Western Governors’ Association Crucial Habitat Assessment Tool (CHAT): A Collaborative and Networked Approach for Transportation Projects

Tuesday, February 14, 2012
2:00 – 3:30 PM Eastern

Presenters
• Madeleine West, Western Governors’ Association
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Moderated by: Mike Ruth, FHWA Office of Project Development and Environmental Review
Western Governor’s Association

• **Formed** to provide strong multistate leadership in era of critical change in the economy and demography of the West

• **Six Basic Objectives:**
  1. Develop and communicate regional policy
  2. Serve as leadership forum
  3. Build regional capacity
  4. Conduct research and disseminate findings
  5. Form coalitions and partnerships to advance regional interests
  6. Build public understanding & support for regional issues

http://www.westgov.org/index.php
Captures the Framework of Eco-Logical

- Builds Partnerships
- Identifies Resources of interest
- Coordinates and Integrates Management Plans affecting these resources
- Assesses the Effects
- Establishes and Prioritizes Opportunities
- Documents Agreements
- Regional Approach
- Balanced with Adaptive Management Capabilities
Upcoming Eco-Logical Webinar Topics

**April 2012:** Highlights from the FHWA Eco-Logical Grant Program Annual Report: Lessons for Applying Eco-Logical to Transportation Planning and Project Delivery

**May 2012:** The Use of Regional Ecosystem Frameworks (REFs) for Transportation Planning at Regional, State, and National Scales

**Future topics:**
- Wetland Planning and Assessments: Applications for Transportation Siting and Mitigation
- Linking Transportation and Ecosystems in an Urban Environment: Stormwater Developments and Case Studies
- Green Infrastructure: Eco-Logical Concepts in Infrastructure Planning
- Technical Assistance to Connect Eco-Logical Knowledge with Transportation Plans and Projects
- Land Trusts as Mitigation Partnership Opportunities

Eco-Logical Webinar Series:
Presentation Overview

- Background on the Western Governors’ Wildlife Council
- Status of development of the Crucial Habitat Assessment Tool (CHAT)
- Highlight how CHAT can inform transportation projects and stakeholder collaborations
Wildlife Council Vision

- Identify key wildlife corridors and crucial habitats, and develop and coordinate policy options and tools for preserving those landscapes.

- Provide a user friendly online tool for parties to access consistent wildlife information across political boundaries to better inform land use planning.
WGWC Accomplishments

- Formation of WGWC
- Initial White Paper Released
- Renewal of WGA Corridors Policy
- First Public WGWC Meeting
- Montana CAPS Released
- Amendment to Wildlife MOU
- Release of Southern Great Plains CHAT
- Release of California Areas of Conservation Emphasis
- $3M grant from DOE
- Montana CAPS Presented to Western Govs @ WGA Winter Mtg
- Revised White Paper Guidance
- Washington PHS on the Web Released
- Release of Arizona HabiMap
CHAT in 2013

- Identification of crucial habitats for fish and wildlife including wildlife corridors and connectivity across Western states
- West-wide CHAT displaying wildlife information at relevant scales across the entire Western U.S.
- State-based geospatial tools in increasing numbers of states
Benefit to Planners

**Informative**: Better equips decision-makers to analyze proposed infrastructure projects.

**Relevant**: Inspired by the need to develop new infrastructure across the West and plan at a regional level. Initial work funded by U.S. DOE to incorporate wildlife considerations into regional transmission planning.

**Proactive**: Provides a common starting point, to proactively obtain important wildlife information at regional scales.

**Desirable**: Offers greater predictability and efficiency by combining unique wildlife information from multiple states into a single, user-friendly system of coordinated, vetted and pre-qualified data and maps.

**Regional**: Depicts priority areas for wildlife and habitat consistently across political jurisdictions.
Crucial Habitat and Corridors Identification

Step 1 - Data Development
• inventory information valuable in identifying crucial habitat,
• address data gaps and inconsistencies across political jurisdictions

Step 2 - Prioritization of Crucial Habitats
• apply common definitions of crucial habitats using developed data
• prioritize based on aggregated data and state objectives
• build to suit regional, state, and project level

Step 3 – Develop Public Planning Tool
• geospatial applications to display priorities and data
• user interface based on customer needs
• effect regional, state, and project level decisions
Westwide Work in 2012

• Compile and edge-match Tier I data west-wide
  o Habitat for Listed and Species of Concern
  o Native and Unfragmented Lands (Landscape Integrity)
  o Riparian/Wetland Habitats
  o Connectivity and Linkage Areas
  o Terrestrial Game and Sportfish Habitat

• Develop rules for applying WGA crucial habitat definitions 1-3

• Accommodate state specific needs (linked to individual SWAPs)

• Develop West-wide CHAT that incorporates the above (GIS platform)
Ensuring Use of CHAT

2009 MOU between Western Governors, DOI, DOE, USDA
Federal agencies to support states identification of crucial habitats and corridors across the West

2011 Agreement Under MOU
Fed agencies agree to utilize WGA produced crucial habitat & corridor information
Improve coordination - reduce duplication of effort and efficiencies by coordinating similar initiatives

