?***





# ENVIRONMENTAL SUCCESS IS CREATED BY EVERYONE

**Many Thanks to Everyone Who Supports CDOT's  
Environmental Stewardship Without Whom this  
Program Would not be Successful**

**“CDOT will support and enhance efforts to  
protect the environment and quality of life for  
all of Colorado's citizens in the pursuit of  
providing the best transportation system and  
services possible”**

**CDOT's Environmental Ethics Statement**