

AN UPDATE:

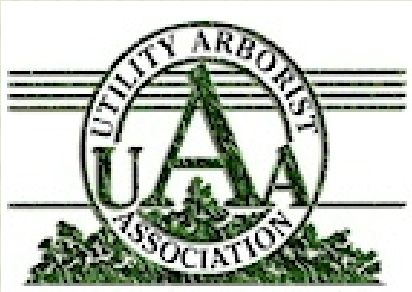
UTILITY ARBORIST ASSOCIATION

UAA RESEARCH

ROW STEWARD ACCREDITATION PROGRAM

Philip Charlton

Executive Director, UAA



Our Mission is to be the leading
North American organization for the
enhancement of quality utility arboriculture and
rights-of-way vegetation management

THE UTILITY ARBORIST ASSOCIATION

VISION & GOALS

The UAA will be an essential part of the professional life of individuals involved in the practice of arboriculture and vegetation management within the energy industries by:

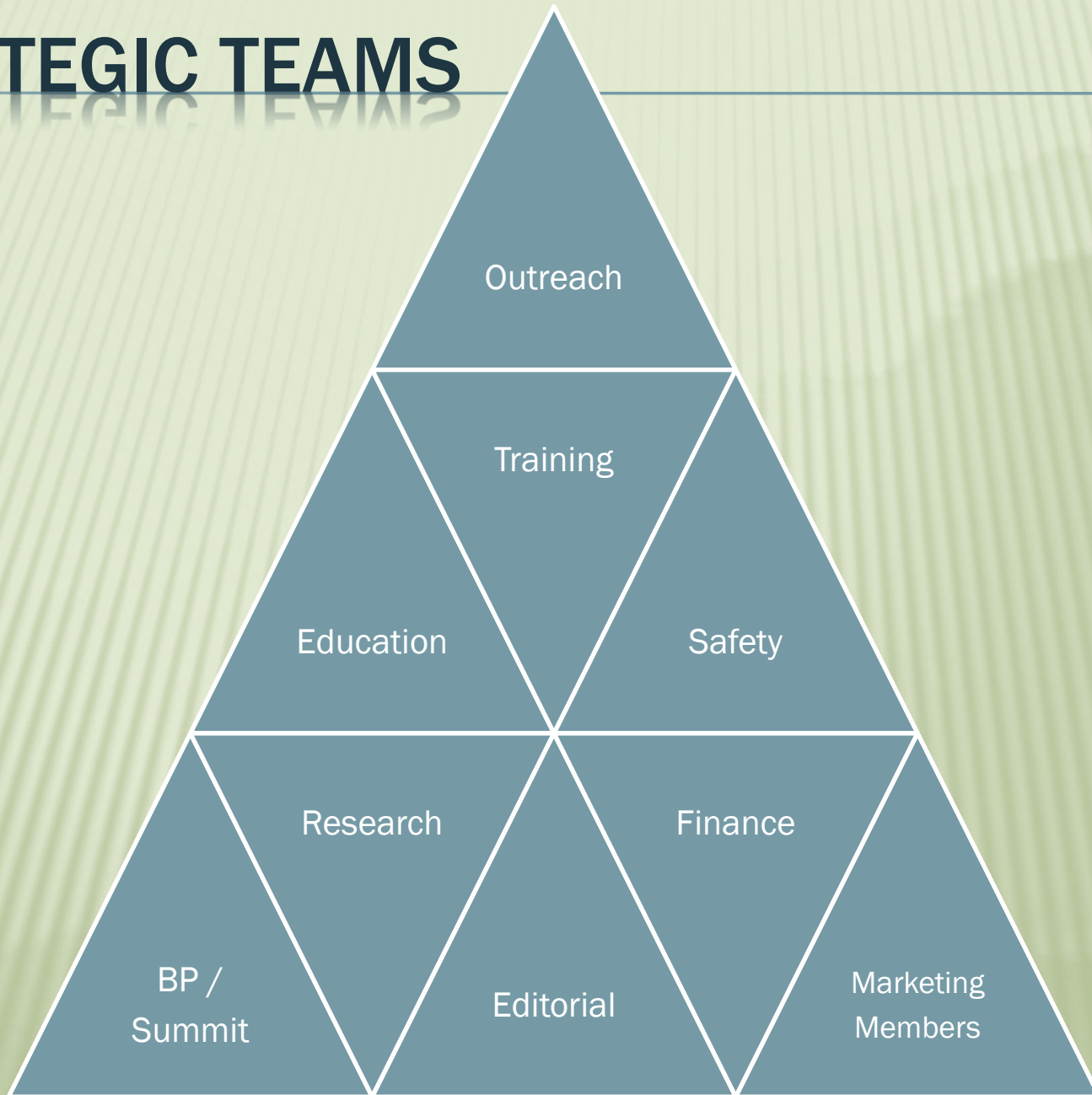
- ❖ *providing educational materials and training opportunities*
- ❖ *developing and promoting best management practices and industry standards for safety, service reliability and environmental stewardship*
- ❖ *driving innovation through research*
- ❖ *playing an active role in shaping the future of utility arboriculture by being the recognized voice of the industry*
- ❖ *managing UAA operations with excellence*