Stakeholder Advisory Group (industry, NGOs, landowners)
Help develop the CHAT user interface, guide content and application, and aid CHAT outreach and use
Looking Ahead

• October 2012
  – Every state will identify “crucial” habitat
  – States developing individual state CHATs

• December 2013
  – State information will be networked and displayed in a public, West-wide, CHAT

• Ongoing
  – Integration of CHAT into state and project specific applications
  – Dynamic updates and maintenance for long-term CHAT relevance
Using Wildlife Data to Plan and Implement Transportation Mitigation
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Case Studies From Utah

- U.S. Highway 6 (reconstruction)
- Interstate 70 (wildlife retrofit)
US 6 Coordinating Committee

2005 Record of Decision for the US 6 Reconstruction
FEIS established committee to study and address
wildlife and vehicle collisions

Bureau of Land Management
Federal Highway Administration, Utah Division
U.S. Fish and Wildlife Service
Uintah National Forest
Utah Department of Transportation
Utah State University
Functional Wildlife Passage
Wildlife Vehicle Collision Data: Statewide Database

- WVC data entered into a statewide database
- Summarizes carcass pickups by year, route, milepost, etc.
- Allows transportation officials and wildlife managers to identify safety problems, high kill zones, and potential mitigation areas
US 6 Big Game Wildlife Vehicle Collisions 2005-2010

NUMBER OF CARCASES

MILEPOST

Mule Deer (n=1911)
Elk (n=121)
Siting new Wildlife Crossing Structures on US 6

- Tucker underpass
- MP 200.7 underpass
- Colton culvert
- Beaver Creek underpass

![Graph showing the number of carcasses along US 6, with specific locations marked.]
US 6 Wildlife Crossing Structures

Photos courtesy of Ashley Green
Preliminary Results: US 6

Photos courtesy of Patricia Cramer
Wildlife Vehicle Collisions
I-70 Study Area
1996-2009
Siting of I-70
Wildlife Crossing Infrastructure

Box culvert (existing)
Underpasses (new)

Wildlife exclusionary fencing

Mule Deer and Elk (n=450)
I-70 arched underpass at MP 5.3

Photos courtesy of Patricia Cramer and Bruce Bonebrake
Preliminary Results: US 6

Photos courtesy of Patricia Cramer
Preliminary Results: I-70 underpasses

Photos courtesy of Patricia Cramer
National Award

2010 US 6 Wildlife Coordinating Committee was awarded the Exemplary Ecosystem Initiative Award from the Federal Highways Administration
Current Projects
Roadkill App Map
Transportation Planning & CHAT: Examples from the Great Northwest

• I-90 Snoqualmie Pass project
• Washington Wildlife Habitat Connectivity Working Group
• Oregon Wildlife Movement Strategy
• Oregon Collaborative Environmental Transportation Agreement for Streamlining (CETAS)
Washington: I-90 Snoqualmie Pass project

- Wildlife habitat linkage assessment
- Broad coalition of stakeholders including Conservation Northwest; I-90 Wildlife Bridges coalition
Washington Wildlife Habitat Connectivity Working Group

- WSDOT – WDFW collaborative partnership
- Connectivity products
Washington Wildlife Habitat Connectivity Working Group

- WSDOT “Environmental Workbench” – catalogue of data
- WG formed to give WSDOT, others broader information on conservation planning
- Wildlife/vehicle collisions tracked to augment knowledge of retrofit opportunities
Oregon Wildlife Movement Strategy

- ODOT – ODFW, Collaborative partnership
- Produced Wildlife Linkage Assessment
- Hosted FHWA conservation data workshop, 2008
- Continued coordination with CHAT; with Washington
Example of Efficient Planning in Oregon

- Amphibian – friendly culvert design
- One way to incorporate conservation data into project planning
Oregon Collaborative Environmental Transportation Agreement for Streamlining

- Regular meetings to streamline environmental processes
- Call for resource mapping and data management system to provide
- Saves staff time, project and planning budgets
Reflections from the Great Northwest:

• Improved data access
• Early in process to inform land use planning
• Regional consistency
Conclusion

• WGA initiative leverages state wildlife authorities and expertise & Governor leadership

• CHAT an outcome of technology advances and development demands

• Initiative has evolved from state to state to pilot groups to west-wide network

• WGA network subverts political and administrative disconnects
Conclusion

- WGA effort building a west-wide CHAT tied to individual state data & conservation priorities
- Coarse filter landscape integrity and connectivity
- Fine filter TES and SGCN and game species data
- Down-scale climate change models
Conclusion

• States are working cooperatively with land managers (BLM and USFS)

• States are working cooperatively with federal wildlife managers (USFWS)

• States are initiating cooperation with federal science agencies (USGS)
Conclusion

• State network is building a best management practices approach

• Working to insure integration with other GIS tools and efforts

• Working with stakeholders on how they need to be served wildlife information

• Integrating west-wide to states and landscape to project specific
Thank you!

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