Managing Electricity Reliability Risks on Forests and Rangeland

Moderator: Anne Beard
Panelists: Randy Miller, Reggie Woodruff, Tom Sullivan
NERC FAC-003
ROW Clearing Project

PROJECT FOR RISK REDUCTION USING INTEGRATED VEGETATION MANAGEMENT TECHNIQUES

Anne Beard
Manager, Vegetation Management and T&D Asset Management, Public Service Company of New Mexico
• PNM maintains over 14,500 miles of Transmission & Distribution (T&D) lines

• Over 40% of land is owned by federal, state, or tribal/pueblo entities
ACTUALLY A 20’+ TALL PIÑON PINE 7’8” CLEARANCE FROM 345KV CONDUCTOR FOUND DURING AERIAL PATROL
CONCERNS

- Accuracy of existing patrol methods
- Additional clearance violations
- Risk of outage
- Cost $
- Wildfire risk
EXISTING REACTIVE PROGRAM
UNMANAGED VEGETATION
TREE/BRUSH ENCROACHMENT
TREES OF CONCERN
PROJECT BENEFITS – CLEAR HORIZON

- NERC Compliance
- Reduce O&M costs over time
- System Hardening
- Reduce Fire Risk
- Environmental – pollinator habitat
ENVIRONMENTAL SCREENING

The core of the environmental management system (EMS)

- **All T&D work** is evaluated or screened for environmental impact
- **On certain jobs**, the Environmental Services Department evaluates, prepares permits and issues clearances.
HOW THE EMS FITS INTO THE CONSTRUCTION PROCESS

- **Construction Projects >$1M**
  - Construction Management Process
  - Env Svcs is part of the project team

- **Construction Projects <$1M**
  - Projects Reviewed in Environmental Screening Portal
HOTZONES

- HotZone® map identifies “sensitive areas”
- Based upon features/criteria: parks, open space, bosque, landfills, major arroyos, wetlands, open water, riparian habitat, T&E species, critical habitat, historic districts, national historic landmarks, archaeological sites, and federal, state, and Indian lands
ENVIRONMENTAL DATA MODEL

- ROW renewals have prompted cultural and biological inventory of pre-NEPA lines
- PNM developed a personal geodatabase to store cultural, biological, and access road inventory data in a GIS framework
- Links to site descriptions, site maps, and reports
CLEARANCES

- All projects will have a clearance with the work packet

- Clearances may have special stipulations such as monitoring or avoidance areas

- PNM employees and contractors must be familiar with stipulations and often have pre-field tailboard trainings
INTEGRATED VEGETATION MANAGEMENT PROJECT

NERC FAC-003-3

- 19 transmission lines of 200kV or above
- Five 115kV transmission lines deemed “critical path”
- Totals of over 1000 miles
- Use best tool for the job
CULTURAL RESOURCES

- 215 miles of previously unsurveyed federal, state, or tribal lands
- Approximately 235 new archaeological sites identified to date
BIOLOGICAL RESOURCES

- Existing Biological Data Model
- Phase I consultation with agencies on T&E and sensitive species and assessment of online tools – Critical Habitat, CHAT, county lists
- Phase II – on the ground biological evaluations and consultation with federal, state, and tribal agencies

Mesa Verde Cactus
Thank you
Utility Integrated Veg. Management

Randy Miller
Director, Vegetation Management, PacifiCorp
Selective Management

- Should be done wherever possible
  - Remove species that at any time in their life will interfere with conductors
  - Establish a tree-resistant plant community
  - Promote
    - Environmental Stewardship
    - Biodiversity
  - Control
    - Wildfire
    - Noxious Vegetation
  - Improve
    - Wildlife Habitat
  - Reduce
    - Impacts of Management
Wire Zone-Border Zone

- Establish compatible, stable plant communities.
- Enhance wildlife habitat (meadow species, edge species and forest species).
Bramble and Byrnes: Game Lands 33

- Over 60 years of research on Game Lands 33 in Pennsylvania
- Begun to see how much herbicide use harmed wildlife
- Determined proper herbicide use helped create habitat that promoted populations and diversity
Herbicide

