



Wildlife Considerations in Transportation and Community Planning

A Summit on Communications and Planning for Private and Public Developments.

October 15, 2019 - Governor's Mansion - Carson City, Nevada



Mission: The focus of this Summit is to convene wildlife, transportation, planning, and policy experts to discuss current science and needs related to wildlife movements and conflicts around the state. The Summit will bring stakeholders together to share information and develop strategies to communicate, plan, and accommodate wildlife needs; reduce animal-vehicle collisions; and protect wildlife and their movement corridors across Nevada and along our highways.

Collaborate, Educate, and Create Solutions

- Build new relationships and strengthen existing relationships.
- Identify productive communications and participation between stakeholders.
- Encourage early engagement in planning.
- Collaborate with a broader community.
- Increase education and outreach.
- Promote creative partnerships and increase the diversity of champions.
- Identify potential policy needs.
- Identify various funding mechanisms.

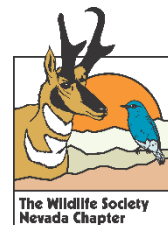
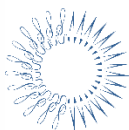
Supporting Partners: The 2019 Summit is hosted by the Nevada Department of Transportation, the Nevada Department of Wildlife, and Pew Charitable Trusts, and is endorsed by The Center for Large Landscape Conservation and the Nevada Chapter of the Wildlife Society.

Summit Planning Committee: This Summit was organized by Nova Simpson with NDOT, Brain Wakeling and Cody Schroeder with NDOW, Leslie Duncan, Matt Skroch, Nick Callero, and Lauren Christopherson with Pew Charitable Trusts, John Tull with U.S. Fish and Wildlife Service, and Caelan McGee and Meagan Wiley with Zephyr Collaboration.

Financial support provided by The Pew Charitable Trusts.

Short Agenda

TIME	TOPIC & OBJECTIVE	PRESENTER
8:00 am	Registration, Coffee and Continental Breakfast	
8:30 am	Call to Order, Welcome Opening Statements and Goals FHWA Environmental Excellence Award	<ul style="list-style-type: none"> • Nova Simpson, NDOT • Caelan McGee, Facilitator • Kristina Swallow, Director NDOT • Tony Wasley, Director NDOW • Greg Novak, FHWA
9:15 am	The Power of Film in Educating Partners and Publics	<ul style="list-style-type: none"> • Jake Willers
9:45 am	Secretarial Order 3362, Improving Habitat Quality in Western Big-Game Winter Range and Migration Corridors	<ul style="list-style-type: none"> • John Tull, Nevada Science Coordinator, US Fish and Wildlife Service
10:00am	Migration Priorities in Nevada, Status of Migration Data, Mapping and Information Sharing	<ul style="list-style-type: none"> • Cody Schroeder, Mule Deer Specialist, Nevada Department of Wildlife
10:45 am	<i>Break</i>	
11:00 am	Animals & Roadways; Science, Infrastructure, and Education	<ul style="list-style-type: none"> • Nova Simpson, Biological Supervisor for Northern Nevada, NDOT
11:45 am	<i>Lunch - Provided</i>	
12:45 pm	Public-Private Partnerships: Paving the Way to Implementation	<ul style="list-style-type: none"> • Renee Callahan, Center for Large Landscape Conservation, and ARC Solutions
1:15 pm	State-Level Structure and Process for Wildlife and Transportation Planning	<ul style="list-style-type: none"> • Matt Skroch, Pew Charitable Trusts
1:45 pm	<i>Break</i>	
2:00 pm	Workshop; Opportunities, Challenges, and Next Steps for Coordination	<ul style="list-style-type: none"> • Table Exercise for all Participants
3:00 pm	Report-Outs and Full Group Discussion	<ul style="list-style-type: none"> • All Participants
3:45 pm	Summarize Key Themes and Action Items	<ul style="list-style-type: none"> • Caelan McGee, Facilitator
4:00 pm	Adjourn	



8:00 - Registration, Coffee, and Continental Breakfast

8:30

Call to Order and Welcoming Remarks

This meeting is facilitated by Caelan McGee with Zephyr Collaboration. Zephyr Collaboration is made up of skilled facilitators and mediators with experience in California and across the US. They create and support collaborative decision-making processes for complex policy questions based on key issues, interests and the best available information. Their work is rooted in the principles of transparency and accountability and help shape durable solutions with those who implement as well as those who live with the results. For more information about Zephyr Collaboration go to <https://www.zephyrcollaboration.com>.

