



Vegetation Management Implementation Plan: Final Report



**Submitted to the
KUB Board of Commissioners
November 15, 2012**

Table of Contents

Foreword	2
Introduction	3
General Recommendations: Vision and Objectives	5
Aesthetics, Implementation, and Preventive Actions	8
Customer Communication and Public Education	16
Dispute Resolution	23
Contracts and Contractors	36
Appendix 1: Panel Recommendations, KUB Responses, and Timeline and Status	
Appendix 2: Periodic Reports	
Appendix 3: Customer Survey Data	
Appendix 4: Examples of Communications Materials	
Appendix 5: Qualified Citizen Review Committee Report	

Foreword

The primary goal of any electric utility is to provide safe and reliable service for its customers. If we do our job well, customers don't even think about their power—it is simply there on demand, whenever they need it, to power their computers, appliances, and other needs.

Achieving this goal, however, involves a diverse set of programs managed by the utility. One of the most important—and most visible—of these is the vegetation management program. Vegetation management is unique among reliability programs because of its direct impact on customers.

It is the one program that requires individual customers to give up something for the greater good of the community. Although most customers understand that and accept tree pruning as a necessary task, there will always be cases where KUB's responsibility to prune trees or remove vegetation creates conflict with customers who object. This is a universal issue for electric utilities, and one KUB has experienced from its early days.

One way we have addressed the issue is to be sensitive to customers' concerns and, therefore, to invest significant effort and resources in the management of the program. As a result, KUB's program has become a much more coordinated, consistent, and professional program driven by national standards. Our commitment to this effort has included the recruitment of highly skilled employees, a focused communication effort, continuous improvements based on public input, and one-on-one customer interactions.

Even the very best program, however, will face resistance when its standards conflict with the wishes of an individual customer. That reality resulted in the establishment of the Tree Trim Policy Review Panel in early 2010. Those individual customer concerns formed the basis for the policy changes and program improvements recommended by the panel. Following staff's review of the panel's recommendations, the KUB Board of Commissioners endorsed strategies to implement those changes and improvements, and KUB immediately went to work.

In the report that follows, we outline our work to implement the changes that the citizen panel recommended. But it is important to understand that regardless of the changes we make in our program, there will always be the potential for conflict when any given customer objects to our work. No vegetation management program can be designed that completely eliminates impacts on individual customers.

In the end, however, KUB has an obligation to all its customers to maintain safe and reliable service. Vegetation management is an important component of that work, and it must continue. Our hope is that the changes we have made and will make in the future will help customers and enable us to continue to enjoy the beauty of healthy trees in our community.

Introduction

In November 2010, the KUB Board of Commissioners approved Resolution 1234, endorsing staff's strategies to implement all but four of the Tree Trim Policy Review Panel's 150-plus action items. [The Board rejected those four due to the financial impact they would have on ratepayers.] This final report to the KUB Board of Commissioners provides an overview of the efforts that have taken place over nearly two-years since KUB established the implementation plan.

KUB appreciates the Board's efforts to remain engaged in the vegetation management process. Commissioners routinely send KUB any concerns they become aware of in the community. They also review the periodic updates KUB submits to the Board on progress implementing vegetation management action items.

Immediately following the resolution's passage, KUB established an internal Vegetation Management Oversight Committee (VMOC) of members who met regularly to coordinate the work and oversee plan implementation. The VMOC was led by the CEO and included representatives from Executive Staff, Vegetation Management, Communications, Community Relations, Customer Service, and the Vegetation Management Customer Advocate (VMCA).

In addition to tracking work associated with deliverables, the VMOC monitored performance data at each meeting [see data presented throughout the report]. Monitoring these details provided checks and balances for the program and helped ensure implementation stayed on track. It also gave us the opportunity to continually identify areas for improvement perhaps not covered by panel recommendations.

The VMOC quickly organized the work using the panel's four primary areas of recommendation:

- Aesthetics, Implementation, and Preventive Actions
- Customer Communication and Public Education
- Dispute Resolution
- Contracts and Contractors

We further divided action item implementation into three phases, but we began working immediately on as many items as we could. By the beginning of 2012, KUB completed all work for Phase 1 [January 1–June 30, 2011] and Phase 2 [July 1–December 31, 2011] on time or ahead of schedule, except for one item where we voluntarily extended the scope beyond our initial commitment. Since the last report to the Board, KUB completed all remaining Phase 3 [January 1, 2012–Completion] work.

KUB was committed to implementing all the actions endorsed in Resolution 1234, and this report details how we achieved that goal. Each section includes a narrative describing the work, which is broken into two parts. The first is the same information reported in the 2011 Year-End Report to the Board. The second is information that is reported for the first time.

Even though parts of this report discuss progress on a calendar year basis, some data is reported on a fiscal year basis, consistent with how vegetation management contracts are issued. [KUB's fiscal year is July 1–June 30.]

[Note: For a side-by-side comparison of each recommendation, KUB's response, and the timeline and status, see Appendix 1. For other periodic reports previously submitted to the Board on the progress of the Vegetation Management Strategic Implementation Plan, see Appendix 2. See Appendix 3 for customer survey data and Appendix 4 for samples of communications materials.]

General Recommendations, Vision, and Objectives

Completed Work As of 2011 Year-End Report	Phase	Completed Work Since 2011 Year-End Report	Phase
Adopted community vision and program objectives	1	A qualified citizens review committee evaluated the program to evaluate the implementation plan's effectiveness in meeting the objectives	3

Completed Work (As of 2011 Year-End Report)

In November 2010, KUB's Board adopted the tree panel's community vision and objectives, adding an objective to consider associated costs and the impact on ratepayers. Additionally, the Board amended the first objective to include the adjective "efficient" to help ensure that program improvements are implemented in a cost-effective manner to balance the needs of the Vegetation Management Program with costs to ratepayers.

KUB Community Vision Statement

The KUB Tree Trim Policy Review Panel has a community vision that includes the natural beauty of trees on public and private property. The conservation, preservation, and protection of trees are issues of genuine concern. The panel understands that a healthy tree is not necessarily a pretty tree, but we believe that community aesthetics and KUB's objectives for providing reliable electric service and safety are not mutually exclusive.

Objectives

- To ensure safe, reliable, and efficient electric service.
- To support good arboricultural practices to ensure healthy trees.
- To appropriately maintain trees within power line right-of-ways.
- To ensure effective communication with customers regarding vegetation management and dispute resolution.
- To strengthen community, customer, and contractor education.
- To acknowledge the value of trees to the environment, including the important role of trees in reducing air pollution, shade provision, and energy conservation as well as the monetary value of trees to property owners.
- To balance the rights and responsibilities of both property owners and KUB, ensuring all customers are treated equitably.

KUB adopted this additional objective:

- To consider associated costs and the impact on ratepayers.

Completed Work (Since 2011 Year-End Report)

Introduction

As recommended, a qualified citizen's review group was formed to evaluate the effectiveness of KUB's responses to the recommendations made by the Tree Trim Policy Review Panel in meeting the original seven guiding objectives and KUB's added objective to consider associated costs and the financial impact on ratepayers. The six people who participated in the evaluation met at least one of the following criteria:

- Utility arboriculture experience and arborist certification
- Urban forestry experience and arborist certification
- A senior communications professional with a communications degree or commensurate experience
- Professional with customer service management program and personnel experience
- Contract management experience
- Customer representative from a neighborhood where tree pruning has been completed since program changes were implemented

Based on these criteria the following citizens were selected to participate in the Qualified Citizen's Review Committee:

Qualified Citizen Review Committee						
	Utility Arborist	Urban Forester	Comm/PR Degree	Customer Service	Contract Mgmt.	Customer
Jim Barnhart Right of Way Supervisor Duck River Electric Membership Corp.	X					
Alvin Nance Executive Director/CEO Knoxville Community Development Corp.					X	
Cheryn Picquet Norwood Neighborhood Professor Emeritus, UT						X
Ranee Randby Director, Public Health Community Relations Knox County Health Department			X			
Tom Simpson East TN Regional Urban Forester, State of TN		X				
Brock Stoner Patient Experience Mgr. Summit Medical Group				X		

The group received a draft of this final report prior to the November 8, 2012, meeting and then heard a presentation given by KUB's lead forester, Liz Hannah. The presentation summarized KUB's efforts to implement program changes according to the panel's input and the Board's endorsement.

Following a question and answer session, the group's facilitator, Dawn Ford, proceeded to lead the group in evaluating the effectiveness of KUB's response in meeting the guiding objectives. Ms. Ford's assessment and report of the group's responses is included in Appendix 5. KUB appreciates the input received from the committee and will take their suggestions into consideration as we work to continually improve the Vegetation Management program.

Aesthetics, Implementation, and Preventive Actions

Completed Work As of 2011 Year-End Report	Phase	Completed Work Since 2011 Year-End Report	Phase
Reinforced standard to continue ANSI A300 pruning	1	Conducted a tree growth regulator feasibility study	3
Set standard to strive to prune no more than 25% of tree canopy and notify customers in cases where this is unavoidable	1-3	Evaluated the special status tree program	3
Expanded Tree Planting Program options	2	*Purchased a vegetation management system	1
Implemented negotiated agreements	1	Benchmarked with other utilities on ways to consider drought and environmental conditions	3
Reinforced process to continue encouraging new developments to install electric lines underground	1	Adjusted schedule to prune overlapping lines at the same time	2-3
Limited removal of overhanging limbs	1-2	Evaluated further increase of pre-planning	3
Reduced clearance for select components	1-2		
Expanded pruning options and notified customers of options	1-2		
Implemented a process improvement program	1-3		
Set process to offer pre-planning to all customers	1		

** Systems on the market did not track customer concerns and special requests as comprehensively as the panel recommended. KUB selected a system during the agreed-upon timeline, but because of additional customized functionality required to meet customer-concern tracking needs, implementation was delayed. KUB is in the final stages of testing the new system and training staff to begin use of the system with the start of the upcoming year.*

KUB's Board agreed with the panel's rationale to support the long-term health of trees in our community by balancing appropriate arboricultural practices with the need to provide safe, reliable electric service. In this category, the panel focused on KUB's tree pruning standards and how they are implemented in the field, as well as ways to reduce customer conflicts through preventive actions by KUB.

KUB originally prioritized specific work that would benefit the largest number of customers and make the biggest impact to our program. Therefore, we scheduled specific work addressing customer communications, contractor management, and standards implementation for the first two phases.

Completed Work (As of 2011 Year-End Report)

Process Improvement

In addition to establishing the VMOC to oversee program implementation, KUB formed a process improvement team. The team evaluated the entire vegetation management process, from contractor selection and supervision to work completion. The team also established key performance indicators (metrics) that are used to measure the progress of this effort.

ANSI A300 Standards

The panel recommended that KUB continue to prune trees according to the ANSI A300 standard. KUB continues operating under that standard, subject to the program changes noted in the following recommendations.

Limited Removal of Overhanging Limbs

KUB's standard now leaves established limbs above the normal ten-foot clearance zone over 2- and 3-phase distribution lines—as long as the limbs are healthy and do not possess failure-risk characteristics. KUB removes new small-diameter limbs beginning to encroach over the lines. KUB continues to remove all limbs over transmission lines because of the large volume of customers those lines serve. This standard change effectively extends the benefits of the special status tree program to most trees.

Species-Specific Exceptions to Clearance Requirements

KUB modified minimum clearance requirements for slow- and low-growing species. As with all standard pruning, KUB uses the lateral pruning method in conjunction with the minimum clearance requirement to determine the appropriate pruning cut to achieve clearance and maintain tree health. Here are other things we have done to incorporate this standard change:

- *Expanded Standard Options:* Communicated this exception to customers by listing it as a standard customer option in the *Customer Guide*
- *Contract Requirement:* Incorporated language in contracts to require contract tree crews to reduce pruning for some slow-growing species and reviewed those specifications in contractor orientation meetings
- *Proactively Identify Exceptions:* Changed process to identify slow- and low-growing species on pre-planned properties (scheduled by KUB or requested by customer) and make exceptions as appropriate
- *Forester Checklist:* Added a procedure for foresters to use a written checklist during customer conversations to remind us to consider species-specific exceptions

Subordinate Lateral Pruning

Following the panel's recommendations, KUB immediately began offering customers an alternative pruning option called subordinate lateral pruning, which allows pruning to a "weak" lateral, instead of a proper lateral, to reduce the amount of pruning in one growing season. In accordance with best management practices, KUB will return in one to four years to make a proper lateral pruning cut for the health of the tree. Work involved in rolling out this customer option has included:

- *Expanded Standard Options:* Communicated this exception to customers by listing it as a standard customer option in the *Customer Guide*
- *Forester Checklist:* Added a procedure for foresters to use a written checklist during customer conversations to ensure this option is considered
- *Negotiated Customer Agreements:* Developed a negotiated customer agreement form explaining the technical implications and long-term results of the pruning option

This option works best on trees that have never been pruned before, as long as they have lateral branching patterns and lateral branches outside the utility maintenance zone. It doesn't work on trees without lateral branching patterns or on trees where all of the lateral branches reach into the utility maintenance zone. As a result, we have found that this option rarely applies in the field; however, we do offer it when appropriate. No customer has signed a Subordinate Pruning Agreement to date.

Reduced Clearances Around Some Components

In response to panel recommendations, KUB reduced the required minimum clearances around some distribution system components, including down guy wires, neutral lines, and street light wires. As with all standard pruning, KUB uses the lateral pruning method in conjunction with the minimum clearance requirement to determine the appropriate pruning cut to achieve clearance and maintain tree health. All current tree contracts include specifications to reflect the reduced minimum clearance for neutral lines from ten feet to five feet in maintained residential areas. Current specifications limit removal of vegetation around down guys and street light wires only to address vegetation that is in direct contact with or threatening to damage the wires, rather than maintaining a standard clearance zone for those components. KUB held training sessions with contractors to review those changes, and KUB's inspection program provides ongoing oversight.

Better Communications About Customer Options

The panel recommended increasing communication about some program options, and we realized that customers needed to know that they had a choice about pruning. Communicating available choices helps customers make informed decisions.

