

# GMP's Vegetation Management Program

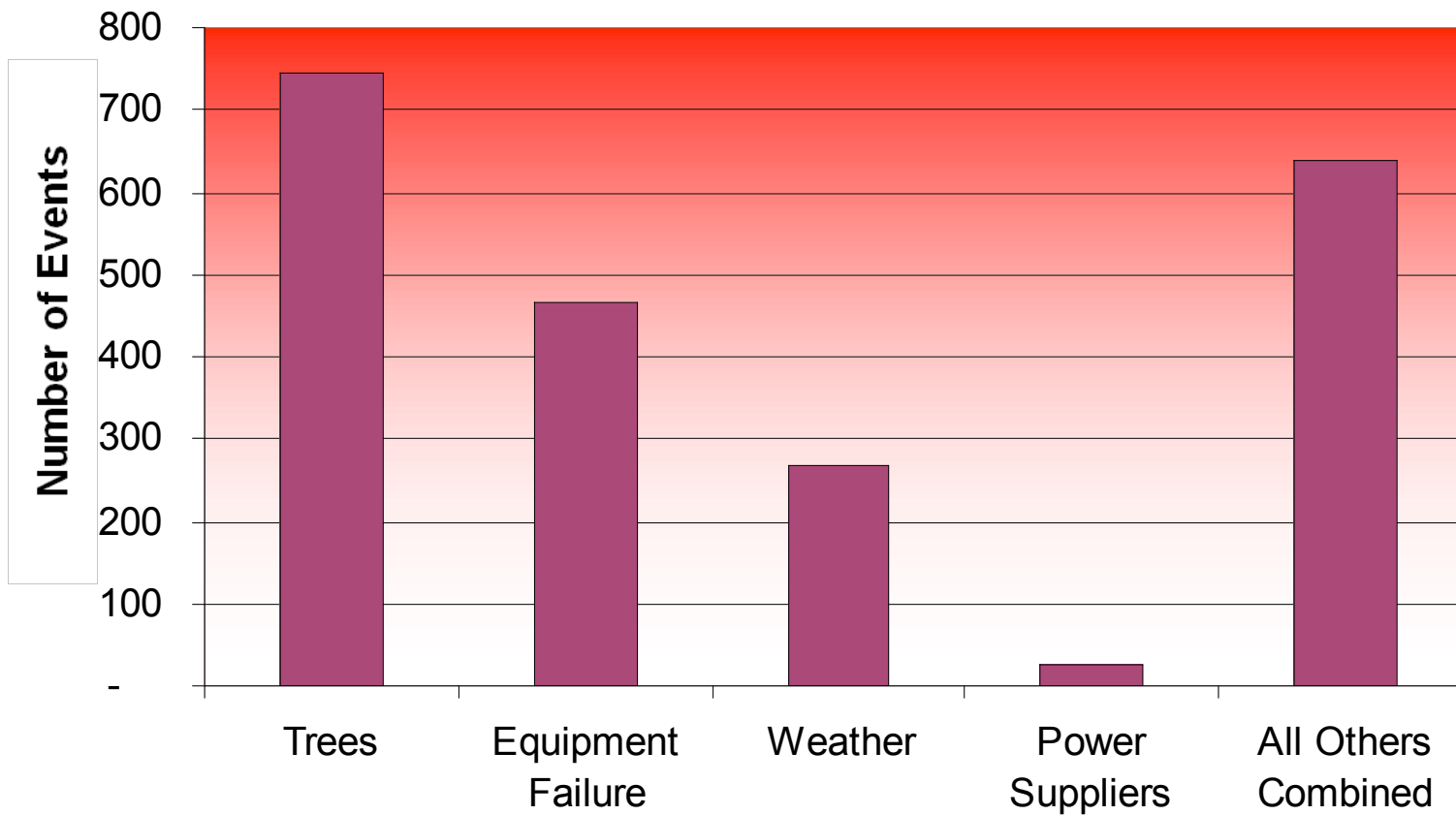


# What is Vegetation Management?

- A **systems approach to managing the vegetation** that encroaches our transmission, distribution and service lines.
- It includes **planning, budgeting, initiating, and administering the line clearing programs.**
- **An effective program will:**
  - **Improve system reliability** – Reduce number and duration of outages
  - **Maintain great customer relations**
  - **Apply sound environmental approaches**
  - **Improve operating efficiency** (optimizing work methods)
  - **Trimming plans are based on system reliability priorities, while not exceeding budget**

