

Community Pipeline Safety Initiative

Mendocino County

June 2, 2016



- PG&E’s top priority is the safety of our customers and communities – we are testing, studying and upgrading our gas system, including:
 - **Hydrostatic pressure testing** which verifies the pipeline’s strength and safe operating pressure
 - **Internal pipe inspection robots** to check for signs of corrosion
 - **Valve automation** to allow faster response during gas emergencies
 - **Leak survey** of our entire gas pipeline system more frequently
 - **Aerial and ground patrols** to identify any excavations, signs of construction and other potential safety concerns



WHAT WE'RE DOING



Checking the area above the gas transmission pipeline for trees and structures that pose an emergency access or safety concern



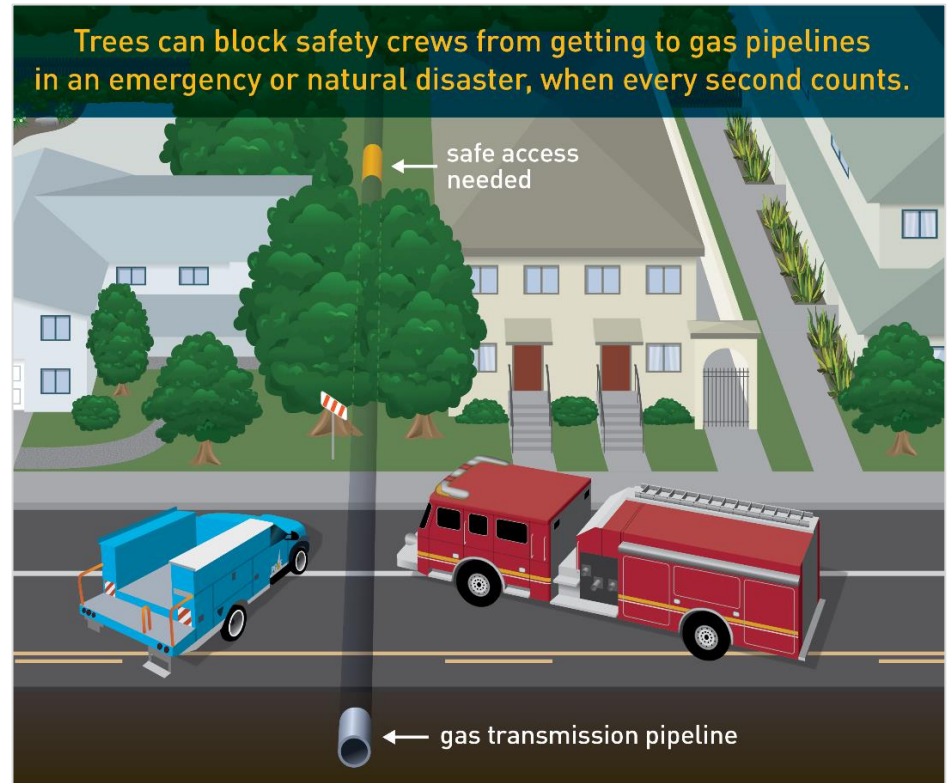
Helping to ensure immediate access for first responders, and preventing potential damage to the pipe



Working with our customers and communities where a safety risk has been identified to develop shared solutions



Planting new trees at a safe distance from the pipeline and restoring the area to preserve the natural beauty of our communities



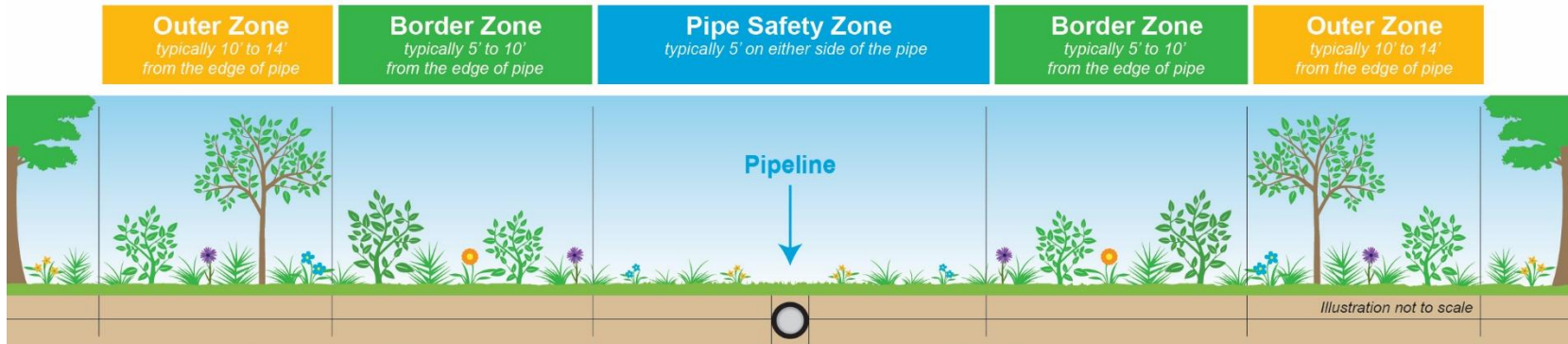
“City of Chico Fire-Rescue is committed to a proactive approach to community risk reduction. PG&E has taken this same approach and commitment to ensure that Chico has a safe and dependable gas and electrical system. I’m proud to support PG&E’s ongoing efforts in our community.”