- Application to utility Rights-of-way pioneered by Bramble and Byrnes.
- Should be done in compliance with EPA requirements
  - Using only properly labeled products
Cover Type Conversion

Dylan Evans Photo
Maintained Rights of Way are not Sacrifice Areas

- Right-of-way Stewardship Council Accreditation

http://www.rowstewardship.org/integrated_vegetation_management
WGA Webinar: Managing Electricity Reliability Risks On Forests and Rangeland

Reggie Woodruff
Energy Program Manager
Points of Discussion

- Forest Service Mission
- Special Uses
- Transmission
- Vegetation Management
- Liability
Right-of-Way Stewardship Program

Tom Sullivan
ROW Stewardship Council
Chair, ROW Steward Audit Committee

October 5, 2016
What is ROW Steward Accreditation?

• Recognition for Commitment to and Compliance with the ROW Steward Requirements
• Compliance assessed and audited by independent third party
• ROW Steward Council Audit Committee Auditors
• Accreditation awarded by the ROW Steward Council
• Program is Administered by Dovetail Partners

• Similar Framework to:
  • ISO 9001: accreditation of manufacturing processes
  • ISO 14001: accreditation of Environmental Management Systems
  • FSC: Forest Stewardship Council forest management accreditation
  • SFI: Sustainable Forestry Initiative forest management accreditation
ROW Stewardship Council
Sponsor of Accreditation

ROWSC is composed of a diverse group of stakeholders who provide active management and guidance.

– *Technical Advisory Committee*. Subject matter Experts (SME), develop and maintain accreditation requirements

– *Audit Committee*. SME’s responsible for verification audits of applicant submissions for accreditation.
# ROW Stewardship Council

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<th>Constituency</th>
<th>Member</th>
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<td>Environmental NGO</td>
<td>Josianne Bonneau</td>
<td>Wildlife Habitat Council</td>
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<td>Environmental NGO</td>
<td>Liz Johnson</td>
<td>The Nature Conservancy</td>
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<td>Vicki Wojcik</td>
<td>Pollinator Partnership</td>
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<td>Public at large</td>
<td>Ruth Stein</td>
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<td>Industry Organization (non-voting)</td>
<td>John Goodrich-Mahoney</td>
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<td>Audit Committee Chair (non-voting)</td>
<td>Tom Sullivan</td>
<td>Energy Initiatives Group</td>
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<td>Technical Committee Chair (non-voting)</td>
<td>John Goodfellow</td>
<td>BioCompliance Consulting, Inc.</td>
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10 Principles of ROW Steward

1. Compliance with Laws, Standards and BMPs
2. Tenure and Use Rights and Responsibilities
3. Community Relations
4. Management Planning
5. Understanding Pest and Ecosystem Dynamics
6. Setting Management Objectives and Tolerance Levels
7. Compilation of a Broad Array of Treatment Techniques
8. Accounting for Economic and Ecological Effects of Treatments
9. Site-specific Implementation of Treatments
10. Adaptive Management and Monitoring
Audit Process

• Application
• Cost Estimate and Audit Expectations
• Timeline
• Audit agreement
• Applicant Submittals
• Gap Analysis
• Field Audit
• Draft Audit Report
• Final Audit Report
• Costs of Accreditation
Field Audit

• ROW Steward is a **performance** based accreditation
  – Many Requirements look for field performance
  – All VM staff should understand IVM
  – All VM staff should understand ROW Stewardship concepts and this accreditation
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OCTOBER 5, 2016

MODERATOR:
Anne Beard
Manager, Vegetation Management and T&D Asset Management, Public Service Company of New Mexico

PANELISTS:
Randy Miller
Director, Vegetation Management, PacifiCorp

Reggie Woodruff
Energy Program Manager, U.S. Forest Service

Tom Sullivan
Audit Committee Chair, Right-of-Way Stewardship Council

Learn more about the Chairman’s Initiative of Gov. Steve Bullock at westgov.org/initiatives/forest-and-rangeland-initiative