Facilitator Bio - Caelan is the Principal of Zephyr Collaboration, which he formed in 2017, and is a Senior Mediator with 19 years of experience helping stakeholders develop more effective policy for land use, environmental, public health and security issues. Caelan has extensive practice working on high conflict and technically complex projects in transportation and forest planning. He has worked nationally and internationally on public policy issues regarding mining, fisheries management, air quality, and environmental justice. He also has extensive experience in strategic planning and interagency coordination.

Opening Statements and Goals

NDOT Director, Kristina L. Swallow

Kristina is the new Director for NDOT coming with nearly 25 years of diverse experience in engineering, public policy, community advocacy and voluntarism. She is passionate about having a positive impact on the places she lives, organizations she serves, and people she works with. As a practicing civil engineer, Kristina has worked in a number of technical areas including flood control, traffic impact analysis and mitigation, land development, public works and transportation policy. Her roles have included being a small business owner, working as a consultant, serving as a program manager in city government, working as a lobbyist in the Nevada State Legislature, and working as a legislative aide in the U.S. Senate where she was able to negotiate language in the final passage of MAP-21. She is a licensed civil engineer in the state of Nevada, has a Bachelor of Science degree in Civil Engineering from the University of Arizona, a Master of Science in Civil and Environmental Engineering from the University of Nevada Las Vegas and has completed additional studies within the UNLV College of Urban Affairs.

NDOW Director, Tony Wasley

Tony has been the Director for the Nevada Department of Wildlife for the past 6 ½ years but has worked for NDOW for more than 23 years. Currently, Tony is creating and leading an adaptive and innovative agency through political and social change. Tony is a member of the Executive Committees in both the Western Association of Fish and Wildlife Agencies (WAFWA), the national Association of Fish and Wildlife Agencies (AFWA), is presently the Chairman of AFWA's Education Outreach and Diversity Committee, WAFWA's Sagebrush Executive Oversight Committee, and cochair of the national Relevancy Working Group. He is also presently the Vice Chairman of the North American Wetland Conservation Act (NAWCA) council and was a proud fellow in National Conservation Leadership Institute's Cohort 9. He was the past co-chairman of the National Landscape Conservation Cooperative Council, and past chairman of the Pacific Flyway Council. Additionally, Tony serves on AFWA's National Grants Committee, and the Western Governors' Association Sage Grouse Task Force. Tony earned bachelor's degrees in both Wildlife Management and Biological Sciences from CSU Chico and earned a master's degree in Biological Sciences from Idaho State University where while on a National Science Foundation Research Assistantship he studied plant and animal interactions.

2019 FHWA Environmental Excellence Award

FHWA Nevada Division, Greg Novak, Assistant Division Administrator

Greg will present the 2019 FHWA Environmental Excellence Award to FHWA, Nevada, NDOT, and NDOW for their project, "Wildlife and Safety Improvements along US 93 and I-80; A Landscape Scale Approach to Habitat Connectivity and Traffic Safety in Elko County, Nevada." This landscape scale approach has made an environmentally sensitive and outstanding contribution to both transportation and the environment of northern Nevada as it addresses the four major risk areas identified for deer-vehicle conflicts where the migration crosses over US-93 and I-80, increases human and wildlife safety, reduces habitat fragmentation by providing safe crossing locations for various wildlife, and increases connectivity for migratory mule deer by providing safe access to more than 1.5 million acres of summer and winter habitat.

This project was completed in cooperation with ARC Solutions, Contech Engineered Solutions, Nevada State Legislature, USFWS, UNR Department of Engineering, and UNR Department of Natural Resources and Environmental Science.

9:15 - The Power of Film in Educating Partners and Publics

Presented by Jake Willers - Jake takes us behind the scenes of his latest film (Re)Connecting Wild and discusses how film is the ultimate tool to disseminate information to the masses. (Re)Connecting Wild is a short film documentary about the wildlife crossings in northeastern Nevada and created in partnership between NDOT, NDOW, and ARC Solutions.

Presenter Bio - Jake is a TV presenter and wildlife filmmaker who has hosted 30 wildlife shows on the National Geographic Channel, which have enjoyed success in 147 countries and been translated into 25 languages. Jake has traversed the globe traveling to 38 countries and filming in some of the most inhospitable places on earth. In 2007, Jake moved from Cambridge, England to the US and formed NineCaribou Productions, LLC, a production company dedicated to expanding peoples' knowledge of wildlife and the world around us. For more information about NineCaribou Productions go to 9caribou.com.