Bill Hack, Division Chief, City of Chico Fire-Rescue



First responders depend on immediate access in an emergency

Making sure the right plants and trees are located in the right location adds to the safety and natural beauty of your community



Please note easement widths can vary and the above represents best practices and guidance for safe landscaping near gas pipelines.

Pipe Safety Zone	Lawns, flowers, low-profile grasses and low-growing herbaceous plants work well within the Pipe Safety Zone.
Border Zone	Small to medium shrubs with a trunk or main branch less than 8” in diameter at full maturity work well within the Border Zone. Diameter is measured 4.5 feet above the ground.
Outer Zone	Large shrubs and small trees with a trunk or main branch less than 36” in diameter at full maturity work well within the Outer Zone. Diameter is measured 4.5 feet above the ground.

Please note easement widths can vary and the above represents best practices and guidance for safe landscaping near gas pipelines.



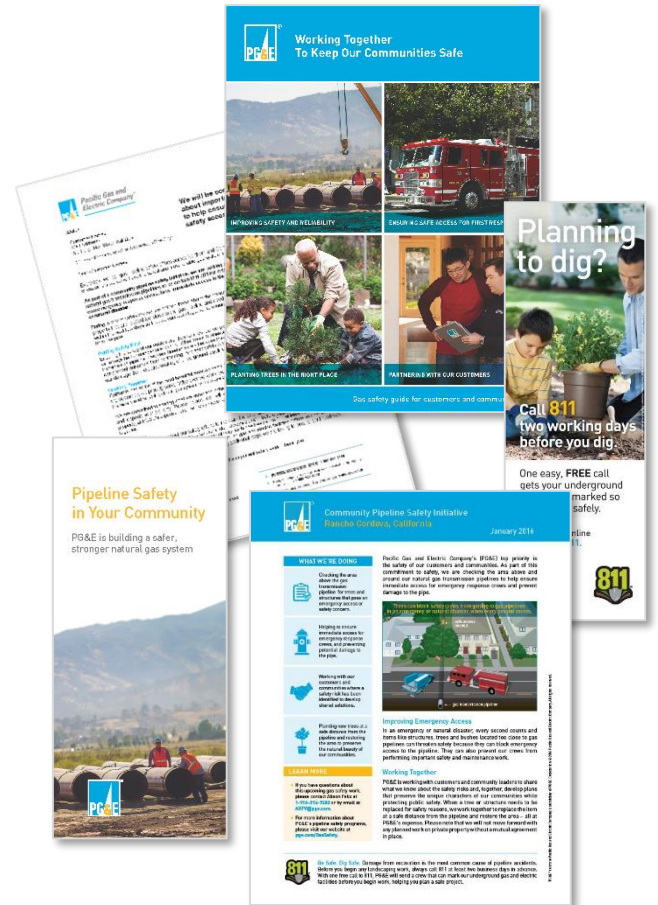
Community Pipeline Safety Initiative – Mendocino County

- We understand how important trees are to the community. They are important to us too. When a tree poses a safety concern and needs to be replaced, PG&E works with the property owner to determine:
 - **Tree Replacement:** Including the following replacement options:
 - **Option 1:** One 15-gallon replacement tree per tree, including planting
 - **Option 2:** Two 15-gallon replacement trees per tree, and PG&E will donate the trees
 - **Option 3:** An in-lieu payment
 - **Restoration:** Work together to develop a landscape plan that restores the area with native, drought-tolerant landscaping, such as grasses or flowers
 - **Protected Trees:** For those trees designated protected or heritage by the county, we will submit ministerial permits and meet the replacement tree ratio specified in the county's tree ordinance
- We recognize every customer and property is different, and we will address special circumstances on a case-by-case basis



Community Pipeline Safety Initiative – Mendocino County

- It is important to us that our customers fully understand and support this safety work
- Our outreach includes:
 - Meeting with county officials and staff to discuss the safety risks and work together to plan for gas safety work in public areas
 - Communicating about gas pipeline safety to all residents within 500-feet of the safety work
 - Notifying nearby residents before any safety work takes place
 - Hosting answer centers near work areas
 - Contacting private property owners regarding any safety work proposed for their property
- We will not move forward with any planned work until we have a signed agreement in place with the customer





Community Pipeline Safety Initiative – Mendocino County

Proposed Franchise/County-Owned Work

Tree Assessments	946
Brush Assessments	2,466

Proposed Private Property Work

Tree Assessments	2,881
Brush Assessments	3,805

- An in-depth review of franchise trees was recently completed by our safety specialists
- The analysis helps ensure we are only replacing trees that pose a safety or emergency access concern. It involves:
 - Analyzing specific vegetation and pipeline data, such as the height and species of a tree and the age and coating of the pipeline
 - Determining if a tree is a manageable risk and can potentially remain with regular monitoring, or an unacceptable risk and must be replaced
- In the future, it may be determined that manageable risk trees pose an unacceptable safety risk and will need to be replaced





What does the tree-by-tree review involve?