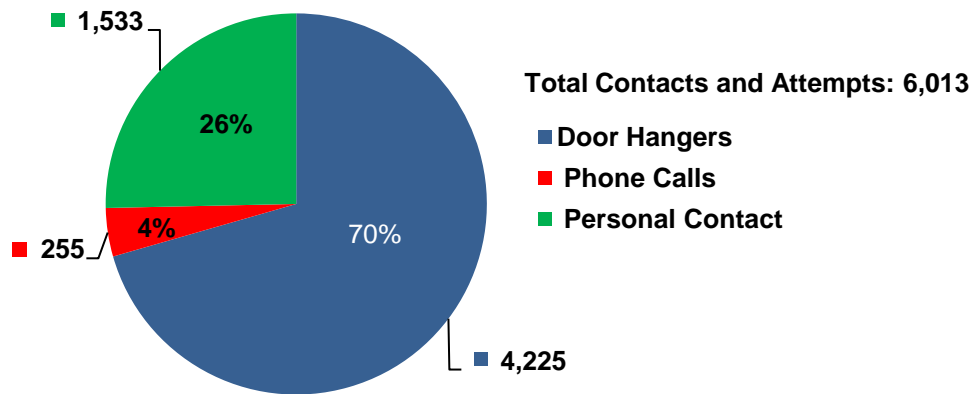
Beyond the mechanisms we already had in place for customers to communicate with us, like the extended-hours dedicated phone line and e-mail address, KUB has added these tools to achieve this objective:

- *Customer Guide:* KUB developed a guide that outlines and explains all standard options: tree removal, private pruning, engineering solutions, reduced clearance, special status trees, subordinate lateral pruning, and dispute resolution [*Note: You can find more detailed information about how this publication was developed in the Customer Communication and Public Education section on page 16.*]
- *Negotiated Customer Agreements:* KUB developed four negotiated agreement forms to help ensure that KUB and the customer are in agreement about the work to be done. The agreement forms also specify what is required from each party and explain other details and implications surrounding the work.
- *Forester Meetings:* A KUB forester signs all negotiated agreements with the customer, which means the customer has an opportunity to discuss details in-person and in-depth with a trained forester.
- *Forester Checklist:* Foresters use a checklist to ensure that they consider each and every customer option. When applicable, foresters communicate those customer options to the customer and note that the option was verbally offered and explained.
- *Door Hanger Information:* We also revised our door hangers to add property-specific notifications. For instance, on one door hanger, we added a check box to notify customers when more than 25 percent of a tree's canopy will need to be removed to maintain safe, reliable service. We also developed a new door hanger to notify customers when our inspection reveals further work is required on their property. All door hangers also include this phrase requested by the panel: "See comments on back."
- *Customer Notification Letter:* The letter mailed in advance of pruning also explains that customer options exist. The letter encourages customers to read the tree pruning guide online or to call the vegetation management phone line to talk with a forester about the options.
- *Videos:* KUB produced a video called *Why and What We Prune* and posted it on YouTube, with a link from KUB's website, last fall.

More Pre-Planning Efforts

Because tree pruning has so many variables and can be confusing to customers, the panel recommended more one-on-one customer contact in advance of work. Currently, KUB conducts pre-planning (where foresters attempt door-to-door customer notification to discuss upcoming work) along approximately 400 miles of electric lines each year. The following chart illustrates KUB's attempts for door-to-door contacts with more than 6,000 customers for fiscal year 2012 to date. As shown, KUB was successful in reaching 30 percent of those customers during face-to-face meetings and/or by telephone. Foresters left door hangers for the remaining 70 percent of customers, with an offer to schedule a pre-planning appointment.

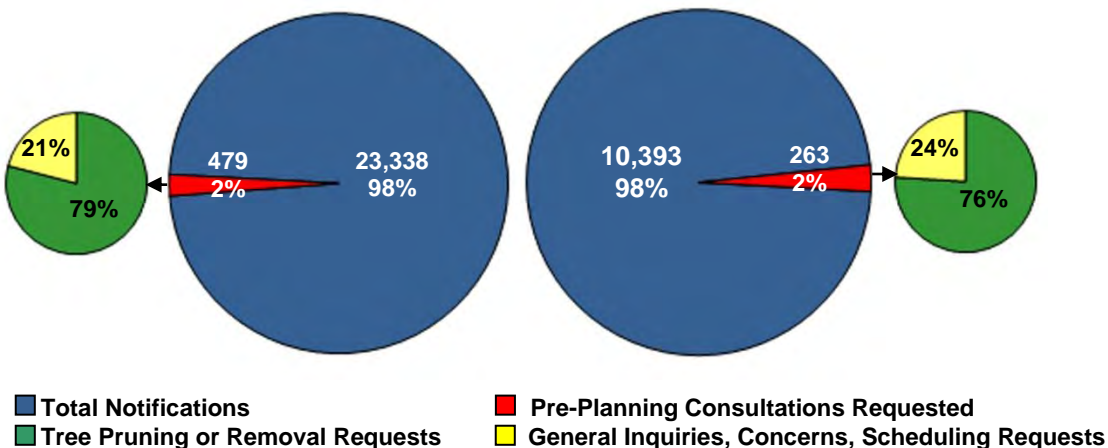
Customer Contacts and Attempts for Pre-Planned Circuits July - December 2011



*Note: This chart does not represent standard notification efforts, such as direct mail and automated phone calls.

In response to the panel's recommendation, KUB has a project under way to evaluate opportunities to increase pre-planning. In areas where foresters are not already attempting door-to-door contact, KUB began using our standard notification letter to communicate to all customers that they have the option to request a consultation with a forester. As illustrated by the charts below, approximately 2 percent of the customers notified by letter of upcoming work in their area requested a pre-planning consultation with a forester. Of the customers who requested a consultation with a forester to discuss upcoming work, 79 percent requested tree pruning or removal by KUB in FY11, and 76 percent requested work in FY12 to-date. The remaining contacts were general inquiries, concerns, or scheduling requests.

Customer-Requested Consultations on Circuits Not 100 Percent Pre-Planned by KUB FY11 July – December 2011



In addition to the current level of door-to-door contacts and offering pre-planning appointments to all customers on request, KUB maintains a database of customers who have expressed past concerns with tree pruning or need us to coordinate property access (e.g., to have gates unlocked, dogs moved out of yards, or vehicles moved). Staff attempts direct contact with those customers to offer pre-planning appointments in advance of work. Over the last year, KUB has attempted to contact more than 450 customers from the database.

Tree Planting Program

The tree replacement option for customers who choose to remove trees that interfere with power lines continues to be an active element of the Vegetation Management Program, and KUB has enhanced the option over the past year to provide even greater value. Even though KUB continues to offer low-growing species, KUB modified elements of the program to strengthen it:

- *Expanded Offerings and Larger Trees:* KUB now offers a wider variety of replacement options and sizes. We began including shrubs, with four species on the list, and added five new tree species for a total of 11 available trees. Of the 11 tree species, seven varieties are 6–7 feet tall at planting, and four varieties are 4–5 feet tall at planting.
- *Disease-Resistant Trees:* KUB now offers disease-resistant trees whenever possible.
- *Program Brochure:* KUB published a *Tree Planting Program* photo-brochure of tree and shrub species offered. The brochure also provides descriptions of each replacement option, including the size at planting and maturity.
- *Tree Donation Option:* KUB began giving customers the option to donate a replacement tree they receive to a public location somewhere in KUB’s service territory. To date, no customer has chosen to donate a replacement tree to a public location.

Trees and shrubs now offered in the Tree Planting Program include the following:

Available Planting Program Trees		Shrubs
Crape Myrtle	Purpleleaf Plum	Forsythia
Eastern Redbud	Purpleleaf Sand Cherry	Fragrant Lilac
Emerald Green Arborvitae	Red Flowering Crabapple	Golden Globe Arborvitae
Fosters Holly	White Dogwood	Pee Gee Hydrangea
Kwanzan Cherry	White Flowering Crabapple	
Pink Dogwood		

Completed Work (Since 2011 Year-End Report)

Data and Work Management

The process improvement team also identified the scope for purchasing a software system intended to consolidate vegetation management customer data. While the team found work management options available on the market, vendors reported other utility customers are not using their systems to track customer concerns and special requests as comprehensively as the panel recommended. KUB purchased a system, and is in the final stages of testing and staff training to begin full implementation at the start of the new year. The system enhances program operations by:

- Providing a central repository for information related to vegetation management customer concerns
- Allowing foresters to access specific customer and job information remotely and with a GIS map interface
- Providing functionality to sign and deliver customer agreements electronically
- Reducing use of paper and potential for errors related to transfer of data from paper forms
- Improving data management and reporting capabilities

Improved Scheduling

Even customers who see the need for tree pruning to maintain reliable electric service can feel inconvenienced by having crews and large equipment in their neighborhoods. To help minimize the disruption, KUB is working to better coordinate pruning so that we're not in neighborhoods any more often than necessary.

KUB immediately minimized the number of trips we make to an area by implementing schedule changes to prune our overlapping transmission and distribution lines at the same time, when possible. We implemented work plans to achieve this goal last year and for the current year. KUB will make annual adjustments to work plans over the course of several cycles to reduce duplication of work to the extent possible.

Special Status Trees and Areas

Several years ago, KUB developed a Special Status Tree (SST) program to allow an exemption for qualifying trees from removal of limbs above the minimum clearance zone for electric lines to help preserve their contribution to the urban canopy. In October 2010, KUB discontinued the practice of removing established limbs overhanging distribution electric lines above the minimum ten-foot clearance zone, unless the limbs are dead, diseased, weak, or possess other failure risk characteristics. That standard change extended the benefits of the SST program to all healthy trees on our system. Since October 2010, fewer than ten customers have specifically requested an SST evaluation. It is common, however, for customers to request that KUB evaluate trees on their property and consider granting an exception to standard pruning.

All customers may request a pre-planning consultation with a forester to discuss options. Additionally, KUB's foresters proactively look for trees that should be granted an exception. Foresters also attempt to make direct contact with all customers who have expressed a concern in the past. Because of these programmatic changes, a specific SST program is no longer necessary to ensure exceptions to KUB's standard pruning are granted when appropriate.

Additionally, KUB completed a pilot to evaluate the effectiveness of a distinctive marking for special status trees. KUB found that a unique marking is useful for crews to identify all cases where special instructions apply for tree work on customer property. Tree contracts include a provision that requires crews to follow KUB's instructions for trees with this marking, and this information is reviewed in contractor training.



Benchmarking and Research Projects

KUB used benchmarking and research methods to complete these two deliverables during Phase 3:

Tree Growth Regulators: KUB completed research and a cost-benefit analysis on the use of tree growth regulators. Research indicates tree growth regulators can be a useful tool as part of an integrated vegetation management program. KUB will pilot offering application of the chemical on a case-by-case basis to customers whose trees qualify based on best practices and program guidelines. At this time, tree growth regulator application across KUB's entire system is cost prohibitive. TGR applications to help prevent aesthetic impacts of pruning may work best as a preventive treatment on trees that have not yet grown into the utility maintenance zone or to delay follow-up pruning required for trees that have previously been pruned for safe clearance from electric lines. Customer cost-sharing may be required as part of this program.

Drought and Environmental Conditions: KUB benchmarked practices among 12 other utilities regarding their vegetation management practices that consider drought and environmental conditions. Additionally, a KUB arborist attended a conference that included a panel discussion on fire hazards related to trees in close proximity to electric lines during periods of drought. Of the utilities consulted, none have an official policy on the matter and none said that they would suspend tree pruning during drought or other conditions due to the utility's responsibility to manage safety concerns. To provide safe and reliable electric service, KUB will maintain a continual vegetation management program.

Customer Communication and Public Education

Completed Work As of 2011 Year-End Report	Phase	Completed Work Since 2011 Year-End Report	Phase
Developed and revised publications	1	Produced additional YouTube videos	2-3
Enhanced tree pruning web map	1	Sponsored tree planting demonstration	2-3
Included photos of tree species and pruning shapes in publications	1-3	Evaluated ways to obtain contact information for owners of undeveloped property	3
Conducted focus groups for publications	1	Posted photos on web site to illustrate the progressive impact of pruning	1-3
Developed customer agreements	2	Benchmarked best practices for protecting nesting birds and animals	3
Implemented a customer follow-up survey	2		
Equipped staff with arborist lasers	2		
Launched automated telephone notification system	2		
Enhanced call center representative training	1		
Researched industry best practices about opt-out items on the main switchboard	1		
Implemented a pilot to test a unique SST marking technique	1		
Evaluated the use of social media	1		
Implemented public education efforts (letter, events, public presentations)	1-3		
Published video on YouTube	1-2		
Notified homeowners associations to offer a customized presentation about upcoming work	1		
Offered option to donate replacement tree to a public location	1		

Communication and public education are vital to a successful vegetation management program. We have had a system in place for many years to communicate with customers about upcoming work through letters, door hangers, our web site, community meetings, and one-on-one communications.

The panel stressed that KUB communications must help customers understand all their options under the program, including tree removal, tree replacement, private pruning, dispute resolution, etc. Although they wanted all options covered, the panel advised that materials must be clear, concise, attractive, and easy to understand.

KUB concentrated on keeping the communications materials that go out before work begins clear and concise. We accomplished that by creating the new tree pruning guide, which contains many details previously in the letters and door hangers. Those communications direct customers who want in-depth details to the online tree pruning guide. In addition, foresters, crews, and the Vegetation Management Customer Advocate all have copies of the guide to give to customers who express concern about ongoing work.

Because customer communications are foundational to any strong program, we concentrated our efforts there this year. As a result, most of the work in this section has been finished as outlined below.

The new work completed in this area has enhanced what we were already doing and in some cases expanded our reach to do more than complete the work. As a result, we have educated our customers, residents and industry professionals alike, about proper tree planting and pruning techniques that promote tree health. We are excited about how those efforts could positively impact our community's trees.

Completed Work (As of 2011 Year-End Report)

Publications

When we rewrote our communications materials, our objective was to use consistent language across all publications and mediums. We knew that the tree pruning guide would serve as the foundational piece for all other publications. We tested draft materials with three focus groups whose members were relatively unfamiliar with our program and past written materials. The diverse perspectives represented by the members of each group proved to be extremely valuable—and not without varying opinions and active dialogue. At the recommendation of the tree panel, a public relations firm coordinated and conducted the focus groups.