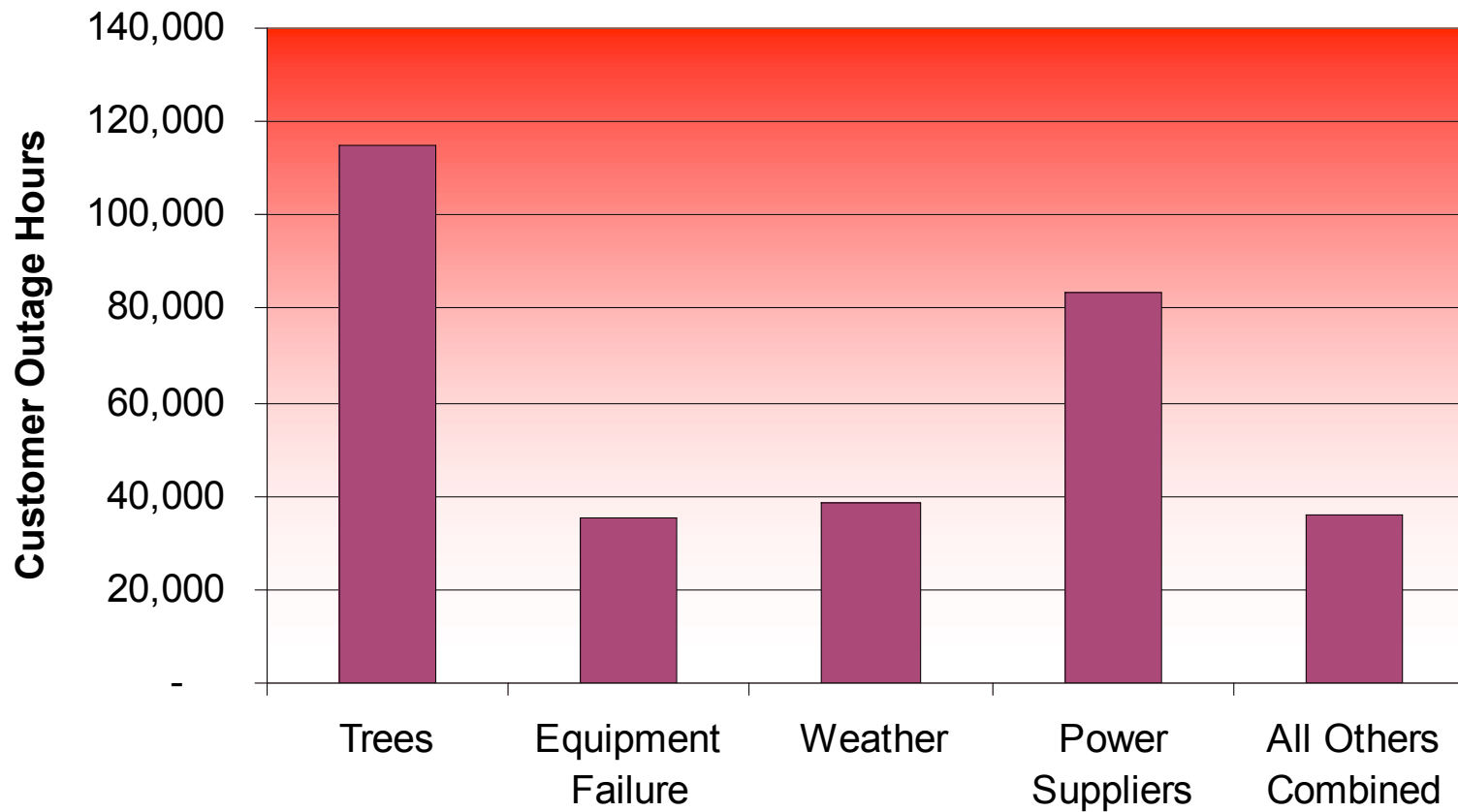
Why Vegetation Management? Trees cause the highest number of outages.