ORGANIZATION & OPERATIONS

501(c)3 Tax Exempt Non-Profit
By-Laws



STRATEGIC TEAMS



AD HOC TEAMS

- ❖ National Meeting
- ❖ Regional Meetings
- ❖ ROW 11 Symposium
- ❖ Regional Reps
- ❖ Utility Arborist Research Fund
- ❖ Pipeline
- ❖ A300
- ❖ Z133
- ❖ ISA Council of Representative

200
Volunteers

BEST PRACTICES / SUMMIT TEAM

Accomplished in 2012-2013

- ❑ Facilitated 2013 Vegetation Managers Summit
 - ❖ FAC-003 – North American Transmission Forum partnership
 - ❖ Storm Response

BEST PRACTICES / SUMMIT

Top priorities for

- Schedule

**Comparison of FAC-003
versions 1 & 2 now
available on UAA's website**

EDUCATION

□ Accomplishments in 2012-13:

- ❖ Established the Safety Committee
- ❖ Xcel Energy “Tree Worker Safety” video
- ❖ Utility Specialist workshops
- ❖ Spanish translations of the BMPs
- ❖ Revised “Utility Pruning of Trees” pamphlet

EDUCATION

□ Looking forward

- ❖ Make educational and training materials readily available to the membership
- ❖ 6 Quizzes/year on the website
- ❖ Informational and educational curriculum for students
- ❖ Other

SAFETY

- ❑ Monthly public safety infraction photo
- ❑ Safety quizzes on safety article for CEU
- ❑ Safety tailboard
- ❑ Monthly, seasonal and transitional information
- ❑ Industry event calendar
- ❑ OSHA bulletins, Z Committee updates
- ❑ Safety Summits – 2x/year

SAFETY



What's wrong with this picture?

Like us on
Facebook

TRAINING

Accomplished in 2012-2013

□ Webinars

- ❖ Topics on Safety, IVM, Storm Response and a very popular 3-part series on different aspects of EAB
- ❖ Obtained an increased number of sponsorships

□ Utility Specialist Training Workshops

□ Regional Meeting Planning Template

TRAINING

Top priorities for 2013-14

- ❑ Virtual Library
- ❑ Work with Webinar Authors & Presenters to provide question for online CEU quiz's and Newslane articles
- ❑ More Regional Meetings
 - ❖ Regions not currently served
 - ❖ Focus on areas of member interest and relevance

RESEARCH

- ❑ Recruit university researchers
- ❑ Help UARF create the \$1M endowment
- ❑ Complete top 3 research priorities
 - ❖ "Development of a Business Case for Scheduling Utility Vegetation Management on a Preventive vs. Corrective Maintenance Basis"
- ❑ Communicate results of past research
 - ❖ Website link
 - ❖ Newsline
- ❑ Update the research priorities