The focus groups provided input on the new tree pruning guide and on the design and amount of content covered in the door hangers. KUB responded to their input and, with the help of the same public relations firm, incorporated their suggestions into new written materials. In addition to the tree pruning guide and door hangers, KUB added the following materials and components to its publications strategy:

- *Logo:* A public program as visible as Vegetation Management needs its own image, so we asked the public relations firm to help design a new program logo. The logo is incorporated throughout program materials.
- *Tree Pruning Photographs:* We took photos that illustrate the aesthetic impact different pruning techniques have on trees by showing typical tree species. Foresters use the photos that are in the back of the tree pruning guide to show customers the type of results that they can expect.
- *Promotions:* The focus groups also discussed how broadly to distribute the new tree pruning guide. They discussed pros and cons of mailing a copy to every customer and only providing copies on



request. They debated between keeping costs low for printing and postage and getting the message out as broadly as possible, and ultimately their feedback was to keep distribution costs low. In keeping with the Board's guidance to "consider associated costs and the impacts to ratepayers," we decided to promote as broadly as possible using KUB's existing communications channels. We promoted the tree pruning guide on the front page of our website, in the quarterly customer newsletter called *Connection*, as a message on customers' bills, in employee and retiree newsletters, in information that mails to new customers, on Facebook, and with posters in our payment centers. We emphasized that guides are available on the web and free copies are in KUB payment centers.

- *Notification Letters:* We revised notification letters to customers informing them of upcoming tree pruning to reflect language from the new guide and input from the panel.
- *Tree Planting Program Brochure:* We updated this brochure and added new replacement tree and shrub options.
- *Interactive Tree Pruning Map:* We started making street-specific information available on our online interactive tree pruning map.

Customer Service Improvements

In addition to improving our publications, we also made changes in customer service processes to improve the customer experience. We did this by making sure customers had ample advance notice that a crew was coming to their area and also by raising expectations of our call center representatives and contractors. Here are some of the projects we have worked on and information gathered responsive to customer service:

Advance Notification

- *Property Owner/Landlord Contact Information:* KUB typically mails pruning notices to the account holder at each address, which can be renters rather than owners. KUB committed, to the extent possible, to extend advance pruning notification to property owners as well as renters. During Phase 1, we reported that KUB's existing customer information system only stores mailing information from landlords who choose to participate in KUB's Property Management Plan (PMP). Those landlords receive advance notification of vegetation management work. Over the past year, KUB stepped up efforts to promote participation in the PMP. Future KGIS updates may provide better access to property owner information. [KGIS is the Knoxville, Knox County, KUB Geographic Information System.]
- *Automated Telephone Notification System:* KUB purchased and implemented an automated telephone notification system in summer 2011 to contact customers before vegetation management work occurs. Customers who have up-to-date phone numbers in our system receive calls asking them to look for a green envelope in their mailbox with information about upcoming vegetation management work in their area. Through December 2011, we have called about 17,000 customers, successfully reaching about 80 percent of all customers called after two attempts. The 20 percent not successfully reached result from a busy signal, a bad phone number in our system, no answer, or no answering system. Statistics show that 74 percent of the customers KUB mails a letter also successfully receive a phone

call. To ensure that KUB has accurate phone numbers in its system, we routinely conduct campaigns urging customers to update their numbers. Over the past year, we enhanced those efforts to improve call accuracy. [See updated information on page 20.]

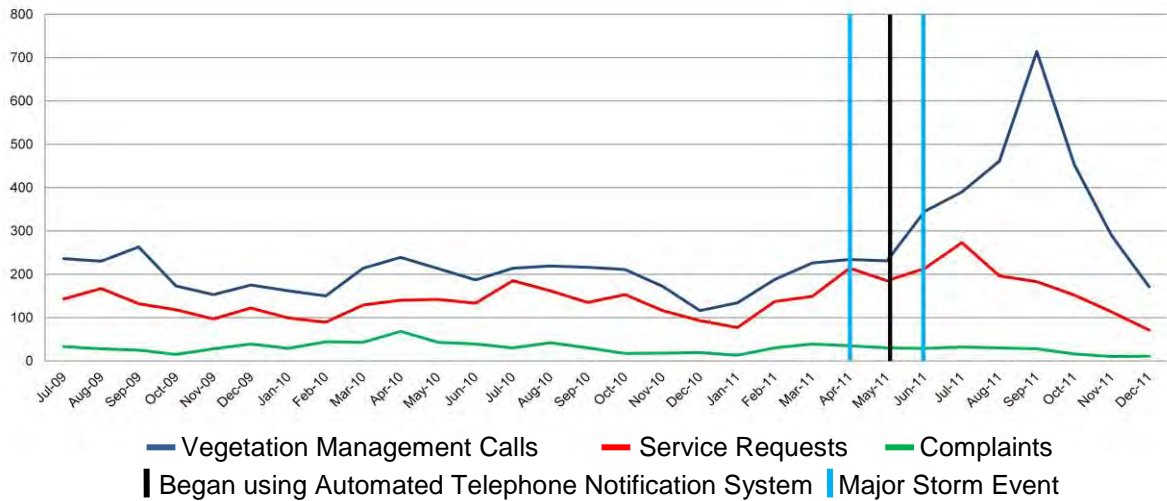
Call Center and Customer Satisfaction

We encourage our customers to send us their vegetation management questions and concerns before work begins, but it's only natural for questions to arise when our crews are in neighborhoods. We have implemented the panel's recommendations related to customer service, and we also started conducting a vegetation management customer survey to gauge how we're doing. Here is how we did it:

- *Employee Training:* KUB provided additional training to call center representatives, with instructions to direct customers with specific questions to a dedicated Vegetation Management phone line. KUB also hired a professional consultant who conducted in-depth training on interpersonal communication and conflict management with KUB's foresters and the Vegetation Management Customer Advocate.
- *Call Center Opt-Out Choice:* The panel recommended that KUB list vegetation management as a customer opt-out choice on the call center's automated switchboard. We determined not to do that after reviewing industry best practices and evaluating internal call center data. Industry best practices state that opt-out choices should be limited to three or four options and represent safety-sensitive issues as well as the types of calls with the highest call volume. Vegetation management calls are not generally safety-sensitive in nature, and our internal data shows that less than 1 percent of all calls (out of about 80,000 calls taken each month) to our call center concern vegetation management.
- *Customer Contact:* KUB increased field audits to ensure that the English-proficient member of the cutting crew is visible and available on site, as required by contracts. KUB reviews guidelines for the customer contact in contractor orientation meetings. *[Note: You can find more information about increased field audits in the Contracts and Contractors section on page 36.]*
- *Arborist Lasers:* KUB purchased lasers for foresters to demonstrate to customers where pruning cuts should be made. Foresters use the lasers when conditions are favorable. (The laser beam can be difficult to see on sunny days or if customers have poor eyesight.)
- *Customer Survey:* KUB recently implemented a phone survey that asks 30 customers a month from areas where pruning was recently completed how they think our Vegetation Management Program is doing. The customer survey has not been in place long enough to report statistically significant data at this time.

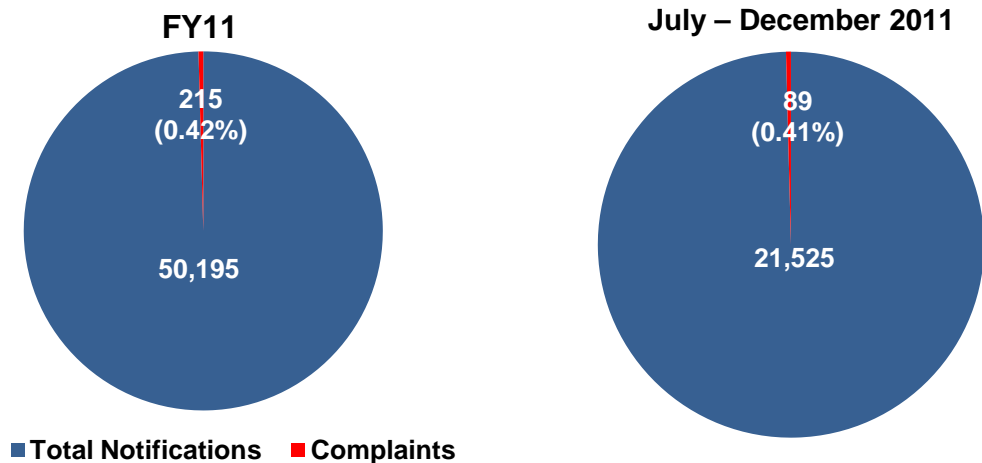
We regularly track and report customer contacts by comparing customer requests for vegetation management services, customer complaints, and the number of calls to the call center over the same time period. Many service requests result from customers who ask KUB to prune or remove trees. Here is the most recently compiled information and an explanation where trend lines significantly change:

All Vegetation Management Calls



Additionally, we track customer complaints compared to the number of customers notified by letter of upcoming circuit work. In FY11, we sent 50,195 letters notifying customers of upcoming circuit pruning, and we received 215 complaints on circuit work. For circuit work to-date in FY 12, we have sent 21,525 letters and received 89 complaints.

Complaints Limited to Circuit Work Compared to Total Customer Notifications



Public Education

- *Speaker's Bureau:* KUB offered to give presentations to over 100 homeowners associations this past year in an effort to proactively address concerns or questions about upcoming vegetation management work. In 2011, one homeowners association requested a presentation and one association requested KUB be present at its meeting to answer questions. KUB fulfilled both requests.
- *Videos:* KUB has completed the first video in a series of four intended to raise awareness of the Vegetation Management Program. The first video, published on YouTube, is called *Why and What We Prune*. Other videos currently in production are called *How We Prune*, *Customer Pruning Options*, and *Customer Notification and Customer Contact*. Each video will be available as a link from the tree pruning home page on www.kub.org. [Follow the Tree Pruning link under Tools and Tips.]
- *Tree Planting Education:* KUB made several efforts to raise awareness of proper tree planting techniques near utility lines:
 - *Letter:* KUB mailed a letter last spring to over 400 local builders, developers, landscape architects, and other target audiences encouraging proper tree planting.
 - *Newsletter:* KUB promoted tree planting information in an article in our March–April 2011 customer newsletter.
 - *Diagram:* With the help of a public relations firm and input from three focus groups, KUB reworked the visual presentation of the “plant the right tree in the right place” diagram.
 - *Local Events:* KUB distributed vegetation management materials at EarthFest and other similar community events.

Completed Work (Since 2011 Year-End Report)

There are updates to two items reported in the 2011 Year-End Report:

- *Automated Telephone Notification System:* As previously reported, KUB implemented an automated calling system in June of 2011. Concerns related to Federal Communications Commission (FCC) regulations caused us to review this practice and, as a result of that review, we are suspending outbound automated calling for now. This will allow us to update our processes to ensure they meet FCC requirements to obtain customer consent before an automated contact is made to a cell phone. We don't currently ask for such permission, and our systems do not distinguish between landlines and cell phones. Until we can make changes in our systems to accommodate those requirements, we must discontinue automated calling to avoid potential regulatory violations.
- *Customer Survey:* KUB previously reported that a monthly survey was being conducted to 30 randomly-selected customers. At that time, there were not enough data points to report statistically significant feedback. We have compiled about ten months of data since the survey began, and the report in Appendix 3 represents the information KUB has received.

KUB completed these items that were remaining at the time of the 2011 Year-End Report:

- *Nesting Birds and Animals:* KUB benchmarked 12 utilities (six in state and six out of state) and found that none had written policies related to nesting birds and animals. All KUB foresters completed training to increase knowledge about how to protect active nests and other wildlife while complying with state and federal laws.
- *Tree Planting Demonstration Project:* KUB partnered with the University of Tennessee to develop a demonstration project on the school's Agriculture Campus. The project was completed in the summer of 2012 and will help educate landscaping students, professionals, and the general public about planting the right tree in the right place.
- *Additional Videos on KUB Web Site:* Three additional videos described in the Public Education section above are now published to YouTube with links from the tree pruning home page on www.kub.org. [Follow the Tree Pruning link under Tools and Tips.] The videos are also incorporated into presentations that KUB provides to homeowners associations and other interested groups.
- *Property Owner/Landlord Contact Information:* KUB worked with various agencies to identify ways to get accurate and up-to-date property owner information. We found that although there are some opportunities to purchase data and validate against our own, the quality of purchased data did not justify the cost. [See additional information on page 18.]



Dispute Resolution

Completed Work As of 2011 Year-End Report	Phase	Completed Work Since 2011 Year-End Report	Phase
Appointed a Vegetation Management Customer Advocate (VMCA)	1		
Developed process and procedures and made the information available to customers	1		
Reviewed industry best practices	1		
Developed alternative dispute resolution tools	1		
Created a dedicated VMCA phone line, e-mail address, and online contact form in order to establish primary contact information for customers	1		
Developed a mediation agreement	1		
Communicated the right to appeal to customers	2		
Reviewed customer feedback and complaint patterns	1		

In December 2010, KUB appointed a Vegetation Management Customer Advocate (VMCA) to develop a process and tools necessary to carry out the new Dispute Resolution program. KUB's VMCA works with customers to explore resolutions that balance tree health and appearance with ensuring vegetation is a safe distance from KUB's electric lines.

Process for Resolving Issues

The first step of the dispute resolution process was to provide general guidance for customers on resolving concerns until a more thorough dispute resolution process could be defined. We posted the three-step process on our website shortly after the KUB Board endorsed the implementation strategies. The three steps below describe the process:

Step 1: Contact KUB

After customers receive notification that work is being scheduled in their area, they can contact KUB by calling Vegetation Management's extended-hours hotline or by e-mailing trees@kub.org.

Step 2: Discuss Options With a KUB forester

If customers want specific information about how their tree(s) will be pruned, we encourage them to speak with a KUB forester, and in many cases, the forester meets with the customer on the customer's property. At the meetings, foresters discuss the standard options available and answer any additional

questions. Most issues are resolved during this step, but if the customer rejects the standard options, the forester offers the dispute resolution process.