Our pipeline integrity and risk management experts review a number of factors, including:

Tree Characteristics	Pipeline Information	Site Conditions
<ul style="list-style-type: none">• Tree species and size at full maturity	<ul style="list-style-type: none">• Pipeline depth	<ul style="list-style-type: none">• Ability to access pipeline in an emergency
<ul style="list-style-type: none">• Distance from tree to pipeline	<ul style="list-style-type: none">• Pipeline installation date	<ul style="list-style-type: none">• Ability to access pipeline for critical maintenance work and patrols
<ul style="list-style-type: none">• Potential for root interaction with pipeline	<ul style="list-style-type: none">• Pipeline coating type	<ul style="list-style-type: none">• Lightning and wind exposure
<ul style="list-style-type: none">• Tree hazard	<ul style="list-style-type: none">• Pipeline size (diameter)	<ul style="list-style-type: none">• Seismic activity and soil instability



Community Pipeline Safety Initiative – Mendocino County

- To ensure we are only replacing trees that pose an emergency access or safety concern, we also conduct a review of trees on private property
- The review involves meeting with property owners to discuss safety risks and gather more information about their tree(s) and property
- This analysis will determine which trees need to be replaced for safety reasons and which can potentially remain in place with regular monitoring
 - Trees and brush within 5 feet of pipeline must be removed to ensure access and protect public safety
 - Trees located between 5.1 and 14 feet will be reviewed as part of the assessment, and in some cases, may be able to remain in place with ongoing monitoring





Community Pipeline Safety Initiative – Mendocino County

Proposed Franchise/County-Owned Work	
Tree Assessments	946
<i>Manageable</i>	935
<i>Unacceptable</i>	11
Brush Assessments	2,466

Proposed Private Property Work	
Tree Assessments	2,881
<i>Manageable</i>	<i>Review TBD</i>
<i>Unacceptable</i>	<i>Review TBD</i>
Brush Assessments	3,805



Community Pipeline Safety Initiative – Mendocino County

Mendocino County (rural)

Proposed Franchise/County-Owned Work	
Tree Assessments	708
Manageable	705
Unacceptable	3
Brush Assessments	2,197

Proposed Private Property Work	
Tree Assessments	2,684
Manageable	Review TBD
Unacceptable	Review TBD
Brush Assessments	3,438

Calpella CDP

Proposed Franchise/County-Owned Work	
Tree Assessments	42
Manageable	42
Unacceptable	0
Brush Assessments	61

Proposed Private Property Work	
Tree Assessments	47
Manageable	Review TBD
Unacceptable	Review TBD
Brush Assessments	126



Community Pipeline Safety Initiative – Mendocino County

Hopland CDP

Proposed Franchise/County-Owned Work	
Tree Assessments	32
<i>Manageable</i>	30
<i>Unacceptable</i>	2
Brush Assessments	15

Proposed Private Property Work	
Tree Assessments	111
<i>Manageable</i>	<i>Review TBD</i>
<i>Unacceptable</i>	<i>Review TBD</i>
Brush Assessments	152

Redwood Valley CDP

Proposed Franchise/County-Owned Work	
Tree Assessments	164
<i>Manageable</i>	158
<i>Unacceptable</i>	6
Brush Assessments	193

Proposed Private Property Work	
Tree Assessments	39
<i>Manageable</i>	<i>Review TBD</i>
<i>Unacceptable</i>	<i>Review TBD</i>
Brush Assessments	89

Proposed Gas Safety Work (KMZ Review)





Community Pipeline Safety Initiative – Mendocino County

- Tree on Franchise/Unacceptable
- Tree on Franchise/Manageable
- Brush Unit on Franchise
- Tree on Private
- Brush Unit on Private
- Brush Unit on County-Owned Parcels
- ★ Tree on County-Owned Parcel/Unacceptable
- ★ Tree on County-Owned Parcel/Manageable

- Answer all of your questions
- Gather feedback and recommendations
- Reach agreement on a plan forward
- Begin outreach to private property owners



- For questions regarding the upcoming pipeline safety work, please contact Leslie Horak, Public Affairs Representative, at **1-707-331-2998** or by email at **leslie.horak@pge.com**
- For more information, visit us at **pge.com/GasSafety**
- To view an online map of our natural gas transmission pipelines, please go to **pge.com/pipelinelocations**



Thank You

