Date of Submission

May 2021

Network Innovation Allowance Progress Report

Notes on Completion: Please refer to the appropriate NIA Governance Document to assist in the completion of this form.

Network Licensees must publish the required Project Progress information on the Smarter Networks Portal by 31st July 2014 and each year thereafter. The Network Licensee(s) must publish Project Progress information for each NIA Project that has developed new learning in the preceding relevant year.

Project Progress

Project Title

Applied Integrated Vegetation Management

Project Reference

NIA_SSEPD_0025

Funding Licensee(s)

Scottish Hydro Electric Power Distribution, Southern Electric Power Distribution

Project Start Date

January 2016

Project Duration

7 years and 3 months

Nominated Project Contact(s)

SSEN NIA Programme Delivery Manager –Joe McNeil

Scope

Integrated Vegetation Management (IVM) is the practice of promoting desirable, stable, low-growing plant species which naturally inhibit the regrowth of taller tree species, coupled with annual control using selective application of herbicide (instead of mechanical cutting). The purpose of this project is to investigate if using IVM can reduce the operational expenditure, number of re-visits, exposure to hazardous activities, and impact on the environment compared to traditional techniques.

The project scope includes the following steps:

- Determine current knowledge about IVM strategies in the USA and elsewhere by reviewing existing literature and other information sources
- Literature review to assess current equipment and methods
- Decide management objectives and the range of herbicides and equipment to be used
- Carry out a baseline site and vegetation survey to understand the site-specific plant succession applicable at the Tongham Railway path site
- Carry out a baseline ecology survey and willingness to pay survey
- Set up the trial, with different treatment options and control areas at Tongham Railway
- Monitor the effectiveness of the various methods used at Tongham Railway
- Monitor the changes in habitats for wildlife

The project has been extended to include a broadleaf woodland site adjacent to the railway. There is no public pathway on this parcel of land. It is typical of the kind of land for which integrated vegetation management should be particularly suitable and effective.

Objectives(s)

Results from the trial will be used to make a comparison between the current method and the innovative method and to assess the viability of the innovative method from a consideration of financial and environmental factors.

We will:

- Determine current knowledge about IVM strategies in the USA and elsewhere by reviewing existing literature and other information sources
- Design IVM strategies based on current knowledge and test them in the field
- Implement IVM strategies on trial sites
- Quantify any financial savings of IVM compared to conventional techniques
- Assess the relative value of biodiversity of the habitat arising from the IVM compared to conventional techniques

Success Criteria

The project will be deemed successful if:

- Identification of the extent to which IVM can control trees returning and how effective it is as a tool to maintain regulatory standards around power lines
- Determine if IVM is a cost-effective method in the UK
- Production and dissemination of learning around IVM

Performance Compared to the Original Project Aims, Objectives and Success Criteria

Determine current knowledge about IVM strategies in the USA and elsewhere by reviewing existing literature and other information sources

- This was successfully undertaken during the first year of the project. The report concluded that IVM could result in improving the biodiversity of both plants and animal species.

Design IVM strategies based on current knowledge and test them in the field

- Based upon the literature review an IVM strategy was produced.

Implement IVM strategies on trial sites

- Two trial sites where selected in the Southern Electric Power Distribution area, this year vegetation heights and coverage of bare ground, water logging and brash seemed to be mostly similar between IVM plots and control plots and while there are changes year on year there were no obvious trends.

Quantify any financial savings of IVM compared to conventional techniques

- As the trial has progressed there have been changes in the way the Tree Cutting Team operate, therefore investigation is presently underway to evaluate the financial savings of IVM compared to new policies and procedures.

- An opportunity has been taken to investigate how much the public values the improvements in biodiversity that are delivered via the implementation of the new style of land management. The results of the survey are still to be analysed.

Assess the relative value of biodiversity of the habitat arising from the IVM compared to conventional techniques

- Annual surveys are being carried out and presently there are no significant changes in the biodiversity and habitat between the trial sites, when compared year on year.

Required Modifications to the Planned Approach During the Course of the Project

No modifications to the planned approach have occurred, however analysis from the public opinion survey and the changes to SSEN's tree cutting operations may alter the direction of the project in the future.

Lessons Learnt for Future Projects

· There is merit in assessing the public opinion survey results and evaluating the usefulness of the monitoring already conducted to determine how to best take this project forward.

· It is also important to re-visit the Company's policies and procedures which may have a direct effect on the direction of the project. In this instance SSEN's tree cutting department has dramatically changed its approach altering the visitation patterns, the level of cutting undertaken and tools associated with undergrowth management. These alterations may affect the potential cost savings associated with the implementation of IVM. An investigation is required to determine the full effect of these changes.

· At the beginning of a project which requires a subjective review, it is important to create a detailed monitoring and evaluation scope with a list of success criteria. This will enable the necessary reviews to be undertaken consistently by any person with the right skill level.

The Outcomes of the Project

Ongoing investigation into public opinion on perceived value of biodiversity, as well as changes to internal policies and procedures implemented by the Tree cutting team may impact the direction of this project.

Data Access

No network or consumption data has been directly gathered during the course of this Project.

See Network Innovation Competition (NIC) and Network Innovation Allowance (NIA) Data Sharing Procedure at https://www.ssen.co.uk/InnovationLibrary/Distribution/

Foreground IPR

N/A