Step 3: Appeal to the VMCA

When an issue is not resolved during the second step, foresters refer customers to the VMCA. Any customer can contact the VMCA directly by calling a dedicated phone line or by filling out an online form requesting assistance.

Dispute Resolution Process

A customer referral or inquiry to the VMCA initiates the four-step dispute resolution process. Foresters or the VMCA give customers a newly developed handout that explains the process and the types of options the VMCA considers.

Step 1: Evaluate

The VMCA reviews the customer's experience to make sure that his/her interactions with KUB and/or its contractors followed KUB processes and professional standards. This is often completed over the phone.

Step 2: Review

The VMCA hears the customer's concerns as well as the KUB forester's position. In most cases, the VMCA requests a meeting with the customer to evaluate the situation in person to ensure all possible options can be considered.

Step 3: Consider and Discuss Options

Following the review, the VMCA provides a written summary to the customer of all remaining possible options, including the standard options covered by the forester. Additional options include mediation and a customer proposal to the VMCA. Discussion between the customer and the VMCA takes place during this step.

Step 4: Complete the Work

If the customer and the VMCA reach an agreement, KUB will schedule the work to be completed accordingly. Customers may be present during the work. If the VMCA and the customer do not reach an agreement and no more opportunities exist to work toward resolution, the VMCA notifies the customer that work will proceed to provide the necessary clearance that KUB must ultimately achieve.

Customer Interactions and Resolutions (As of 2011 Year-End Report)

So far, eight customers have completed the dispute resolution process. One other customer has a tree removal agreement that will be fulfilled during upcoming circuit work. Descriptions about each customer's dispute and resolution are listed here:

Customer 1

A KUB forester referred to the VMCA a customer who disputed pruning of a sugar maple with limbs in close proximity to electric lines.

Customer Position: The customer said that a contract forester informed him that pruning achieved was sufficient. The customer did not want further pruning on his property.

KUB Position: KUB's contract crew said that the customer asked them to suspend work. A KUB forester concluded that adequate clearance was not achieved.

VMCA Considerations: The VMCA offered the customer applicable standard options, an alternate pruning technique, and mediation.

Outcome: The customer agreed to an alternate pruning technique and a KUB contractor completed work accordingly. This customer told KUB that he was not aware that he had options before engaging in the dispute resolution process. His feedback was incorporated into communications materials.

Customer 2

A customer disputed the amount of pruning on a sugar maple and cherry tree with less than ten feet of clearance near a 69 kV transmission line [clearance required on this type of line is 25 feet]. He also disputed the amount of pruning on a sugar maple in conflict with a single-phase distribution line that requires ten feet of clearance.

Customer Position: The customer did not want the maximum clearances achieved but would agree to some pruning.

KUB Position: The customer declined all applicable standard options that the KUB forester offered, but KUB had to achieve clearance for safety and reliability.

VMCA Considerations: Because the maple tree on the 69kV line in discussion was fully mature and the observed growth rate of the limbs between the two pruning cycles left an adequate clearance, KUB offered to reduce the clearance requirement from 25 feet to 15 feet for limbs that had not been pruned before. Water sprouts would need to be removed at their point of origin due to tendencies for rapid regrowth and for the health of the tree. An alternate pruning technique used in combination with

a reduced clearance exception would further minimize the amount to be pruned. The VMCA also offered applicable options like removal, private pruning, and mediation.

The maple tree along the single-phase line exhibited the same maturity and observed growth rate as the other maple tree. Therefore, the VMCA also offered a reduced clearance and alternate pruning technique for that tree.

Outcome: The cherry tree required minimal pruning, and the customer and KUB forester achieved resolution according to KUB standards.

The customer agreed to combine the alternate pruning technique and reduced clearance options for both maple trees. KUB will observe the growth rate between the two cycles to determine if the reduced clearance was sufficient. A KUB contractor completed work as agreed.

Customer 3

A customer with a mature magnolia tree had an electric line running diagonally along the outer branches. The center of the tree's trunk was about six feet from the power line at its closest point. The standard clearance requirement for limbs is ten feet, but the trunk's close proximity to the line only allowed for up to six feet of clearance. KUB granted a reduced clearance for this slow-growing tree.

Customer Position: Pruning requirements for full clearance (even at the reduced clearance offered) did not offer the customer an aesthetically-pleasing result. The private annual-pruning option KUB offered required ongoing maintenance at the customer's expense. The customer declined all standard options, including an engineering solution to put the line underground.

KUB Position: When evaluated by the forester, the limbs were in contact with the neutral conductor and were in close proximity to the primary voltage conductor. This showed KUB that the growth rate of the limbs between the two pruning cycles did not allow for a further reduction in clearance.

VMCA Considerations: Following an on-site meeting with the customer and internal evaluation of other possible engineering solutions, the VMCA provided eight options to the customer. Two of those eight options attempted to satisfy both KUB clearance needs and the customer's aesthetic interests.

Outcome: The customer chose one of the VMCA's proposed options to pay to install a pole that would redirect the electric line away from the tree. KUB reduced the cost of the job by the amount it would have otherwise spent to remove the tree if the customer had selected a standard tree removal option. This solution redirects the line far enough away from the tree that future pruning should not be needed.

Customer 4

A customer contacted the VMCA following a forester's recommendation about the aesthetic impact pruning would have on an oak and cherry tree in her front yard in conflict with a 69 kV transmission line [requires 25 feet of clearance].

Customer Position: The customer disputed the amount of pruning required.

KUB Position: Given the close proximity of the oak tree's trunk, reduced clearance was not an option. The cherry tree required minimal pruning, which could not be avoided. There were no engineering solutions for this line, and the customer declined private pruning. That left lateral pruning as the best option for the trees.

VMCA Considerations: After seeing which limbs would need to be pruned using lateral pruning, the customer said that if any pruning was needed, she preferred removal and replacement.

Outcome: KUB removed the cherry and oak trees, and they are scheduled to be replaced with trees already selected by the customer. The VMCA made an exception to standard replacement options by offering to replace the large oak tree with another tall-growing species selected by the customer. This was an option because the customer's property had enough room for the tree to be planted far enough away from the power lines to avoid future conflict.

Customer 5

The VMCA contacted a customer who previously requested work be suspended until the public input process was finished and a dispute resolution process was established. The Bradford pear tree in dispute had limbs in contact with the power lines, and the trunk of the tree was within 10 feet of the lines.

Customer Position: The customer wanted KUB to round limbs over to achieve a uniform tree shape for aesthetics. The customer declined to privately prune limbs KUB would not prune, which would have achieved the desired, rounded-over shape, and initially declined all other standard options.

KUB Position: To efficiently manage costs and for the tree's health, KUB does not round over, or shape, trees for any customer.

VMCA Considerations: The VMCA evaluated all standard options and offered non-standard options, like mediation, as well. The customer and VMCA discussed an option that would combine an alternate pruning technique with the private pruning option to reduce the amount of pruning required and achieve the rounded-over appearance. The customer ultimately declined that option due to the extensive amount of pruning that would still be required to meet KUB's clearance requirement.

Outcome: The customer chose tree removal and the equivalent cash value of replacement.

Customer 6

Another customer disputed work required on a young, wild-growing sugar maple that was not part of maintained landscaping (the tree's trunk was growing through a chain link fence along a property line). The tree was growing directly underneath a power line and had not been previously pruned.

Customer Position: The customer did not want the sugar maple pruned.

KUB Position: Before the next pruning cycle, KUB expects that this sugar maple will be in direct contact with KUB's lines and will require severe pruning. KUB offered the standard options and recommended removal because the tree would require extensive pruning in the future.

VMCA Considerations: At a meeting on the customer's property, the VMCA reiterated the forester's concerns about the future pruning needs for the tree and offered to remove it and replace it with another tall-growing species far enough away from the power lines that future pruning would not be needed.

Outcome: The customer seriously considered removal and replacing with a sugar maple but opted for removal and accepted the equivalent cash value of replacement instead.

Customer 7

The VMCA contacted a customer after the customer requested that a contractor suspended a V-cut prune on a maple tree located directly beneath a power line.

Customer Position: The customer did not want the maple pruned and refused to discuss the matter further with KUB foresters.

KUB Position: The tree is located directly underneath power lines, and KUB must prune the limbs to prevent electric safety hazards and power outages.

VMCA Considerations: Because the customer refused further contact with the forester, the VMCA attempted to resolve the situation. During the VMCA's initial phone call to discuss the proposed pruning, the customer refused to engage in the dispute resolution process. The VMCA followed up with a written letter explaining KUB would complete the work according to standard pruning practices if the customer did not contact the VMCA to further discuss other listed options.

Outcome: The customer was not willing to engage in the process, so KUB completed pruning as stated in the written correspondence to the customer.

Customer 8

The customer contacted the VMCA using the online dispute resolution and appeals form regarding an oak tree on her property that was already pruned. She also asked for compensation to cover some of the costs to remove a dead tree on her property that she previously asked KUB to remove. KUB's Vegetation Management Department denied her request, and she appealed to the VMCA.

Customer Position: The customer requested that KUB remove a tree that was a threat to our lines and her personal property. The tree sustained further damages during the summer storms, and the customer determined that it required immediate removal. She requested \$600 to compensate for some of her costs to privately remove the tree. The customer also stated that an oak tree on her property was not pruned properly.

KUB Position: The customer placed the tree removal request for the first tree a few months before circuit pruning work was scheduled, so KUB planned to review the request at the start of the pruning work. The customer had the tree removed without waiting for a decision from KUB. Foresters evaluated the oak tree and determined that it was properly pruned according to the lateral pruning method. KUB did not receive advance notification of any customer concerns regarding that tree.

VMCA Considerations: The VMCA conducted a thorough investigation and found a deficiency in the customer service process concerning the customer's initial request for tree removal. We addressed the process issue before this investigation, during implementation of the panel's recommendation to improve the coordination between the vegetation management hotline and foresters.

Outcome: The VMCA denied the customer's request to compensate because there was no agreement in place for tree removal and also because the improved vegetation management process would not have resulted in a removal any sooner (although if the communication had been clearer, the customer would have known more about the schedule). Ultimately, KUB is not responsible for contributing to private contractor costs for removal.

The VMCA offered to remove the oak tree, since the customer was unhappy with the appearance after pruning and had declined other available options. The customer and the VMCA reached agreement to remove the tree, and KUB gave the customer the equivalent cash value of replacement.

Customer 9

A customer requested that KUB remove a pine tree in conflict with a service line on his property. The tree's health was deteriorating due to the impact of drought and beetles. A KUB forester previously declined the customer's request due to KUB's policy of not maintaining vegetation around service lines. The customer appealed to the VMCA.

Customer Position: The customer asked KUB to remove the tree in conflict with his service line.

KUB Position: Service lines provide power to individual customers (as opposed to multiple customers). That is why KUB's *Rules and Regulations* state that it is the customer's responsibility to maintain vegetation near those lines.

VMCA Considerations: The VMCA verified KUB's policy regarding the customer's responsibility to maintain service lines. If KUB started maintaining customer service lines, the miles of lines to maintain would increase by about 40 percent, subsequently increasing the associated costs to the program. That is a cost KUB is not able to assume, as it would substantially increase the number of trees pruned by KUB and potentially result in more customer dissatisfaction. Additionally, other utilities benchmarked do not remove large trees along service lines.

Outcome: The VMCA declined the customer's request to remove the pine tree because of KUB policy and the Vegetation Management Program's objective to consider costs. The VMCA offered for KUB to lower the service line at no charge for the customer's private contractor to safely remove the tree.

Customer Interactions and Resolutions (Since 2011 Year-End Report)

Since the last report, nine additional customers have completed the dispute resolution process. Descriptions about each customer's dispute and resolution are listed here:

Customer 10

The customer has four large maple trees in her front yard that are over-mature and in decline. She did not want any pruning to occur—despite the fact that she had contacted the fire department when a branch near the line caught fire. (The fire put itself out by the time first responders arrived.)

Customer Position: The customer had general concerns about being taken advantage of because of her age. She also had concerns about losing foliage that provided her non air-conditioned house with shade.

KUB Position: Despite multiple attempts by foresters' to present options to her, they were unable to come to agreement. Because the customer told a forester that arcing had recently occurred, KUB had no choice but to achieve clearance from the lines.

VMCA Considerations: The VMCA discussed the matter with the customer over the phone and found that she was suspicious of KUB's explanation for pruning her trees. The customer agreed to meet with a third-party tree expert who could provide an independent opinion on the trees. At the meeting, the third-party expert evaluated the health of the trees and indicated that they were dying and that the limbs being as close to the electric lines as they were created an unsafe situation for her and her trees.

Outcome: The customer agreed to pruning at a reduced clearance that was offered due to the fact that her trees were over-mature and in a state of decline. The crew made careful pruning cuts with the customer and a forester present to direct the work.

Customer 11

The customer had a young, wild-growing red maple tree directly below the electric line. He refused all standard options provided by the forester.

Customer Position: The customer explained that years ago KUB removed a tree and planted a replacement tree that later died. He explained that he did not want any work to be completed on his property.

KUB Position: Red maple trees grow quickly, and this tree was already within the utility maintenance zone. The tree was anticipated to grow further into the lines and require severe pruning in the future. Removal was the best option for the tree according to best-practices.

VMCA Considerations: The VMCA contacted the customer and met with him on his property. Because there were very few practical options for this tree, the VMCA offered removal with either a cash equivalent of a replacement tree or a replacement maple tree, a non-standard offering and larger species, which could be planted elsewhere on his property.

Outcome: The customer chose to accept the cash equivalent of the replacement tree, and the tree was removed.

Customer 12

The customer refused lateral pruning for three Bradford pear trees and one other tree on his property. He requested that KUB top the trees instead.

Customer Position: The customer preferred the aesthetic result of topped trees better than laterally pruned trees. The customer refused all other standard options provided by the forester.

KUB Position: KUB does not top or round over trees. The policy was upheld by the Tree Trim Policy Review Panel and later endorsed by the KUB Board of Commissioners.

VMCA Considerations: The VMCA met with the customer on his property and discussed options for the trees. The only non-standard option available for three of the trees was an alternate pruning technique. Because the fourth tree was declining in health, the VMCA recommended removal and offered a replacement tree.

Outcome: The customer agreed to the alternate pruning technique for the three Bradford pears and to removal and replacement for the fourth tree.