OUTREACH

Accomplished in 2012-2013

- *Redesigned the UAA Website*
- *Three messages & leave behind documents for upcoming DC trip*
- *Discussion, Support Offered and Liaison*
 - *ROW Steward Accreditation Program*
 - *MOU with Land Agencies*

Voice for the future



11,000,000 acres of ROW
5,000,000 miles of distribution

OUTREACH

- ❑ Informing regulators and legislators
 - ❖ **Outcome 1:** Introduction to utility vegetation management industry
 - ❖ **Outcome 2:** Recognize UAA as a source of technical expertise
 - ❖ **Outcome 3:** Understand existence of FAC-003 and the ROW Steward Accreditation Program
 - ❖ **Outcome 4:** Support a MOU with key federal land agencies

EDITORIAL COMMITTEE

Editorial Committee Results:

Produced six *Newslines* with special issues on:

- ❖ Fire, Social Media, Coops and Municipalities , Research

Special features on:

- ❖ Colleges, New Profiles, Profiles from the Past, GF Corner

T & D World Supplement Largest Insert and Sponsorship

**Largest Insert and
Sponsorship Ever**

EDITORIAL COMMITTEE

Potential Special Issues on

- ❖ Careers in Utility Vegetation Management
- ❖ UVM Around the World
- ❖ ISA National, UAA Regional and NADF Partners Meetings-What's best for the membership and UAA
- ❖ Wildlife Benefits of IVM on Right of Ways
- ❖ Blast from the Past-stories and old photos of the last 50 years
- ❖ Regulatory Update

MARKETING COMMITTEE

Accomplished in 2012-2013

- ❑ Pipeline subcommittee – developed IVM BMP
- ❑ Engage members in UAA activities
 - ❖ Created Social Media: Facebook, LinkedIn Group
- ❑ Began to:
 - ❖ Understand member demographics, needs
 - ❖ Understand needs of sponsors and advertisers

MARKETING COMMITTEE

Top priorities for 2013-14

- ❑ Grow membership
- ❑ Increase website sponsorship revenue
- ❑ Develop marketing plan that includes
 - ❖ Target audiences: Pipeline, Tree Workers, Vendors, Students, Utilities (IOU's, Co-Ops, Muni's), etc.
 - ❖ Strategy and rapid response plan for social media

