Vegetation Management – Predict

Reduce vegetation infringement with power lines at scale

Vegetation is a serious challenge for utility companies. Trees and branches colliding with power lines, poles and other assets is a leading cause of service interruptions and can even lead to wildfires.

Traditional approaches to vegetation management can be expensive and labor intensive, relying primarily on manual inspections and static records of the last time an area was trimmed.

But the variety of contributing growth factors such as tree species, weather conditions, soil moisture, health and herbicide applications might create difficulties in tracking the development of trees in your territory without exhausting your resources.

Actionable insights for vegetation management

Weather Company Vegetation Management – Predict combines AI and analytics to help address the high costs and inefficiencies associated with vegetation management by providing greater visibility into the current state of your service territory. Delivered through the cloud, this solution is designed to:

- **Enhance planning and monitoring** to identify vegetation priorities based on predicted growth patterns and associated risks

- **Improve contracting efforts** and drive a more competitive bidding process with a better understanding of how much trimming and maintenance work is required

- **Enrich cycle-based approaches with AI and condition based capabilities** to recognize cycle busters or trees that will not meet routine cycles and combine with existing cycle approach

- **Inform your auditing process** through remote inspections that automate the manual and time intensive spot-checking to validate work completion and provide evidence of vegetation state to improve regulatory reporting

"By working with IBM, we are able to use analytics and AI to prioritize high-risk areas. This helps us adapt maintenance operations to improve public safety and service reliability."

– **Peter Stoltman**, Vegetation Management Program Manager, Oncor

How does it work?

Weather Company Vegetation Management - Predict is built on IBM PAIRS Geoscope, a cloud-based platform that ingests up to 10 terabytes of satellite, drone, flight and weather data every day to create a catalog of geospatial-temporal information. Users provide a geospatial file with a view of their infrastructure. To create an additional layer of analysis, users can set desired buffer zones between assets and vegetation.

The solution applies AI and analytics to this data to identify potential outage threats so you can take action. This enables utility companies to automatically monitor vegetation growth and maintenance needs across hundreds of miles of transmission and distribution lines. These geospatial-temporal insights can also help improve overall grid reliability, wildfire prevention, storm management and assessment.

Viewable through your geographic information system (GIS) or other visualization tools, these insights help you better understand your territory by providing:

– The current state of vegetation across your territory, including average tree height

– Assessment of vegetation encroachment in defined buffer zones around assets

– Exact location and height of trees that may pose a threat to your service

Help reduce outages in your territory with AI-driven insights

To learn more about how **Weather Company Vegetation Management – Predict** can help you increase efficiency in vegetation management, improve customer satisfaction and support the safety of citizens and workers, schedule a demo today.

ibm.com/weather