Customer 13

The customer has various tall-growing hardwoods, including hickory, box elder, and sycamore trees planted along a 69kV electric line with 13kV line underneath. The required clearance between the trees and the lines was 15–20 feet.

Customer Position: The customer refused all options and did not want KUB to complete any pruning on his property. The customer chose to facilitate dialogue between his attorney and KUB's attorney instead of exercising the dispute resolution process.

KUB Position: All trees within the utility maintenance zone are pruned to achieve the established clearance requirements using the standard options provided to all customers.

VMCA Considerations: KUB's attorney worked with the VMCA to offer the customer an option to use an alternative pruning technique.

Outcome: The customer agreed to the alternative pruning and work was completed.

Customer 14

The customer requested that KUB remove two maple trees that were pruned on his late mother's vacant property under the condition that KUB remove the stumps. The customer did not like the aesthetic impact of pruning.

Customer Position: The customer wanted KUB to remove the trees but refused to allow the work unless KUB removed the stumps or procured stump-grinding services on his behalf. The customer refused a cash equivalent of replacement trees that could be used toward private stump grinding, arguing that the cash equivalent would not cover the cost.

KUB Position: KUB does not grind stumps, and the practice was upheld by the Tree Trim Policy Review Panel and later endorsed by the KUB Board of Commissioners due to cost and associated liabilities. KUB's *Procurement Guidelines* and State law do not allow KUB to procure services for individual customers. KUB foresters offered the cash equivalent of replacement trees with no intent or obligation to completely cover stump grinding costs for the customer.

VMCA Considerations: The VMCA explained that KUB would not grind the stumps nor procure those services for him. The VMCA also received a quote from a private company that offered stump grinding services for the two trees below the amount offered in the replacement tree value. When the VMCA passed along the information, the customer did not believe that the quote was valid. The VMCA offered several options, including several combinations of cash value replacement trees and planted replacements; mediation; and customer proposal.

Outcome: After several weeks, the customer decided to accept the cash value of the replacement trees after removal.

Customer 15

The customer agreed to have three large trees on his property removed and wanted the wood removed after work was complete.

Customer Position: The customer said that KUB did not operate under an informed consent policy once he learned that the agreement he signed stated that the wood would be left on his property.

KUB Position: KUB's standard practice does not provide for wood removal, and the practice was upheld by the Tree Trim Policy Review Panel and later endorsed by the KUB Board of Commissioners due to cost.

VMCA Considerations: The VMCA explained that KUB would not remove the wood because the signed agreement specified "wood is owner's responsibility."

Outcome: No further action was required.

Customer 16

The customer has a hackberry tree along a primary line and was concerned that the V-cut required would cause the tree to split.

Customer Position: The tree required a significant V-cut, and the customer proposed that KUB top, or round over the tree, instead to prevent the tree from splitting.

KUB Position: KUB does not top or round over trees. The policy was upheld by the Tree Trim Policy Review Panel and later endorsed by the KUB Board of Commissioners. The pruning cuts needed would remove regrowth since the last pruning cycle when the same V-cut was made.

VMCA Considerations: The VMCA explained that KUB would not round over the trees but that we would work with him to minimize pruning by using a combination of lateral and alternative pruning cuts.

Outcome: The customer agreed to alternative pruning in particular cases and was present with a forester while the work was being conducted.

Customer 17

The customer had multiple trees along two different spans of electric lines on his property. Most of the necessary pruning was the same pruning that was completed last cycle.

Customer Position: The customer's primary concern was that pruning would reduce the amount of shade to his yard and home. He understood the need for pruning and was not opposed to KUB achieving clearance, but he wanted KUB to top the trees, or round them over, for aesthetic purposes.

KUB Position: KUB does not top or round over trees. The policy was upheld by the Tree Trim Policy Review Panel and later endorsed by the KUB Board of Commissioners.

VMCA Considerations: The VMCA explained that KUB would not round over the trees but that we would work with him to minimize pruning by using a combination of lateral and alternative pruning cuts.

Outcome: The customer agreed to alternative pruning in particular cases and was present with a forester while the work was being conducted.

Customer 18

The customer has a conifer that has grown into the utility maintenance zone of a three-phase line for the first time. The species is not commonly found on KUB's system, and its limb structure is unlike most conifer species.

Customer Position: The customer said that the tree's limbs were so light-weight that they would not cause an issue for the power lines.

KUB Position: Limbs in close proximity to the lines are considered an electrical safety hazard, regardless of the limbs' weight. Safe clearance was necessary.

VMCA Considerations: A different KUB forester accompanied the VMCA on a site visit and provided a technical explanation about the tree's limb structure. The tree qualified for a tree-growth regulator (TGR) application.

Outcome: The customer gained a clearer understanding that the proper cuts being made at the axials would not require a significant amount of pruning. The customer was satisfied with the explanation. KUB also explained the potential benefits of a TGR application to the customer, and the customer agreed to participate in the TGR pilot.

Contracts and Contractors

Completed Work As of 2011 Year-End Report	Phase	Completed Work Since 2011 Year-End Report	Phase
Evaluated contractor training requirements and implemented improvements	1-2	Benchmarked best practices for protecting nesting birds/animals	3
Reinforced to contractors to suspend work at customer's requests	2	Evaluated best practices for contractor training	3
Offered training with Spanish interpreters	2	Evaluated the inspection process	1-3
Hired two additional foresters	2		
Conducted training that addressed Special Status Tree pruning	1		
Required authorization to take equipment on customer property	1		
Reevaluated benchmarks and methods to ensure contractor performance	1-3		
Evaluated parameters for contract extensions	1-2		
Hosted appreciation breakfasts for tree crews	1		
Provided customers option to be present during routine pruning	2		

Contractor performance is a vital component of the Vegetation Management Program because contractors make pruning decisions in the field and routinely interact with customers. Panel recommendations regarding contracts and contractors focused on selection, training, oversight/accountability, and customer service.

Completed Work (As of 2011 Year-End Report)

Contractor Selection

As a municipal utility, KUB must offer all qualified contractors equal opportunity to perform work on our system by soliciting bids and awarding those bids as defined by law. To ensure contractors meet a set of predetermined requirements before they can work on KUB's system, KUB has made improvements to the prequalification process for vegetation management contractors. The prequalification process includes a review to ensure the contractor has the ability to provide a fully trained workforce to meet KUB's expectations.

Contractor Training

Although contractors are required to provide a fully trained workforce and to conduct their own technical training, part of the necessary training is KUB specific. KUB refreshed this training to reflect changes endorsed by KUB's Board last year. KUB holds annual meetings with contract tree crews to review work requirements. As an additional measure, KUB contracts require contractors to hold their own annual

training on ANSI A300 pruning standards and safety. KUB included the following items at orientation meetings to address the panel's input:

- *Orientation Materials:* KUB revised its materials distributed at orientation meetings to incorporate program changes and emphasize expectations.
- *Spanish Interpreters:* KUB scheduled interpreters for orientation meetings that had Spanish-speaking participants.
- *Customer Requests to Suspend Work:* KUB reviewed instructions for crews to suspend work as soon as it can be safely stopped when customers request it, so customers can schedule an appointment with a forester to discuss options. KUB also provided crews copies of KUB's *Customer Guide* to distribute to customers who have questions or concerns.
- *Special Status Trees:* KUB informed contractors of the SST program and the unique marking for SSTs, which is currently being piloted.
- *Equipment on Property:* KUB required contractors to obtain written authorization to take heavy equipment across customer property.
- *Public Recognition:* KUB provided contractor appreciation breakfasts.

Staffing and Contractor Oversight

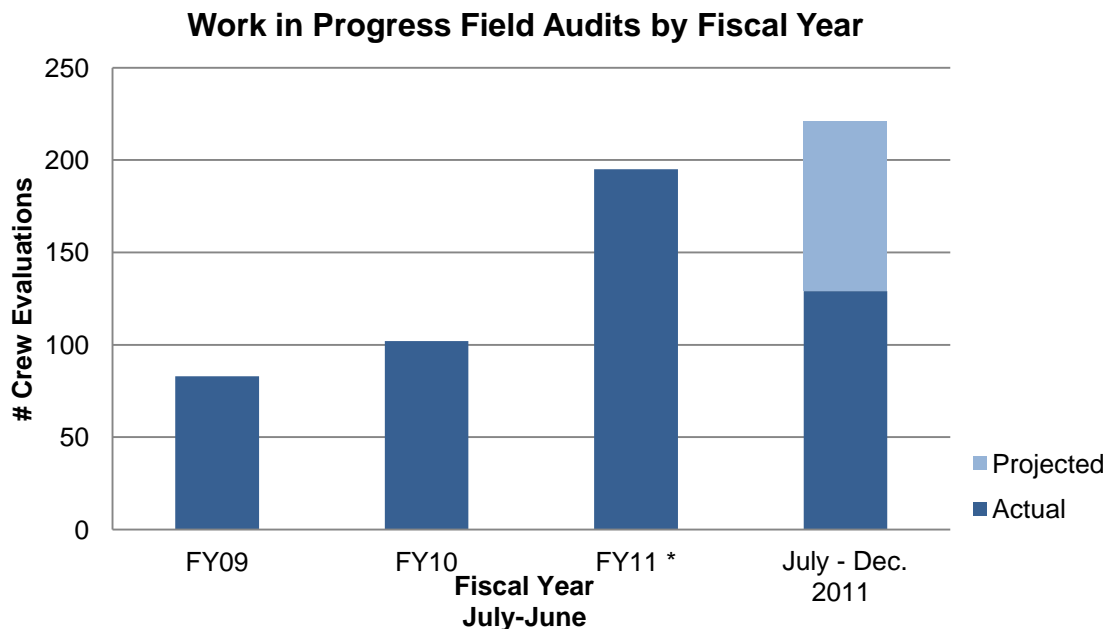
To implement changes recommended by the panel and increase contractor oversight, KUB increased its full-time staff and is encouraging professional development among its foresters:

- *Hiring:* KUB added two full-time, experienced foresters to its staff. This step brings the total number of professional foresters operating the program to five, compared to just one prior to 2007. Additionally, KUB reassigned an analyst to help track increasing amounts of data and meet reporting obligations.
- *Staff Training:* KUB foresters earn continuing education credits to maintain their arborist certifications. KUB sent one forester to a national industry conference in 2011 to help KUB stay apprised of industry best practices, and a KUB forester participates in regular meetings with representatives from East Tennessee regional utilities.
- *Contractor Oversight:* The increased number of professional staff for KUB's Vegetation Management Program allows for closer contractor supervision for both tree crews and contract foresters.
- *Forester Checklist:* KUB and contract foresters use a checklist to ensure that they consider each and every customer option. When applicable, they communicate those options to the customer, and the forester notes that the option was verbally offered and explained. Supervisory review of those checklists ensures quality and helps to identify staff coaching opportunities.
- *Forester Meetings:* With a larger team in place, additional communication is essential to ensure quality and consistency. To that end, KUB implemented bi-weekly meetings for the KUB and contract foresters.

Contractor Performance Management

KUB tracks contractor performance in the areas of safety, quality, customer satisfaction, and on-time completion of work. The following initiatives contribute to a rigorous performance management system for KUB's Vegetation Management Program:

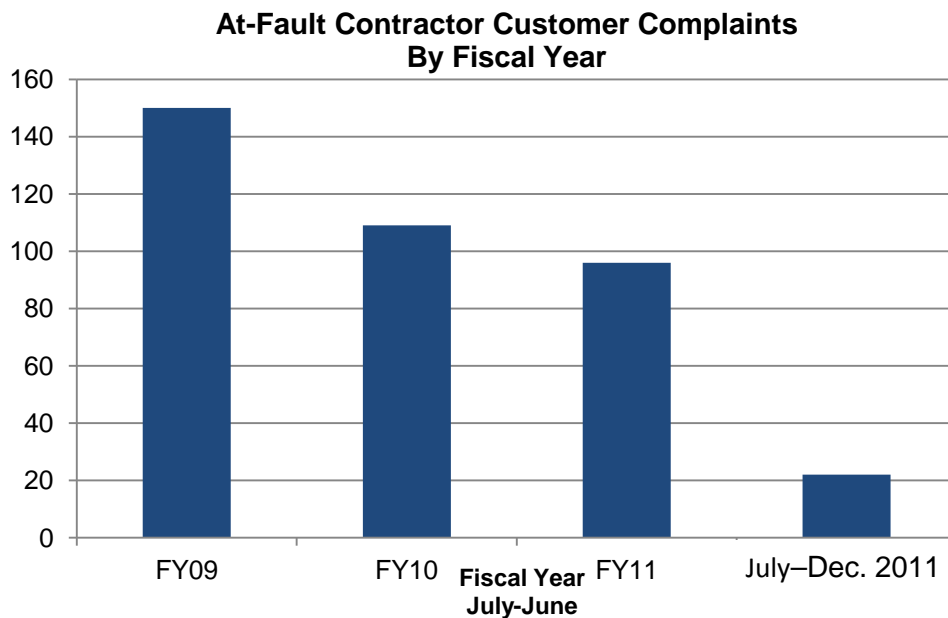
- *Enhanced Performance Management System:* The process improvement team formed in response to panel recommendations evaluated the contractor performance system and identified areas for improvement. KUB uses this tool to provide objective performance data, which are reviewed with contractors quarterly, or more often when data reveal a concern that should be addressed quickly. Contractors with unsatisfactory performance are not allowed to bid on future work.
- *Increased Field Audits:* After the panel submitted its recommendations, KUB implemented more frequent inspections of work in progress to ensure crews are following the new pruning standards, have an English-speaking customer contact on site, and are meeting safety expectations. KUB takes corrective action when auditors observe noncompliance, and KUB is incorporating that data in the new performance management system. [Note: The data presented below represent formal crew evaluations conducted by inspectors, not the total number of times inspectors observe or monitor work in progress.]



*Panel submitted recommendations to KUB in 2Q FY11

- *Increased Review of Customer Complaints:* Customer complaints where contractors are found to be at-fault are a key performance indicator. KUB's routine business process now includes a thorough review of all customer complaint data. KUB efforts continue to focus on reducing those numbers. The following chart illustrates a continual decline in contractor at-fault customer complaints related to KUB's scheduled maintenance pruning over the last few years. In fiscal year 2009, the number of at-

fault complaints was 150, and fiscal year-to-date, there have been 22. KUB reviews the details of each individual complaint with the contractors during performance review meetings.