FINANCE COMMITTEE

Accomplishments in 2012-13

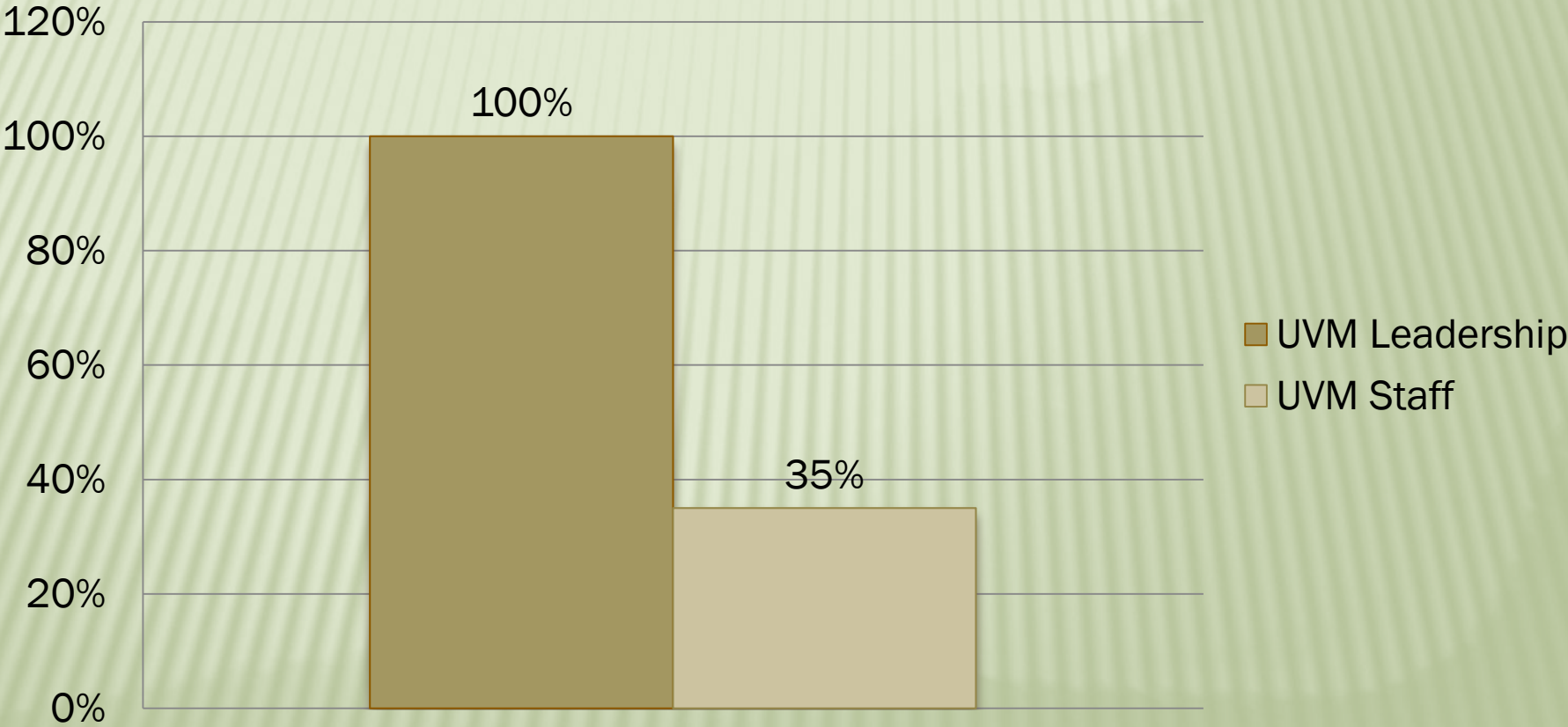
- ❖ Transitioned accounting to Quickbooks
- ❖ Completed review & update of all policies
- ❖ Managed financial audit
- ❖ Prepared the 2013-14 budget

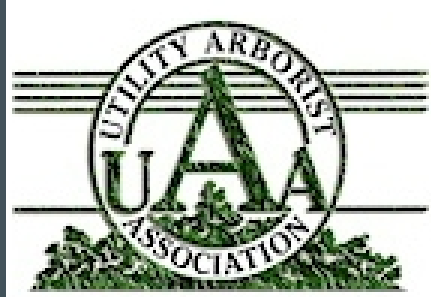
For 2013-14

- ❖ Bid out key contracts
- ❖ Better involve strategic plan committees in budgeting
- ❖ Monitor finances, audit and tax preparation

BE PART OF THE CHANGE

UAA Membership





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THE UAA

DRIVING INNOVATION THROUGH RESEARCH

Research Priorities

1. Preventive vs. Corrective Maintenance
2. Pruning practices
3. Hazard Trees (Risk Assessment)
4. Optimum Cycle/Scheduling Strategies
5. Rights-of-Way Maintenance: IVM, T&E Species, Biodiversity, Invasive Species,.....

UTILITY ARBORIST RESEARCH FUND

DRIVING INNOVATION THROUGH RESEARCH

- ❑ UAA and the TREE Fund established the UARF
 - 🌿 Seeded by APS & UAA: \$100,000+
 - 🌿 Currently \$250,000+
- ❑ Goals
 - 🌿 \$1M endowment by 2016
 - 🌿 \$50,000/year in new research
- ❑ The Request
 - 🌿 Designate Tree Fund contributions to the UARF

FIRST PROJECT COMPLETED

BIOCOMPLIANCE CONSULTING, INC.