9:45 - Secretarial Order 3362: Improving Habitat Quality

Presented by John Tull - This talk will provide an overview of the Department of Interior Secretarial Order 3362: Improving Habitat Quality in Western Big-Game Winter Range and Migration Corridors. It will also highlight some of the opportunities for coordinating planning and habitat projects to secure state identified big game migration corridors.

Presenter Bio - John is the Nevada Science Coordinator for the Pacific Southwest Region of the U.S. Fish and Wildlife Service. He currently serves as the Department of Interior liaison to Nevada and California for Secretarial Order 3362. John earned a PhD in Ecology, Evolution, and Conservation Biology from the University of Nevada Reno in 2006, and he studied desert mule deer movements and interactions with urban expansion outside Tucson for his Master's of Science.

10:00 - Wildlife Migration Corridors in Nevada

Presented by Cody Schroeder - This talk will provide an overview of Nevada's implementation of the Secretarial Order 3362 including a brief history of past tagging projects on mule deer and other ungulates and research the Department has conducted on migration corridors in Nevada.

Presenter Bio - Cody is the Mule Deer and Pronghorn Staff Specialist for the Nevada Department of Wildlife. He is the primary lead on the migration initiative for the Department of Wildlife and implementation of the Secretarial Order 3363 for Nevada. Cody earned a master's degree in Wildlife Biology at Idaho State University where he studied foraging ecology and habitat selection in Sierra Nevada bighorn sheep.

10:45 - Break

11:00 - Animals & Roadways; Science, Infrastructure, and Education

Presented by Nova Simpson - Nevada has quickly become one of the leaders in road ecology which is the interaction of the natural environmental and roadways. Over the last decade NDOT has built 16 structures specifically for animal movement, 8 transportation bridges that were also designed to accommodate animal movement below, and has modified several existing structures to accommodate wildlife movements. Additionally, NDOT has been involved in numerous research efforts and educational outreach programs. All of these efforts aim to reduce animal-vehicle collisions, increase safety for both motorists and animals, and inform the public of the value and benefit of these projects. This talk will provide a summary of the last decade of NDOT's efforts to increase the safety and permeability of Nevada's highway system.

Presenter Bio - Nova is the Biological Supervisor for Northern Nevada and the Large Mammal Mitigation Specialist for the Nevada Department of Transportation. She manages the biological needs of projects including compliance with laws and regulations applicable to federal and state protected species while minimizing project impacts. As the Mitigation Specialist she has created a program to reduce animal-vehicle collisions, increase driver safety, and decrease habitat fragmentation caused by roadways including a statewide prioritization of problem areas, integration of wildlife considerations into early project planning, various research projects, and public education. She started working with NDOT more than 10 years ago while obtaining her Master's of Science in Road Ecology and has worked for NDOT Environmental Services Division for the past 7 years.

11:45 - Lunch

12:45 - Public-Private Partnerships: Paving the Way to Implementation

Presented by Renee Callahan - A 2012 survey of more than 500 federal and state transportation officials overwhelmingly identified funding as the #1 obstacle to deploying wildlife crossings and related mitigation infrastructure in the U.S. Given this perceived barrier, this talk will focus on the potential role of public-private partnerships, or "PPPs," in developing innovative ways to fund highway mitigation projects aimed at making our roads safer for both motorists and wildlife. And while you may think PPPs are a drop in the bucket, in 2018, Americans donated more than \$425 billion to charities including private foundations who are increasingly interested in supporting highway mitigation for wildlife. In addition to introducing participants to PPPs, this talk will provide an overview of successful initiatives, with a focus on the American West.

Presenter Bio - Renee, with a background in environmental science, management, and law, serves as the Senior Policy Officer and Corridors and Crossings Program Director at the Center for Large Landscape Conservation in Bozeman, Montana. She works to promote innovative public policies that facilitate ecological connectivity and large landscape conservation, drawing upon more than 25 years of professional and legal experience in federal, state and administrative law, policy and research. A former attorney in the U.S. Department of Justice's Honors program, Renee concurrently serves as the Executive Director for ARC Solutions, an interdisciplinary partnership working to facilitate innovation in the placement, design and construction of wildlife infrastructure. During her tenure, ARC has received two Federal Highway Administration Awards for Environmental Excellence and an American Society of Landscape Architects' Honors Award for Communications.