Contract Length

The panel recommended that KUB award vegetation management contracts for longer periods of time to standardize pruning practices. Currently, KUB’s tree pruning contracts are either lump-sum or unit-priced. Our evaluation showed that it is not feasible to award longer-term contracts for lump-sum work, but KUB can and does award contract extensions to unit-priced contractors based on good performance.

The panel also recommended that KUB increase the level of pre-planning, which is required for unit-priced contracts. We are evaluating opportunities to achieve an increase, while keeping in mind our objective to consider associated costs and the impact on ratepayers. Full pre-planning on KUB’s extensive electric system would result in a significant cost increase for KUB’s ratepayers.

Completed Work (Since 2011 Year-End Report)

During Phase 3, KUB completed these outstanding deliverables:

- *Contractor Training:* KUB revised materials to reflect program changes, including instructions for the crews to stop work at customers’ requests and then provide a Customer Guide. KUB also developed and distributed a new photographic guide to help crews identify slow-growing species that are to be pruned for reduced clearance. Additionally, KUB researched industry practices and resources related to contractor training and identified opportunities to enhance the training. KUB now includes the International Society of Arboriculture (ISA) training video called, *Utility Pruning: A Video Guide*. KUB also uses Spanish-speaking interpreters when non-English-speaking contractors participate in

training. KUB added a contract requirement for each company to have an ISA certified arborist on staff for crew training.

- *Inspection Process:* KUB hired two additional foresters prior to the 2011 Year-End Report, bringing the number of full-time foresters to five (not including the contract foresters also working on KUB's system). These additions strengthen KUB's supervisory role. Field audits of contract crews' work in progress have increased by almost a third since the panel submitted its recommendations two years ago. Inspection data is analyzed monthly with statistical control charts. In addition to inspection of work completed by tree crews, KUB implemented quality control audits for KUB foresters to evaluate work performed by contract foresters.
- *Nesting Birds and Animals:* KUB benchmarked 12 utilities (six in state and six out of state) and found that none had written policies related to nesting birds and animals. All KUB foresters completed training to increase knowledge about how to protect active nests and other wildlife while complying with state and federal laws.

Additional Information

We hope that this information helps clearly explain improvements KUB has implemented to its Vegetation Management Program. We would also like to thank the Tree Trim Policy Review Panel members once again for the time and effort they contributed to help us evaluate and improve our program. The program changes incorporated so far have resulted in a much stronger program that benefits our customers and our community.

See Appendix 1 for a side-by-side comparison of the panel's recommendations, KUB's response, and the timeline for completion. Appendix 2 includes the periodic reports KUB has made to the Board on the progress of implementation. Appendix 3 has customer survey data., and Appendix 4 has samples of communications materials.

Tree Trim Policy Review Panel

Jim Bletner	Doug Irwin	Larry Silverstein
Cindy Bradley	Montina Jones	David Vandergriff
Dwain Burke	Brenda Palmer	Luis Velázquez
Jennifer Gihring	Barbara Pelot	<i>Bill Elmore, Ex Officio</i>
Sara Hedstrom Pinnell	Scott Romines	
Randy Humble	Jamie Rowe	

Vegetation Management Oversight Committee Composition as of December 2011

Mintha Roach, President & CEO
Bill Elmore, Executive Vice President & COO
Eddie Black, Senior Vice President
Susan Edwards, Communications and Community Relations
Mike Bolin, System Operations
Derwin Hagood, Process Improvement
Dennis Upton, Procurement
Jamie Davis, Procurement
Pam Jordan, Communications
Leslye Hartsell, Community Relations
Dale Maddox, Customer Tracking System
Mike Patterson, System Operations
Lynn Keck, System Operations, Supervisor
Elizabeth Hannah, System Operations, Lead Forester
Betsy Ford, Vegetation Management Customer Advocate

GENERAL RECOMMENDATIONS AND RESPONSES

	Panel Recommendation	Response	Timeline and Status
1	It is our recommendation that KUB also adopt this community vision and set of objectives.	<p>Agree.</p> <p>KUB recommends adoption of the panel's community vision and objectives.</p> <p>KUB also recommends that an additional objective be adopted to ensure that program improvements are implemented cost effectively to balance the needs of the program with the costs to ratepayers.</p>	<p>Phase 1</p> <p><i>Complete. The KUB Board of Commissioners approved Resolution 1234 in November 2010 in response to this recommendation.</i></p>
2	It is recommended that a qualified citizen's committee shall be reconvened by KUB three years after adoption of the Panel's recommendations to review the effectiveness of the recommendations in meeting the seven guiding objectives.	<p>Agree.</p>	<p>Phase 3</p> <p><i>Complete. KUB convened the committee one year early because the implementation activities concluded earlier than expected. A qualified citizen's committee reviewed the program's effectiveness with respect to the guiding objectives established by the Panel and the Board of Commissioners.</i></p>

AESTHETICS, IMPLEMENTATION, AND PREVENTATIVE ACTIONS

	Panel Recommendation	Response	Timeline and Status
1	Continue pruning trees using proper lateral pruning techniques to ensure the health of trees as outlined in the ANSI A300 Part 1 national standards.	Agree.	Complete
2	Strive to ensure pruning does not exceed 25% of the tree canopy in one growing season per ANSI Standards	Agree.	Phases 1 – 3 (See #3)
3	<p>Strive to identify extreme cases where removal of more than 25% of the canopy is deemed by KUB to be necessary for safety and reliability. KUB will make a good faith effort to meet with these property owners on site, discuss the options including tree removal, and document the contact and/or agreement in writing.</p> <ul style="list-style-type: none"> In specific cases, minimize the removal of excess canopy by offering the customer subordinate pruning. 	<p>Agree.</p> <p>On pre-planned circuits, KUB and/or its contractors will provide notice to customers in cases where it is recognized that more than 25 percent of a tree's canopy will need to be removed to maintain safe, reliable service.</p> <p>On circuits that are not currently pre-planned, KUB will evaluate options for increasing the level of pre-planning and other options for providing notice to customers in cases where it is recognized that more than 25 percent of a tree's canopy will need to be removed. While options are being evaluated, customers may request a pre-planning appointment prior to work on their property.</p> <p>When customers respond to KUB's notification attempts (on pre-planned and non pre-planned circuits), options will be discussed. Negotiated agreements for work other than KUB's standard pruning will be in writing with a copy provided to the customer.</p>	<p>Phases 1 – 3</p> <p><i>Complete. KUB added this to a door hanger to specifically notify customers when this is applicable.</i></p> <p><i>Complete. To notify more customers of cases where more than 25 percent of a tree's canopy will be pruned, KUB increased the level of pre-planning. By the end of this fiscal year, KUB will have increased pre-planning by 40 percent since the time the Tree Trim Policy Review Panel began meeting.</i></p> <p><i>Complete. KUB offers pre-planning meetings to all customers.</i></p> <p><i>Complete. Negotiated agreements for customer options that vary from standard work are in use in the field.</i></p>

AESTHETICS, IMPLEMENTATION, AND PREVENTATIVE ACTIONS

	Panel Recommendation	Response	Timeline and Status
		KUB will offer the option of subordinate pruning when applicable, as described in the “special Companion Publication to the ANSI A300 Part1 Best Management Practices Utility Pruning of Trees” with a signed customer acknowledgement that KUB will return in one to four years to make proper lateral pruning cuts. The customer must select this option in advance, and it may also be considered during the dispute resolution process.	<i>Complete. A negotiated agreement for subordinate pruning is in use in the field.</i>
4	After conducting a feasibility study, consider the use of tree growth regulators on certain trees.	Agree. KUB will begin a tree growth regulator feasibility study in the spring of 2012. KUB will evaluate the results of the study over three to four years of growth before making a final determination.	Phase 3 <i>Complete. KUB completed a tree growth regulator (TGR) feasibility study and developed guidelines for piloting TGR use.</i>
5	The tree replacement program is a positive element of KUB's vegetation management program. Enhance it by: <ul style="list-style-type: none"> planting only low growing and disease resistant species near power lines such as Red Crabapple, White Crabapple, Redbud, Dogwood and Purple Leaf Plum; expanding the list of power line approved species to provide a wider variety of trees available to customers including crape myrtle that matures at less than 20 feet; and offering larger replacement trees with a more reasonable diameter to customers. 	Agree. KUB will continue to offer only low-growing species and will provide larger replacement trees in the current planting season. KUB will offer disease-resistant varieties to the extent they are available. By the fall 2011 planting season, KUB will offer a wider variety of low-growing species, including the low-growing crape myrtle.	Complete. <i>The Tree Planting Program now includes 11 tree species and 4 shrub species. Replacement trees are 4 to 7 feet tall at planting and are disease-resistant when available.</i> Phase 2 <i>Complete. The Tree Planting Program offers a wider variety of low-growing trees and now includes a choice of shrubs and low-growing crape myrtle.</i>
6	Encourage new developments to install underground utility lines.	Agree. Over 95 percent of new residential developments have underground electric service. KUB will continue to promote underground electric service in new developments.	Complete

AESTHETICS, IMPLEMENTATION, AND PREVENTATIVE ACTIONS

	Panel Recommendation	Response	Timeline and Status
7	<p>Expand the Special Status Tree program to include special status areas and for them to include the following:</p> <p>a. Qualification Criteria With the assistance of independent tree professionals, KUB will develop qualification criteria and an application process for Special Status Trees and/or Areas (SSTs). Qualification factors shall include those in the current SST program as well as other factors (e.g. cultural or historical) that give a tree or area extraordinary significance for a property owner or the community.</p> <ul style="list-style-type: none"> KUB will solicit assistance from an independent third party to make decisions on SST applications. <p>b. Identifying Special Status Trees or Areas</p> <ul style="list-style-type: none"> KUB will actively solicit SST applications from customers throughout its service area. KUB will work with government agencies and others to identify SSTs on public property. KUB will integrate trees identified as State Landmark, Historic, or Heritage Trees and memorial trees that have been planted as part of the Legacy Parks Foundation into the SST program. KUB foresters and contractors will also be encouraged to identify SSTs. <p>c. Policies for Pruning Special Status Trees or Areas</p> <ul style="list-style-type: none"> KUB and SST owners will work together to develop a tree-specific plan for achieving appropriate clearances. Example solutions include insulated wire, underground utilities, moving wires to another 	<p>Agree.</p> <p>With the change in the standard for overhang removal (See #8), the benefits of some elements of the current SST program have been extended to many more trees.</p> <p>However, KUB will expand its SST program, which will include KUB and/or its contractors proactively identifying qualifying SSTs. A communication plan will be developed.</p> <p>In the meantime, customers may continue to request an SST evaluation.</p>	<p>Phase 1 <i>Complete.</i></p> <p>Phase 3 <i>Complete. All customers may request a pre-planning consultation and an exception to standard pruning. Foresters are trained to pro-actively identify exceptions to reduce pruning where appropriate. For these reasons, a program aimed at evaluating and tracking trees labeled as "Special Status" is no longer necessary.</i></p> <p>Phase 1 <i>Complete. All customers may request a pre-planning consultation with a forester, and all requests for KUB to grant an exception to standard pruning are evaluated.</i></p>

AESTHETICS, IMPLEMENTATION, AND PREVENTATIVE ACTIONS

	Panel Recommendation	Response	Timeline and Status
	<p>part of the property, and narrower clearances. Solutions will depend on the species, health, and hazard rating of the tree as well as financial feasibility (considering KUB and customer contributions).</p> <ul style="list-style-type: none"> • KUB will implement quality assurance/quality control procedures to ensure that all foresters are aware of available alternatives and implement them equitably. • In cases where KUB and the property owner cannot come to an agreement, KUB will solicit input on the proposed solutions from an independent tree professional. <p>d. Tracking Special Status Trees and Areas</p> <ul style="list-style-type: none"> • KUB will develop a GIS database to track SSTs. This will be used to generate maps for public outreach, KUB foresters, contractors, and crews in the field. 		
8	<p>Eliminate the removal of limbs above and below the stated trim zones (“ground –to- sky pruning”) on all distribution system lines except for those limbs that are dead, damaged, diseased, or have weak limb structure or are identified to be at risk by a KUB forester. Adopt this standard for transmission lines with the exception that all overhanging limbs will be removed. (The trim zone for transmission lines is defined as a circle with a 25-foot radius around the lines. The trim zone for distribution lines is defined as a circle with a ten-foot radius around the lines.</p>	<p>Agree. KUB will not remove established overhanging limbs on distribution lines above the minimum 10-ft. clearance zone, unless limbs are dead, diseased, weak, or possess other failure risk characteristics. New small diameter branches resulting from recent growth may be pruned to maintain safe and reliable service.</p> <p>KUB agrees to continue to remove all overhanging limbs above transmission lines.</p>	<p>Phases 1 – 2 <i>Complete. These program changes have been incorporated into contracts, and work is being conducted as described.</i></p>

AESTHETICS, IMPLEMENTATION, AND PREVENTATIVE ACTIONS

	Panel Recommendation	Response	Timeline and Status
		<p>These program changes will be effective immediately for all properties pre-planned by KUB or contract foresters. For properties that are not pre-planned, program changes will be effective after revised guidelines are developed for tree crews and contracts are renewed. In the meantime, any customer may request a pre-planning appointment prior to work on their property.</p> <p>For branches below the lines, KUB will adjust its clearance requirements as described in #18.</p>	
9	Consider the health, species, growth rate and shape of the tree whenever possible in determining the extent of pruning (especially for those species of trees in the tree replacement program designated as suitable for planting)	Agree.	<p>Phase 1</p> <p><i>Complete. Exceptions are offered for low- and slow-growing species.</i></p>
10	<p>KUB should adopt a continuous process improvement program to refine and improve procedures regarding the vegetation management program and customer satisfaction. The following elements should be included in the program.</p> <ul style="list-style-type: none"> • Conduct case studies of policies that experience numerous breakdowns to pinpoint the problems with policy implementation. • Improve KUB's data management system so that customer problems, inquiries, and complaints are handled more effectively on the front end to prevent mistakes and cases "falling through the cracks". Include routine internal audits to track success in resolving complaints. • Conduct a tree growth regulator feasibility study, develop a policy based on the results, and seek feedback from an independent party before beginning the implementation process. 	<p>Agree.</p> <p>KUB will initiate a process improvement program for vegetation management and customer satisfaction.</p> <p>KUB will implement a data management system for Vegetation Management.</p> <p>KUB will begin a tree growth regulator feasibility study in the spring of 2012. KUB will evaluate the results of the study over three to four years of growth before making a final determination.</p>	<p>Phase 1</p> <p><i>Complete. A process improvement team developed metrics and monitors performance to support continuous improvement.</i></p> <p>Phase 1</p> <p><i>Complete. KUB maintains a database to track customer interactions. KUB is implementing an improved system that is customized to track concerns and special requests.</i></p> <p>Phase 3</p> <p><i>Complete. KUB completed a tree growth regulator (TGR) feasibility study and developed guidelines for piloting TGR use.</i></p>