**DEVELOPMENT OF A BUSINESS CASE FOR
SCHEDULING UTILITY VEGETATION MANAGEMENT
ON A PREVENTIVE VS. CORRECTIVE MAINTENANCE
BASIS**

Phases I and II Final Report

John W. Goodfellow & Arkan Kayihan

9/7/2013

PROJECT PURPOSE

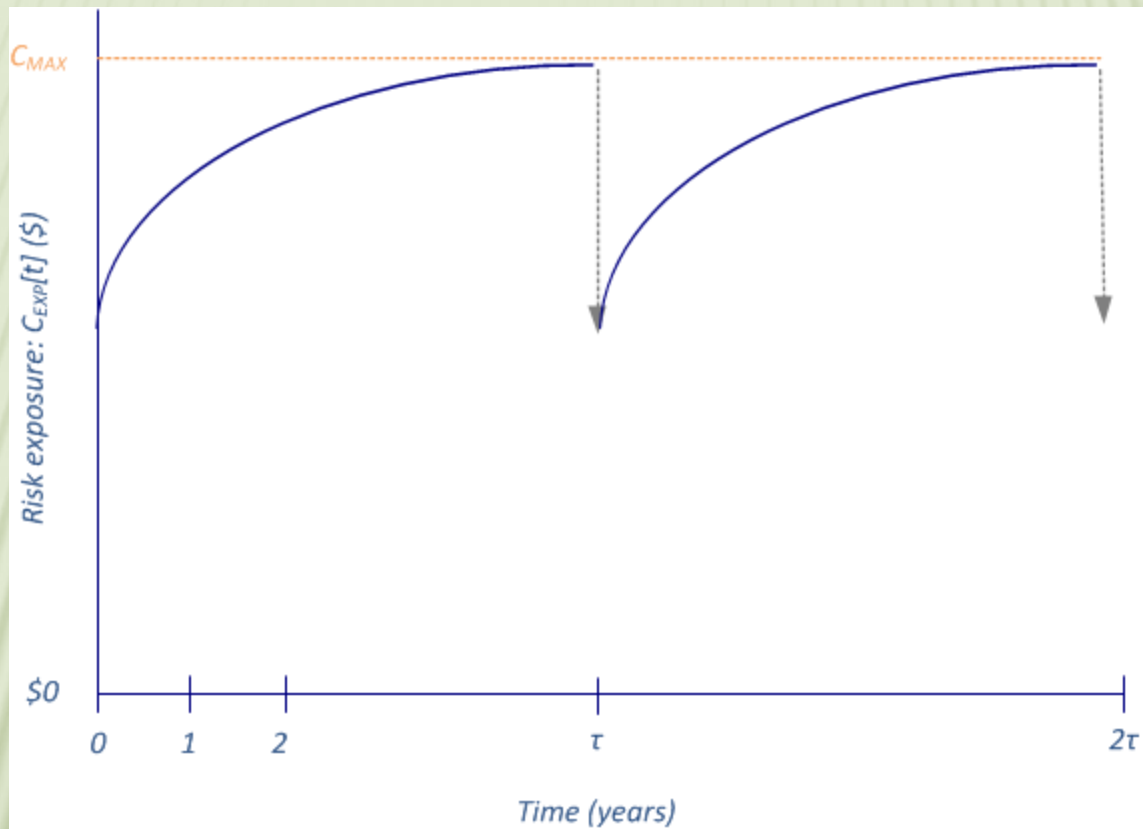
“Lay a foundation for an analytic approach to determine optimal vegetation maintenance spend and cycle times”

THE DESIRED OUTCOME

A framework for an analytic model to evaluate economic efficiency of vegetation maintenance practices that consider:

1. Costs (direct and indirect)
2. Performance (safety and reliability)
3. Customer satisfaction

$$f(x) = a_0 + \sum_{n=1}^{\infty} \left(a_n \cos \frac{n\pi x}{L} + b_n \sin \frac{n\pi x}{L} \right)$$



THE MODEL VARIABLES

❑ System variables

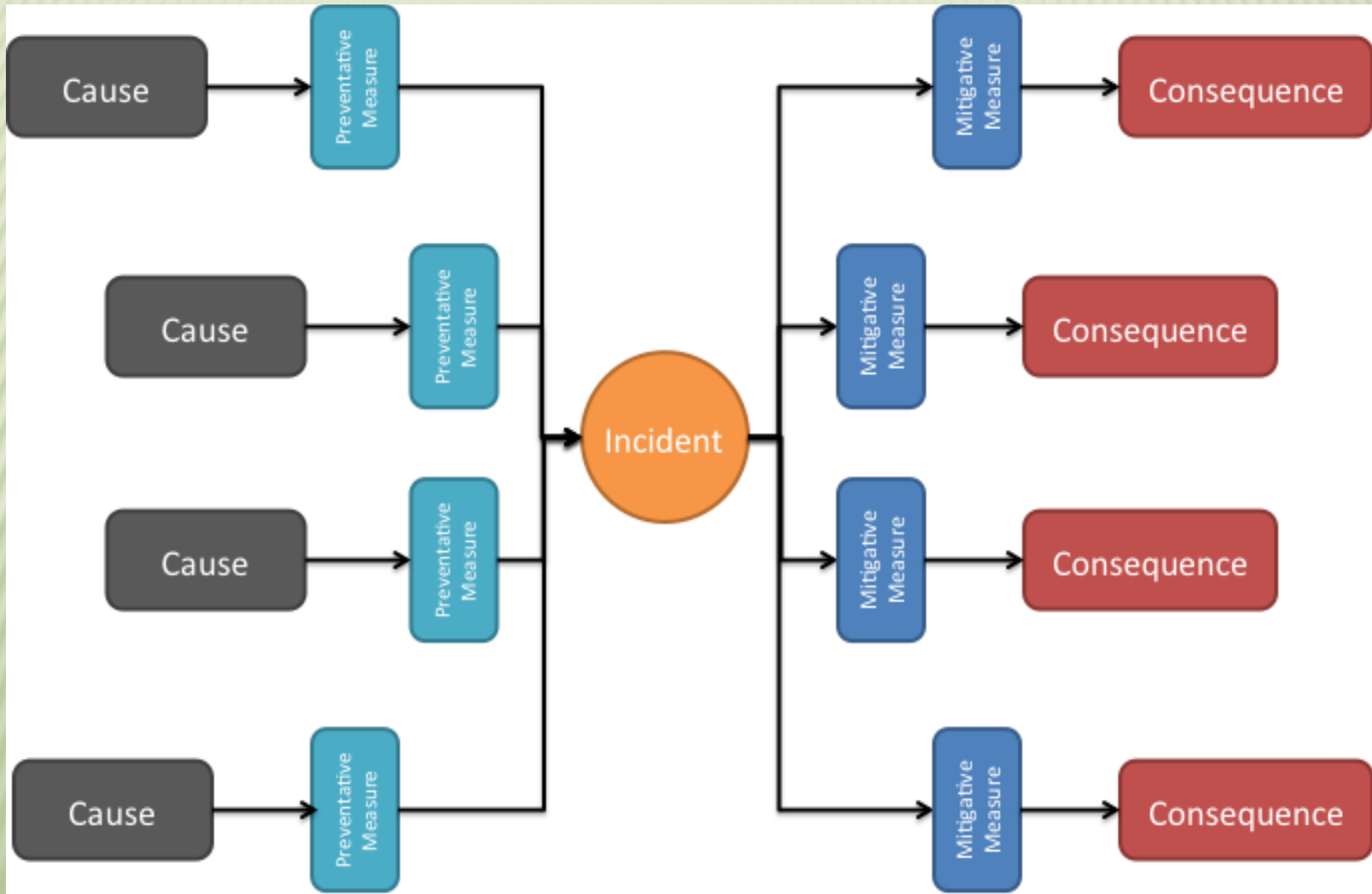
- ❖ Line miles, Voltage class, Site type & Stocking Density

