





Environmental Stewardship

Through the Right-of-Way Steward Accreditation, utilities are raising the standards of integrated vegetation management.

By **Josiane Bonneau**, *Wildlife Habitat Council*, and **Alexander C. Brown**, *PECO*

The Right-of-Way Steward Accreditation is an initiative intended to set the standard for responsible management of land and operations on transmission corridors. Launched in 2013 by the Right-of-Way Stewardship Council (ROWSC), this model follows the lead of the Electric Power Research Institute's Standards for Assessing Performance of Integrated Vegetation Management on Electric Transmission Rights-of-Way and is informed by other well-established accreditation programs such as those used in the forest products industry.

The accreditation not only provides a reference framework for what superior right-of-way (ROW) vegetation management programs should demonstrate, but it also offers independent third-party recognition. Third-party recognition ensures an independent, proven process to convey credibility and bring recognition to integrated vegetation management (IVM) programs. The benefits of the accreditation reach beyond the practitioner's sphere; it has the potential to impact positively the industry, communities, stakeholders and partner agencies.

Three Utilities at the Forefront

Arizona Public Service

Stakeholders are an integral part vegetation management planning at Arizona Public Service (APS). Communication about integrated vegetation management (IVM) is also easily found on APS' website. The utility is proud to be the first company to seek the Right-of-Way Stewardship Council (ROWSC) accreditation. APS incorporates environmental stewardship principles into day-to-day business decisions, at all levels of the company, and the recent recognition provided by the ROWSC brings additional transparency and visibility to the great work of APS employees.

The APS Forestry and Special Programs department conducts vegetation management on approximately 11,400 miles (183,465 km) of distribution lines and more than 6,000 miles (9,656 km) of transmission lines. Vegetation management is conducted following best management practices defined by industry, research and academia. The APS approach uses the IVM system of managing plant communities in a continually improving process of choosing appropriate control methods to achieve established objectives, justify and implement these methods, and monitor results of the various vegetation management treatments. The method selected varies based on effectiveness of control at a given location, economic viability of the method, environmental impact, sustainability and stakeholder input.

IVM allows APS not only to meet the desired outcomes of reliability, but also to enhance plant diversity, establish sustainable cover and forage for wildlife, establish corridors for wildlife movement and viewing, and avoid impacts to and enhance environmental factors.

Several key elements of the IVM program positioned APS to successfully meet and exceed the requirements of the ROWSC accreditation. Since the inception of the program, the APS team participated in multiple studies, trainings and education to gain scientific understanding of vegetation and ecosystems in Arizona. The acquired knowledge and expertise allows APS to design vegetation management plans to best suit each location, vegetation types and environmental concerns. In addition, and of importance as part of the accreditation principles, APS monitors effectiveness of treatment prescriptions and methods immediately following treatment and annually to evaluate effectiveness of treatments and modify approaches if necessary.

New York Power Authority

The New York Power Authority (NYPA) is America's largest state-owned power organization, operating 18 generating facilities and more than 1,400 circuit-miles (2,253 circuit-km) of transmission lines. NYPA's electric transmission system extends from western New York (Niagara Falls) to northern New York (Massena), south to just north of New York City. These lines encompass about 16,000 acres (6,475 hectares) of maintained rights-of-way (ROW), located in nearly all of the major



Arizona Public Service was one of three utilities that received the Founder's Right-of-Way Steward Accreditation in 2013. Accepting the award presented by CN Utility Consulting Vice President of Operations and ROWSC Board Chair Derek Vannice (second from left) were (left to right) APS Manager of Forestry and Special Projects Mike Neal, APS Section Leader in Forestry Jesse Sanchez and APS Archeologist Jon Schumaker.

Stakeholder Consultation

In 2012, the draft accreditation framework was presented to the industry at the ROW 10 conference by John Goodfellow of BioCompliance Consulting Inc., who is the driving force behind the accreditation development. At that time, Goodfellow and his team had completed two critical objectives: polled industry practitioners to assess industry trends, needs and challenges in the context of vegetation management; and held multiple consultation meetings with stakeholders from state and federal agencies, environmental nonprofit organizations, industry contractors, trade associations, and representatives from utilities and academia.