AESTHETICS, IMPLEMENTATION, AND PREVENTATIVE ACTIONS

	Panel Recommendation	Response	Timeline and Status
11	KUB should factor conditions such as prolonged drought, excessive rain and other adverse conditions into tree pruning decisions.	Agree that it is appropriate to benchmark best practices among other utilities related to factoring drought/environmental conditions into vegetation management programs.	Phase 3 <i>Complete. KUB consulted twelve utilities (six in state and six out of state). None had policies to suspend work for environmental conditions/drought.</i>
12	KUB should evaluate the advantages of bringing the pre-planning function in-house.	Disagree. KUB has already evaluated this option, and found that bringing the current level of pre-planning and auditing in-house is not feasible due to an additional estimated annual cost to ratepayers of \$400,000.	Complete
13	When the base of the tree is located outside the easement, KUB shall discuss with the property owner the extent to which the tree will be pruned and the property owner will be given the right to choose between lateral pruning and subordinate lateral pruning.	Agree. KUB will provide notice of options to all customers who have trees to be pruned inside and/or outside the utility maintenance zone.	Phase 2 <i>Complete. All options are currently listed in the Customer Guide.</i>
14	Coordinate scheduling of pruning so that pruning near different phase lines within the same neighborhood is done at the same time instead of at different times.	Agree. Over the next three to four year maintenance cycle, KUB will incorporate into its contracts and begin to implement scheduling changes so that pruning along 13kV distribution lines that overlap 69kV subtransmission lines is performed at the same time. KUB will also begin to implement scheduling changes so that pruning along electric circuits fed from the same substation is performed at the same time, to the extent possible. That will reduce duplication of work on individual properties and reduce the frequency of work within the same neighborhood. It may not be feasible to perform all work within the same neighborhood at the same time in cases where different electric substations supply power to different parts of a neighborhood.	Phases 2 – 3 <i>Complete and On-going. KUB is adjusting its schedule annually to prune overlapping lines and circuits fed from the same substation at the same time.</i>
15	Pruning and removal of vegetation around poles and guy wires should be kept to a minimum especially in	Agree. KUB will implement changes that will no longer require a standard five-foot	Phases 1 – 2 <i>Complete. These</i>

AESTHETICS, IMPLEMENTATION, AND PREVENTATIVE ACTIONS

	Panel Recommendation	Response	Timeline and Status
	landscaped areas taking into consideration KUB's safety requirements. Limit the pruning around down guy wires to only that vegetation that is in physical contact with the guy wires or anchor.	<p>clearance zone around down guys. Vegetation around down guys will be pruned or removed only in cases where it is in physical contact with or threatening to damage the down guy.</p> <p>For the safety of the public and utility workers, KUB will remove vegetation within a ten-foot radius around poles, unless the vegetation appears to be part of the customer's maintained landscaping. Before removing landscape quality vegetation, KUB will discuss options with the customer.</p> <p>These program changes will be effective immediately for properties pre-planned by a KUB or contract forester. For properties that are not pre-planned, program changes will be effective after revised guidelines are developed for tree crews and contracts are renewed. Any customer may request a pre-planning appointment prior to work on their property.</p>	<i>program changes have been incorporated into contracts, and work is being conducted as described.</i>
16	Increase the level of pre-planning of circuits such that it approaches 100% as soon as possible	<p>Disagree.</p> <p>One hundred percent pre-planning is not feasible due to an additional annual estimated cost to ratepayers of \$1.1 million if a contractor is used or \$1.9 million if in-house KUB personnel are used.</p> <p>However, KUB will evaluate and consider opportunities to increase pre-planning</p> <p>In the meantime, any customer may request a pre-planning appointment prior to work on their property.</p>	<p>Phase 3 <i>Complete. (See #3.)</i></p> <p>Phase 1 <i>Complete. These program changes have been incorporated into contracts, and work is being conducted as described.</i></p>
17	Change the current 5-foot clearance around insulated "residential voltage" street light conductors to zero clearance	<p>Agree.</p> <p>KUB will implement changes to no longer require a standard five-foot clearance zone around street light conductors. Vegetation around street light conductors will be pruned only in</p>	<p>Phases 1 – 2</p> <p><i>Complete. These program changes have been incorporated into contracts, and work is being conducted as</i></p>

AESTHETICS, IMPLEMENTATION, AND PREVENTATIVE ACTIONS

	Panel Recommendation	Response	Timeline and Status
		cases where it is threatening to damage the street light conductor. These program changes will be effective immediately for all properties pre-planned by a KUB or contract forester. For properties that are not pre-planned, program changes will be effective after revised guidelines are developed for tree crews and contracts are renewed. Any customer may request a pre-planning appointment prior to work on their property.	<i>described.</i>
18	Reduce the required clearance around the neutral line from 10 feet to 5 feet in all maintained residential areas. In all unmaintained areas where wild growing brush and tall growing trees are not removed, the clearance will remain ten feet.	Agree. This program change will be effective after revised guidelines are developed for tree crews and contracts are renewed.	Phase 2 <i>Complete. These program changes have been incorporated into contracts, and work is being conducted as described.</i>

CUSTOMER COMMUNICATION AND PUBLIC EDUCATION

	Panel Recommendation	Response	Timeline
1	<p>Prior to tree and vegetation removal, discuss with property owners using improved visual communication techniques.</p>	<p>Agree.</p> <p>KUB will include information and visuals in customer notification materials to convey what type of vegetation removal will be performed as part of all routine maintenance. Written materials will be presented to a focus group for review.</p> <p>KUB will request permission from customers whenever KUB proposes to remove trees larger than six inches in diameter at breast height and/or any vegetation that appears to be part of the customer's maintained landscaping. Exceptions may be made in cases where a customer cannot be identified or an immediate hazard exists.</p>	<p>Phase 2</p> <p><i>Complete. Three focus groups reviewed the Vegetation Management Customer Guide and KUB incorporated their input with a professional public relations firm's assistance.</i></p> <p><i>Complete. Tree removal agreements are in use in the field for removal of vegetation as described.</i></p>
2	<p>Improve communication with property owners prior to pruning by utilizing the following techniques whenever practical:</p> <ul style="list-style-type: none"> • Provide inspectors/crews with photo books illustrating typical tree species and pruning results when trees are located under or near power lines. • Use photographs whenever possible to better illustrate likely pruning results on significant cuts. • Equip personnel with "arborist lasers" to better illustrate to customers where cuts will be made. • Put illustrations of the silhouettes of an evergreen tree and two deciduous trees demonstrating distinct branching patterns on door hangers upon which the KUB arborist shall mark to show the proposed pruning. KUB shall retain a copy and give a copy to the property owner and the cutting crew prior to the work. <p>Any agreements made with property owners regarding tree or</p>	<p>Agree.</p> <p>KUB will incorporate photos in materials that illustrate typical tree species and pruning shapes. KUB will also help illustrate the progressive impact of pruning through photographs that will be taken over several growing cycles.</p> <p>Arborist lasers may be used by KUB and contract foresters to better illustrate where cuts will be made.</p> <p>Negotiated agreements for work other than KUB's standard pruning will be in writing with a copy provided to the customer.</p>	<p>Phases 1 – 3</p> <p><i>Complete. Photographs as described are incorporated into the Vegetation Management Customer Guide.</i></p> <p><i>Complete. Photos depicting the progressive impact to pruning have been posted to KUB's website.</i></p> <p>Phase 2</p> <p><i>Complete. Arborist lasers are used by foresters when outside lighting and circumstances permit.</i></p> <p>Phase 2</p> <p><i>Complete. Negotiated agreements for customer options that vary from standard work are in use in the field.</i></p>

CUSTOMER COMMUNICATION AND PUBLIC EDUCATION

	Panel Recommendation	Response	Timeline
	vegetation removal or pruning should be in writing with three copies provided to KUB, the property owner, and the cutting crew.		
3	Give customers a choice of whether they want a replacement tree planted on their property or want to donate a tree for planting in pre-identified public spaces.	Agree. KUB will develop this option and incorporate it into its tree replacement program.	Phase 1 <i>Complete. KUB's Tree Planting Program brochure includes this option.</i>
4	Continue to give customers the option to have their own trees pruned at their expense and increase communication concerning the availability of the option. KUB must approve the outcome and the owner must use a company that employs a qualified line clearance arborist	Agree. Customer notification materials currently highlight this option, but KUB will make modifications to more clearly emphasize its availability. KUB and contract foresters will increase communication about this option. Agreements for customers to have their own trees pruned at their expense will be in writing with a copy provided to the customer. The agreement should state the minimum clearance required, provide a deadline for work to be completed, and mention that KUB will complete the pruning if the work is not completed according to the agreed upon standard or by the deadline.	Phase 2 <i>Complete. The Vegetation Management Customer Guide lists the private pruning option. Foresters offer this option when meeting with customers and use a checklist to document the customer's choice.</i> Phase 1 <i>Complete. Private Pruning guidelines are listed on the respective negotiated agreement.</i>
5	Use call-back surveys with customers after they have had pruning or tree removal on their property.	Agree. A survey will be provided to customers.	Phase 2 <i>Complete. KUB is conducting a monthly customer survey.</i>
6	Improve the customer relations program as it relates to vegetation management: <ul style="list-style-type: none"> • Train and empower call center personnel to answer only frequently asked questions. • Refer all other inquiries directly to the vegetation management staff. 	Agree. KUB will provide additional training to call center representatives. Customers will also be encouraged to visit www.kub.org to review additional information. Call Center representatives will direct customers with specific questions to a	Phase 1 <i>Complete. Conducted training for call center representatives.</i> <i>Complete. Customers are directed to a dedicated VM</i>

CUSTOMER COMMUNICATION AND PUBLIC EDUCATION

	Panel Recommendation	Response	Timeline
	<ul style="list-style-type: none"> Provide a customer opt out for vegetation management calls to the main switchboard. <p>KUB's goal should be to emphasize customer service and customer respect, ensuring a customer friendly attitude is present in all communications with property owners.</p>	<p>dedicated Vegetation Management phone line.</p> <p>KUB will research industry best practices for identifying opt-out items on the main switchboard.</p> <p>KUB will modify its current training materials to reinforce customer service expectations.</p>	<p><i>phone line.</i></p> <p><i>Complete. Research shows that the call volume and level of safety-sensitivity of Vegetation Management calls do not warrant an opt-out selection.</i></p> <p><i>Complete. Modifications have been made to call center reference materials.</i></p>
7	<p>All KUB communications must provide notice that is timely enough to provide adequate warning and gives the property owner a fair amount of time to respond to the notice before action is taken. Notice must be given to property owners that KUB proposes to take action which could significantly affect their property and convey what rights the owner has to contest or appeal that proposed action. KUB must provide notice to property owners at least two weeks prior to conducting vegetation management activity on the property. The notice shall describe the dispute resolution process and opportunity to discuss pruning options with a KUB forester.</p>	<p>Agree.</p> <p>KUB provides customers advance notice with a letter and doorhanger. KUB will add a telephone notification using customer telephone numbers that are available within its customer information system. KUB will evaluate ways to obtain additional telephone numbers. Written materials will advise customers of the availability of pruning and dispute resolution options and how to find more information.</p>	<p>Phase 2</p> <p><i>Complete. An automated telephone notification system was fully implemented but has been suspended due to regulatory concerns.</i></p> <p><i>Complete. A phone number collection campaign has been conducted over the course of several months. KUB will continue to encourage customers to update their phone numbers.</i></p> <p><i>Complete. A Vegetation Management Customer Guide describes pruning and dispute resolution options.</i></p>
8	<p>Door hangers should contain sufficiently detailed information and diagrams, such as those in the vegetation management notification letter, to provide reasonable notice to property owners as to what is going to happen on their property.</p>	<p>Agree.</p> <p>KUB will test written materials, including door hangers, with an independent focus group and revise as necessary.</p>	<p>Phase 1</p> <p><i>Complete. Three focus groups reviewed the Vegetation Management Customer Guide and KUB incorporated their input with a professional public relations firm's assistance.</i></p>
9	<p>Revise the KUB notification letter sent to property owners prior to vegetation management activities to be more concise with bolder type. Ensure it includes accurate</p>	<p>Agree.</p> <p>KUB will test newly drafted written materials with an independent focus group and revise as necessary.</p>	<p>Phase 1</p> <p><i>Complete. The revised notification letter incorporates information</i></p>