❑ Hazards

- ❖ Failure type, probability of occurrence, probability of preventing

❑ Costs & Consequences

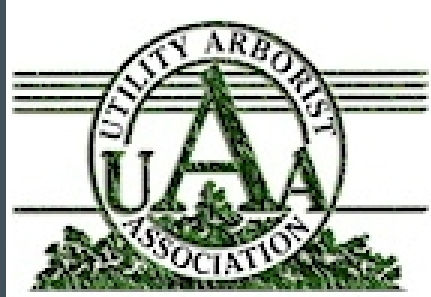
- ❖ Damage type, cost to repair, other direct costs (e.g., lost revenue), & indirect costs (e.g., cost to customers)



NEXT STEPS

Validate the model

1. Develop a “strawman” using existing industry data
2. Conduct a pilot at one or more utilities



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THE UVM INDUSTRY

THE RIGHT-OF-WAY SYSTEM

🌟 Electric

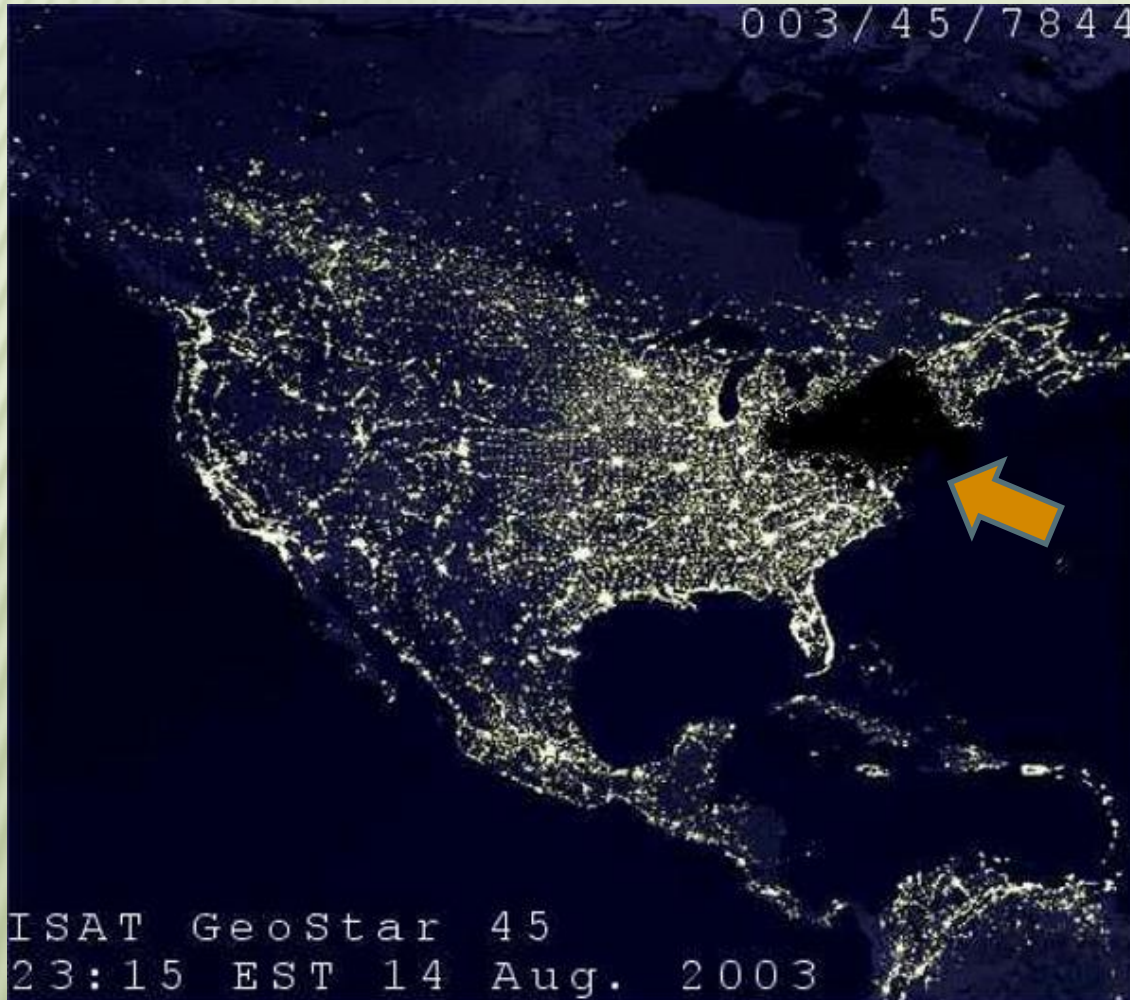
- 🌿 450,000 miles of ROW (35kV and above)
- 🌿 8,600,000 acres