## Typical Annual Number of Outage Events Events Grouped by Cause Codes



Looking at the number of hours customers are out, trees are the most significant contributor.

## Typical Annual Customer Hours Out Customer Outage Events Grouped by Cause Code



# GMP's Trimming Contractor - Davey

- Davey was chosen as part of a competitive bid in the summer of 2005
- Davey is an employee-owned company that was formed in 1880
- Thousands of employees across US and Canada
- Highly respected company in the vegetation management world



# Resources - Staffing

- Davey – *40 employees assigned exclusively to GMP*
  - Account Manager-ISA certified arborist
  - Two superintendents-ISA certified arborists
  - Administrative support
  - 16 crews( 11 buckets, 6 flat cut crews)
- GMP
  - Program oversight, monthly operation meeting, audits, customer issues
  - T&D coordination
  - CSRs – customer trimming issues
- Traffic Control

# Trimming Stats

- Transmission on a 5-year cycle to hit all lines
- Distribution on a 7-year cycle to hit all lines.

Measure	Goal		
Miles of planned distribution trimmed	105 miles per quarter (420 miles annually)		
Count of danger trees removed- distribution	875 per quarter (3500 annually)		
Transmission - acres flat-cut (mowing & hand cut)	75 acres per quarter (300 Acres Annually)		
Transmission count of danger tree removal	425 per quarter (1700 annually)		

# Trimming clearances that we strive for on different types of lines.

- Service Drops (<600V). Only trim when trees are hard against the service cable.
- Primary distribution lines (600V thru 35kv). Clear 12.5' on both sides of lines
- Transmission lines (35kv thru 69kv). Clear 100' right of way, 50' on both sides of line

# Herbicide Use by Green Mountain Power

- Currently GMP does not use herbicides in its maintenance trimming program on transmission or distribution rights-of-ways. GMP does occasionally look into herbicide use to educate ourselves on the benefits / detriments of using herbicides on our transmission or distribution rights-of-ways.
- Herbicides are used sparingly in and around the fences of our substations.

# Customer-Requested Trimming or Tree Removal.

- We look at the situation in the field and, based on the threat to GMP lines, make a decision whether to remove a tree, not remove a tree or work out a cost-sharing agreement for the removal. If the tree is not considered a threat to GMP, customer would be responsible for the cost of removal.

# GMP-Requested Trimming or Tree Removal.

- If GMP requests the tree removal, we will chip the brush but leave the logwood for the customer/landowner. If the tree is outside of our right-of-way and is an imminent threat to our lines, we will also remove the logwood if that's what the landowner requests in order to let us take the tree down. We cannot just take logwood, as it is the property of the landowner.

# Customer requests to take cut logwood or brush.

- GMP fields many calls asking for permission to take wood we've left along properties on road rights-of-way or in private rights-of-way. This wood is owned by the landowner, so GMP cannot give permission for this wood to be taken, people must ask the landowner. GMP does not own this wood.

# Trimming Practices

- Brush is removed when within 50' of a public road.
- Brush is not removed from transmission line rights-of-way farther than 50' from the road, it is windrowed (laid along the side of the right-of-way).
- Customers' brush or trees that fall on power lines during storm events are cleared from GMP lines so power can be restored. The customer is responsible for the removal or clearing of their brush or trees after GMP has restored service.
- Trees on the lines are removed by GMP line workers only.