The consultation process proved to be a pivotal point in

the development of the Right-of-Way Steward Accreditation. Not only did it lead to the creation of volunteer committees informing technical aspects of the accreditation, the auditing process and what would become of the board of directors, it also helped to shape an accreditation that is truly independent and not for the industry, by the industry. Input from the stakeholders was seriously considered throughout the comment and revision process. Their contribution, particularly to the environmental stewardship and community outreach portions of the principles and criteria, can be found throughout the different versions released.

The process was also opened to input from the general public, which was given a representative on the board of directors. The board also included designated seats for

physiographic areas of New York. The lands near NYPA's ROW are more than 85% forested.

NYPA employs the process of IVM to ensure tall-growing trees and woody shrubs do not interfere with its transmission lines. Since 1998, IVM has been universally practiced in a consistent manner throughout NYPA's transmission ROW system. The entire system has continually been maintained on a four-year cycle.

In 2008, NYPA looked to the Electric Power Research Institute to review and assess its IVM program through a formal Electric Transmission Line Right-of-Way Vegetation Management Program assessment. The utility wanted to confirm its status as an industry leader and to verify that its IVM program was using appropriate technologies and was in full compliance with the NERC vegetation standard.

When the Right-of-Way Steward Accreditation pilot phase was announced, NYPA saw the opportunity to display industry leadership by being one of the first utilities to participate in the program. The 2013 application process allowed NYPA to do the following:

- Investigate whether improvements were made since its original 2008 EPRI assessment
- Gain an outside perspective to validate its entire IVM program
- Obtain third-party approval for its sustainable IVM program on the transmission ROW systems.

NYPA's management team has been supportive of the ROW management program and of its participation in the Right-of-Way Steward Accreditation. The utility took the opportunity to publicize the endeavor as a project spotlight on its internal website, as well.

NYPA seeks to support the safe and reliable transmission of electrical power in an economically, ecologically and environmentally sound manner. Sustainable IVM principles are the backbone of NYPA's ROW vegetation management program. These IVM principals provide the right balance of work efforts and effects across environmental, social and economic considerations while maximizing the stability and extent of the diversified plant communities.

Vermont Electric Power Co.

The Vermont Electric Power Co. (VELCO) was formed in 1956 when Vermont's local utilities joined together to establish the nation's first transmission-only utility to create and maintain an interconnected electric transmission grid capable of sharing access to clean hydro power. VELCO is responsible for the safe, reliable, cost-effective and environmentally sound delivery of high-voltage electricity in Vermont. The utility manages more than 738 miles (1,188 km) of transmission lines on 13,000 acres (5,261 hectares) of ROW.

VELCO maintains an IVM program for its ROW. In 2013, the utility considered the Right-of-Way Steward Accreditation as a positive opportunity to measure and improve management practices. The ROWSC performed a thorough review of the utility's existing IVM program. In many ways, the experience was similar to combining several past audits such as NERC, OSHA, EPA, financial, environmental, a herbicide inspection and a peer review into a single audit. An audit of this nature may sound a bit scary at first glance, however, VELCO found tremendous value in the holistic approach as well as looking at all facets of the program and how they all relate to each other. The opportunity to review and measure VELCO's IVM program in a detailed manner against all the principles and criteria both internally by VELCO staff and externally by the auditors offered a valuable focus on continuous improvements.

Following a detailed gap analysis with the audit team, VELCO used as much of the information, data and documentation requests from the previous audits as possible to prepare for the audit. The audit also allowed multiple VELCO departments, such as vegetation management, environmental, safety and real estate, to work on a common goal, which built stronger inter-departmental relationships and a better understanding of departmental roles. Many of the observations and recommendations the auditors provided focused on continued or expanding implementation of existing practices to further meet or exceed the ROWSC criteria.

VELCO's Right-of-Way Steward Accreditation recognizes the utility's commitment to and practice of proper ROW vegetation maintenance practices, which aim to conserve Vermont's working landscape and maintain a safe and reliable transmission grid. The ROWSC Accreditation is already building improved stakeholder relations with regulators and landowners throughout Vermont.



Vegetation on NYPA's ROW is controlled by a variety of methods. Many years of research have shown the lowest-cost, long-term control is accomplished through the judicious use of herbicides, either alone or in a combination of mixtures. Shown here is a crew conducting foliar application on NYPA's ROW.



NYPA manages the Marcy South transmission right-of-way using principles of integrated vegetation management.

nonprofit organizations, land management agencies and institutions of higher learning. The group of stakeholders most closely involved with the ROWSC also played a role in reviewing the principles, supporting the criteria, validating the indicators and determining the acceptable verifiers.