ARC Solutions is an interdisciplinary network whose mission is to promote solutions to improve human safety, wildlife mobility and landscape connectivity by fostering innovation in the placement, design and construction of wildlife crossings. ARC advances its mission through three initiatives that collectively build understanding around the need for crossings (Communications), share the latest in research and technological innovation with practitioners (Technology Transfer), and motivate the construction of wildlife crossings wherever they are needed (Implementation). For more information about ARC go to <https://arc-solutions.org/>.

1:15 - State-Level Structure & Process for Wildlife and Transportation Planning

Presented by Matthew Skroch - The level of interest and interagency collaboration on wildlife and transportation has grown rapidly in recent years, with several signals emerging for how states can successfully address wildlife corridors and driver safety, alike. Matt will summarize several states' initiatives and share ideas about what works best for insuring durable and publicly supported projects that include local, state, and federal stakeholders.

Presenter Bio - Matthew manages the Pew Charitable Trusts' effort to identify and conserve wildlife migration routes in the western U.S. He works collaboratively with state and federal agencies, non-governmental organizations, landowners, and other stakeholders to conserve migrating wildlife and their habitat while reducing the costly incidents of wildlife-vehicle collisions. Matt has 21 years of experience in land and wildlife conservation across the West and holds a M.S. in conservation planning from the University of Arizona.

2:00 - Workshop

Facilitated by Caelan McGee - In small groups, you will discuss and record opportunities and challenges for early coordination for wildlife corridors, land use, and transportation planning.

3:00 - Report-Out and Group Discussion

Facilitated by Caelan McGee - Each group provides a brief report to the entire group of their major conclusions.

3:45 - Summary

Facilitated by Caelan McGee - Summarize key themes and action items for future consideration.

4:00 - Adjourn

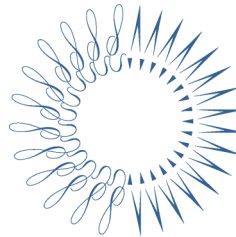
SUMMIT PARTNERS

Nevada Department of Transportation (NDOT) is responsible for the planning, construction, operation and maintenance of the 5,400 miles of highway and over 1,000 bridges which make up the state highway system. NDOT's mission is to provide a better transportation system through unified and dedicated efforts, while we strive to be a leader in delivering transportation solutions to improve Nevada's quality of life. Transportation no longer means highways alone, but rather an integration of travel by rail, bike, air or bus. The department also oversees various allied projects from the Adopt-a-Highway program to the maintenance of State Historical Markers. For more information about NDOT go to <https://www.nevadadot.com/>.



Nevada Department of Wildlife (NDOW) is the state agency responsible for the restoration and management of fish and wildlife resources, the promotion of boating safety on Nevada's waters, and coordinates agency planning activities and legislation. NDOW's mission is to protect, conserve, manage and restore wildlife and its habitat for the aesthetic, scientific, educational, recreational, and economic benefits to citizens of Nevada and the United States, and to promote the safety of persons using vessels on the waters of Nevada. For more information about NDOW go to <http://www.ndow.org/>.

Pew Charitable Trusts (PEW) is driven by the power of knowledge to solve today's most challenging problems. They are an independent, global research and public policy organization, operated as a non-partisan, non-governmental organization dedicated to serving the public through public opinion research; arts and culture; and environmental, health, state and consumer policy initiatives. For more information about PEW go to <https://www.pewtrusts.org/en/>.



The Center for Large Landscape Conservation (CLLC) is a non-profit that brings science, policy, and proven solutions directly to communities working to restore the integrity and natural connectivity of the landscapes in which they live. CLLC goals are to identify threats and prioritize solutions, connect natural areas, provide critical habitat and safe migration for wide-ranging animals, protect ecological processes and systems, and support collaborations that deepen community resilience. For more information about CLLC go to <https://largelandscapes.org>.

The Nevada Chapter of the Wildlife Society (TWS) is a state chapter of an international organization of primarily professional wildlife biologists whose mission is to inspire, empower, and enable wildlife professionals to sustain wildlife populations and habitats through science-based management and conservation. The Nevada Chapter's objectives are to 1) undertake an active role in protecting wildlife population and habitat values against human induced population or habitat degradation; 2) increase public awareness and appreciation of wildlife values, including habitat; 3) keep Nevada Chapter members informed and aware of plans by agencies, groups, and others, to alter, modify or degrade habitat; 4) support wildlife species and habitat management plans prepared by individuals, groups or agencies, to the extent that plans are biologically sound and technically feasible; and 5) support non-wildlife policies of land management agencies where these policies will benefit wildlife resources, including habitat. For more information about the Nevada Chapter of TWS go to <https://wildlife.org/nevada-chapter>.