🌟 Petroleum & Natural Gas

- 🌿 300,000 miles of ROW
- 🌿 2,100,000 acres



AUGUST 14, 2003






- 🍁 55 million affected
- 🍁 11 fatalities
- 🍁 Cost of \$10B

RESPONSE TO THE OUTAGE




- ❑ Congressional response - Energy Policy Act of 2005
- ❑ NERC establishes 2006 standards
- ❑ FERC adopts NERC standards giving them the force of law (FAC-003)
- ❑ FAC-003-02 becomes effective July 2014

GOOD NEWS – BAD NEWS

The Good

-  Increased vigilance
-  Improved reliability
-  Reduction in the liability of potential regulatory citations

The Unintended Consequences

-  Less efficiency – increasing costs
-  More aggressiveness – Unnecessarily altering ROW ecosystems
-  *Less IVM in practice today than in 2003?*





Rights-of-Ways Stewardship Council

To create a means of recognizing excellence in the application and practice of IVM on the North American electric power grid

- UAA, EEI, EPRI
- Utilities, manufacturers, contractors, suppliers, consultants, and more
- ENGO: The Nature Conservancy, Pollinators Partnership, Wildlife Habitat Council and more
- EPA
- The Public

ROW STEWARDSHIP ACCREDITATION MODEL

1. An independent board of directors will provide oversight
2. Objective standards of accreditation will be established and form the basis of a formal application process
3. An independent audit will assess the degree to which an applicant's IVM program is compliant with program requirements



DOVETAIL PARTNERS INC.

A Trusted Source of Environmental Information



Rights-of-Ways
Stewardship Council



Integrat

**Laws, Standards & BMPs
Community & Worker Relations
Tenure & Use Rights & Responsibilities**

1. Set objectives
2. Evaluate the
3. Define action thresholds
4. Evaluate & select control methods
5. Implement control methods
6. Monitor/quality assessment

ROW STEWARD REQUIREMENTS

- 10 Principles
- 32 Criteria

<u>Member</u>	<u>Affiliation</u>
John Goodfellow (chair)	BioCompliance Consulting, Inc.
Randy Miller	PacifiCorp
Geoff Kempter	Asplundh Tree Expert Co.
Rich Hender	Dow AgroSciences
Paul Appelt	Environmental Consultants Inc
Harvey Holt	Purdue University (retired)
Kevin McLoughin	NY Power Authority (retired)
Jenny Arkett	Duquesne Light
Rick Johnstone	IVM Partners
Ryan Aylesworth	Audubon International
Steve Narolski	Bonneville Power Administration

ROW STEWARD PILOT UTILITIES

Completed



In Progress



Thank You