Pilot Evaluations

Following a year of intensive stakeholder consultation, the ROWSC answered interest from some of the country's leading utilities in testing the standards in their service areas. Arizona Public Service (APS), Vermont Electric Power Co. (VELCO) and New York Power Authority (NYPA) participated in the rigorous evaluation and field audit. At the conclusion of each evaluation, the ROWSC reviewed the findings and recommendations as well as a report prepared by the independent auditors.

The outcomes clearly demonstrated that APS, VELCO and NYPA operated outstanding IVM programs on their ROW with extension of their operational efforts into their communities, workforce and conservation outcomes. The three pilots exceeded the standards and were awarded the Founder's Right-of-Way Steward Accreditation in 2013.

Having successfully completed three pilot evaluations in 2013, the ROWSC has acquired the necessary experience to fine-tune the standards and launch the full-scale accreditation program.

Revised Model Launched

In March 2014, the ROWSC publicly released a set of accreditation standards comprised of 10 key principles and associated criteria, indicators and verifiers. These standards establish the technical requirements for applicants seeking

accreditation. In their current format, the standards are applied in an independent audit of an applicant's ROW program to aid in identifying excellence.

The accreditation is a two-step process during which an applicant completes an application document to confirm that the utility's ROW program meets basic criteria. A detailed application with supported documentation is then submitted and verified through a multi-day, on-site audit. The audit report provided to the utility team presents detailed information on the findings in addition to marketing claims associated with each successful accomplishment. Those claims, combined with the third-party recognition of the program, provide an impressive basis for any utility to benefit from the exercise.

Series of Principles Promoted Through the Right-of-Way Steward Accreditation Standards	
Principle 1	Compliance with Laws, Standards and Best Management Practices
Principle 2	Tenure and Use Rights and Responsibilities
Principle 3	Community Relations
Principle 4	Management Planning
Principle 5	Understanding Pest and Ecosystem Dynamics
Principle 6	Setting Management Objectives and Tolerance Levels
Principle 7	Compilation of a Broad Array of Treatment Techniques
Principle 8	Accounting for Economic and Ecological Effects of Treatments
Principle 9	Site-Specific Implementation of Treatments
Principle 10	Adaptive Management and Monitoring

Benefits of Accreditation

The benefits of recognition programs are well known to the utility industry, which has been an active participant in TreeLine USA for decades. The Right-of-Way Steward Accreditation was built to provide operational cost-saving benefits as well as to offer tools for raising awareness in the surrounding communities of the culture of environmental stewardship found in the utility industry.

In addition, the initial participants in the accreditation process reported an added value to their utilities. Beyond the third-party recognition, the teams involved in the audit received valuable feedback from top experts in IVM on their performance and programs. This represented an unanticipated benefit of the experience.

Because of society's growing interest in the environment and heightened awareness of the impact of corridors on landscapes, activities on transmission ROW are of growing importance. Utilities that proactively use ROWSC principles on a voluntary basis are likely to be better prepared to address and meet possible future scrutiny from the public and regulators. A proactive adoption of the accreditation program may very well save utilities time and effort when facing the next customer challenge, and will foster internal recognition of the value of a strong vegetation management program. **TDW**

Josiane Bonneau (jbonneau@wildlifehc.org), the director of field programs for the Wildlife Habitat Council (WHC), oversees development and implementation of voluntary biodiversity programs at corporate facilities. She also works to integrate WHC programs as part of global corporate sustainability strategies while promoting WHC's international expansion. She received a bachelor's degree in biology with specialization in ecology from Université du Québec à Montréal. Bonneau is an elected member of the board of directors of the Right-of-Way Stewardship Council, the organization overseeing the Right-of-Way Steward Accreditation.

Alex Brown (alexander.brown@exeloncorp.com) is manager of vegetation management at PECO, an Exelon Co. He is responsible for the maintenance of vegetation for 13,000 miles (20,922 km) of distribution lines and 1,000 miles (1,609 km) of transmission lines in southeastern Pennsylvania. Brown has degrees in forestry from the University of Aberdeen, Scotland, and horticulture from Askham Bryan College, England. He is an International Society of Arboriculture Certified Arborist/Utility Arborist and an ISA Qualified Tree Risk Assessor. Brown is on the board of directors of the Right-of-Way Stewardship Council.

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