CUSTOMER COMMUNICATION AND PUBLIC EDUCATION

	Panel Recommendation	Response	Timeline
	information about key issues such as clearances, wood removal, special status trees or areas, tree removal and replacement, dispute resolution and causes of outages.		<i>from the Vegetation Management Customer Guide, which was reviewed by three focus groups with a professional public relations firm's assistance.</i>
10	Use a three-color paint system to mark trees. Different colors would indicate prune, remove or special status tree. Paint on trees should not be permanent and size and location of the paint should be no larger than necessary to communicate with the cutting crew.	Agree. Any tree requiring work will be marked with tree paint. Special Status Trees requiring work will be marked uniquely.	Phase 1 <i>Complete. Trees requiring work are marked with tree paint. KUB also uniquely marks trees as a signal to crews that special instructions apply to the tree.</i>
11	Use a robo call system to remind customers their trees will be pruned.	Agree. KUB will implement and use a robo-call system for Vegetation Management.	Phase 2 <i>Complete. An automated telephone notification system was fully implemented but its use has been suspended due to regulatory concerns.</i>
12	When pruning standards, practices, or implementation change, these changes should be communicated to the customer, particularly in face-to-face meetings. Develop a disclaimer that their trees may not look the same as the last time they were pruned.	Agree. KUB will develop a vegetation management guide that provides an overview of current standards and practices. Newly drafted written materials, including the disclaimer, will be presented to the focus group for consideration.	Phase 1 <i>Complete. Three focus groups reviewed the Vegetation Management Customer Guide and KUB incorporated their input with a professional public relations firm's assistance.</i>
13	Use marketing or public relations professional to evaluate current written documents distributed to customers to ensure language is easy to understand, consistent and an appropriate length. Add photographs and diagrams to the material. Ensure written materials and information on the website are consistent.	Agree. A public relations professional will assist with drafting new materials and present them to a focus group for review.	Phase 1 <i>Complete. Three focus groups reviewed the Vegetation Management Customer Guide and KUB incorporated their input with a professional public relations firm's assistance.</i>
14	Put the phrase "See back for comments" on yellow door hanger in bold type. Delete the box and word "other."	Agree.	Phase 1 <i>Complete. All door hangers have been completely revised with input from three focus groups. This phrase is incorporated.</i>

CUSTOMER COMMUNICATION AND PUBLIC EDUCATION

	Panel Recommendation	Response	Timeline
15	Attempt to notify both the property owners and renters that pruning will take place. (Include undeveloped property.)	<p>Agree.</p> <p>KUB will notify all customers and known property owners based on data retained by KUB's customer information system.</p> <p>Contact information for property owners of undeveloped property is not available in KUB's customer information system, but KUB will evaluate ways to obtain it.</p>	<p>Phase 1 <i>Complete. KUB's process notifies customers as described.</i></p> <p>Phase 3 <i>Complete. KUB's research did not identify a cost-effective option that provided readily usable and accurate owner information.</i></p>
16	Unless the homeowner requests to keep the wood when trees are cut, it will be hauled away. Clarify and communicate the policy regarding wood removal.	<p>Disagree.</p> <p>KUB's current program does not include stump grinding or wood removal due to an additional estimated annual cost to ratepayers of about \$780,000. A change is not recommended.</p>	Complete
17	Take steps to make sure the English proficient member of the cutting crew is more visible and more readily available on site.	Agree.	<p>Phase 2 <i>Complete. Conducted field audits to ensure that contract crews have an English-speaking member on site who is wearing a customer contact vest.</i></p>
18	<p>Raise awareness of issues associated with tree planting near utility lines by:</p> <ul style="list-style-type: none"> • Developing a demonstration project that illustrates tree friendly/utility line landscape area and demonstrate the appropriate distance from power lines and trim zone; • Developing a web-based and printed tree pruning manual to educate property owners about proper and improper pruning; and • Producing a short video that illustrates pruning and storm repair crews at work, followed by power-line-friendly landscaping tips. The primary goal is to encourage proper landscaping by focusing on the following message: "How property 	<p>Agree.</p> <p>KUB will evaluate opportunities to raise awareness of proper tree planting techniques as they relate to utility lines, including a demonstration project, web-based information, and videos.</p> <p>KUB will develop a vegetation management guide that provides an overview of all current standards and practices.</p>	<p>Phases 2 – 3 <i>Complete. KUB sponsored a demonstration project with the University of Tennessee to educate the public about planting the right tree in the right place.</i></p> <p><i>Complete. KUB published four videos to the web.</i></p> <p>Phase 1 <i>Complete. Three focus groups reviewed the Vegetation Management Customer Guide, and KUB incorporated their input with a professional public relations firm's assistance.</i></p>

CUSTOMER COMMUNICATION AND PUBLIC EDUCATION

	Panel Recommendation	Response	Timeline
	owners can help make KUB's job safer." Show the video on local cable access, post it on the KUB website, use it in outreach events, and provide DVDs to neighborhood associations, schools and other groups.		
19	Evaluate the use of social media.	Agree.	Phase 1 <i>Complete. KUB is using Facebook and YouTube as communication tools for Vegetation Management and other programs.</i>
20	When there is a request for service, educate developers, builders, homebuilders associations and landscape contractors about planting the right tree in the right place and the impact of vegetation on electric infrastructure. Provide point of sale information to nurseries about power line friendly landscaping.	Agree. KUB will evaluate opportunities to raise awareness to these targeted audiences, including MPC and the appropriate City and County inspection departments, of proper tree planting techniques as they relate to utility lines.	Phase 2 <i>Complete. KUB mailed a letter in April 2011 to over 400 local developers, landscape architects, and other target audiences regarding proper tree planting techniques.</i>
21	Provide educational material to, and work more closely with, neighborhood associations and county and municipal officials about all aspects of the vegetation management program.	Agree. KUB will annually notify all known homeowners associations to offer presentations on various topics, including vegetation management. When pruning is scheduled, another notification will be made to the homeowners association contact to offer a customized presentation on vegetation management work to be conducted in that area. Additionally, when pruning is scheduled for a neighborhood that has previously requested a presentation, contacts will be made to offer follow up presentations in advance of the upcoming work.	Complete <i>This is a standard procedure overseen by KUB's Community Relations Department.</i>
22	Use every opportunity to promote the vegetation management program at all public outreach events.	Agree. KUB will provide vegetation management program information at applicable public outreach events it participates in.	Phase 1 <i>Complete. KUB took information to applicable outreach events in 2011.</i>
23	Develop an on-going public education program about sound	Agree.	Phase 3

CUSTOMER COMMUNICATION AND PUBLIC EDUCATION

	Panel Recommendation	Response	Timeline
	<p>arboricultural practices to include activities such as:</p> <ul style="list-style-type: none"> • A “Did You Know” series for both print and broadcast media; • Educational materials indicating a pretty tree is not necessarily a healthy tree and an ugly tree can be healthy; • A simple and focused message emphasizing the top priority is safety and health of the tree; • Advertisements about proper tree pruning to run on cable television; and • Promotion of the KUB speaker's bureau to civic organizations; and • Conduct road shows about KUB's vegetation management program. 	<p>KUB will consider options to improve these messages in the community.</p> <p>KUB will develop a vegetation management guide that provides an overview of current standards and practices.</p>	<p><i>Complete. Messages have been incorporated in the Vegetation Management Customer Guide, www.kub.org, and videos have been produced.</i></p> <p>Phase 2</p> <p><i>Complete. Three focus groups reviewed the Vegetation Management Customer Guide and KUB incorporated their input with a professional public relations firm's assistance.</i></p>
24	At kub.org , the tree trim map should show and name more streets and neighborhoods and give specific dates as to the timing of when pruning will take place. All information should be updated regularly.	<p>Agree.</p> <p>KUB will enhance its interactive tree pruning map.</p>	<p>Complete</p> <p><i>Street-level information is available on the online tree pruning map.</i></p>
25	Information should be included in all KUB publications and door hangers concerning the need to be alert for nests when pruning trees. Encourage customers to report them to KUB.	Agree that it is appropriate to benchmark best practices among other utilities regarding the protection of nesting birds and animals, in compliance with applicable laws.	<p>Phase 3</p> <p><i>Complete. KUB consulted 12 utilities. Each utility confirmed that it manages tree work near nests on a case-by-case basis, as is KUB's current approach. All KUB foresters completed training to increase knowledge about how to protect nesting birds and other wildlife while complying with state and federal laws.</i></p>
26	All KUB outreach materials are to be available in writing from KUB upon request.	Agree.	<p>Complete</p> <p><i>Materials are available on the KUB website, in payment centers, from foresters working in the field, and are mailed upon request.</i></p>

CUSTOMER COMMUNICATION AND PUBLIC EDUCATION

	Panel Recommendation	Response	Timeline
27	All communications, oral and written, must state the true relationship between tree pruning and reliability (outages). Communications should use accurate statements regarding the causes of outages.	Agree. KUB will use accurate statements and data in its communications.	Complete
28	Given the variability and uncertainty in weather, data collection, and data interpretation, KUB should discontinue the use of graphs to justify the tree pruning program.	Agree. Weather conditions and other variables can impact the apparent outcome on reliability and can be interpreted in different ways when presented in charts and graphs. As part of the effort to use a public relations professional to evaluate newly drafted documents, the best means of communicating this information will be evaluated further. To the extent it is determined that charts and graphs are appropriate, KUB will attempt to disclose the variables and help customers better understand the information being illustrated.	Phase 2 <i>Complete. Graphs and charts were not necessary for use in the Vegetation Management Customer Guide and therefore were not evaluated.</i> <i>KUB attempted to clearly describe charts and graphs used in this report and determined that they appropriately illustrate program improvements.</i>
29	All current KUB vegetation management policies and practices should be published, consistent in all publications, available at kub.org and updated regularly.	Agree. KUB will develop a vegetation management guide that provides an overview of all current standards and practices. The most recent guide will be available at kub.org and/or in printed format on request.	Phase 2 <i>Complete. A Vegetation Management Customer Guide was developed and published, and includes all current standards and practices. Three focus groups reviewed the materials and KUB incorporated their input with a professional public relations firm's assistance. The Guide is available at kub.org and in payment centers, is distributed by foresters, and is mailed upon request.</i>

DISPUTE RESOLUTION

	Panel Recommendation	Response	Timeline and Status
1	<p>KUB should establish an Ombudsman/Customer Advocate office to oversee KUB vegetation management complaints and dispute resolution and guide customers through the process. (See Document C in Appendix for recommended flow chart) The Ombudsman/Customer Advocate should report to the CEO, have detailed knowledge of the vegetation management program, and possess a customer-friendly attitude. The Ombudsman/Customer Advocate, under the direction of the CEO, will develop the appropriate process and procedures necessary to interface existing processes with new position and final recommendations approved by the Board of Commissioners. It is recommended that responsibilities include the following:</p> <ul style="list-style-type: none"> • documenting all customer contacts during dispute resolution; • providing regular and periodic reports to senior management and the KUB Board of Commissioners; • ensuring that appropriate operations, customer service and vegetation management staff and management are involved in dispute resolution; • tracking disputes and complaints from initiation through resolution; • serving as the customer's primary contact during dispute resolution; • sending the customer a letter confirming that the dispute has been resolved; • coordinating the two-step appeal/mediation process with an independent panel and/or a professional mediator (see recommendation #2); 	<p>Agree. The CEO will appoint a Vegetation Management Customer Advocate (VMCA), who will report to the CEO.</p> <p>The VMCA, under the direction of the CEO, will develop the appropriate process and procedures necessary to interface with existing processes.</p> <p>In addition to the recommendations, KUB will:</p> <ul style="list-style-type: none"> • Review patterns of complaints and make recommendations for changes in policies or procedures that would reduce or eliminate recurring complaints. • Research industry best practices as part of ongoing program development, including customer feedback as a part of the process. 	<p>Phase 1 <i>Complete. The VMCA was appointed in December 2010.</i></p> <p><i>Complete. Processes and procedures have been developed and are incorporated with the Vegetation Management Program's process documentation.</i></p> <p><i>Complete. Complaint data is reviewed and evaluated regularly by the Vegetation Management Oversight Committee.</i></p> <p><i>Complete. Feedback is considered and incorporated into vegetation management processes.</i></p>

DISPUTE RESOLUTION

	Panel Recommendation	Response	Timeline and Status
	<ul style="list-style-type: none"> having the authority to implement and supervise the dispute resolution process for vegetation management including the ability to initiate the two tier process at any point deemed necessary; and Having the authority to suggest alternative methods of pruning in those rare cases where a resolution cannot be reached. 		
2	When a dispute cannot be resolved by KUB, the Ombudsman/Customer Advocate shall call together an independent mediation panel comprised of three volunteer independent parties with some level of expertise in vegetation management who are not affiliated with KUB in any way. This panel is an option the property owner may use and/or the dispute can be referred to a professional mediator who will work with KUB and the property owner. If a resolution is unachievable by this process, a dispute may be taken to the KUB Board of Commissioners.	<p>Agree. The VMCA will have the authority to use alternative dispute resolution tools that are mutually agreeable as a means of resolving customer concerns and disputes including, but not limited to, the use of alternative pruning methods and the use of independent parties with a demonstrated expertise in vegetation management and/or professional mediation.</p> <p>If the VMCA is not able to achieve a mutually agreeable resolution with a customer, then a dispute may be taken to the KUB Board of Commissioners.</p>	<p>Phase 1</p> <p><i>Complete. The VMCA routinely makes non-standard tools available such as alternative pruning, mediation, customer proposals, and third-party expert review.</i></p> <p><i>Complete. All Board meetings are publicly noticed and open to the public.</i></p>
3	Establish a two-tier process, first establishing with the customer what will be cut, and second, determining how to fairly work with the customer if they are still unhappy when the trim is complete.	Agree. Assuming the customer has not reached agreement on a pruning plan with VM staff, the VMCA will be responsible for assisting the customer in reaching agreement on the pruning work (first tier), continuing through completion, including any concerns that remain after pruning work is finished (second tier).	<p>Phase 1</p> <p><i>Complete. The process is followed as described and is incorporated with the Vegetation Management Program's process documentation.</i></p>
4	It is crucial that the KUB notification letter, door hangers, public presentations, and kub.org, include detailed information regarding appeal rights and the dispute resolution process. The letter should make clear that this information is available at kub.org or can be mailed to a customer upon request.	Agree. Customer communications will provide notice that the customer has the right to appeal if there are concerns about vegetation management activities on their property.	<p>Phase 2</p> <p><i>Complete. The Vegetation Management Customer Guide incorporates this option. The guide is available on the web, in KUB payment centers, and from foresters/crews in the field. Foresters also distribute a flyer that outlines the dispute resolution process to customers who want to</i></p>

DISPUTE RESOLUTION

	Panel Recommendation	Response	Timeline and Status
			<i>appeal. The KUB web site also has a dedicated page and online form for customers to engage the VMCA.</i>
5	Conduct a customer quality audit with a representative sample of property owners after work is completed. (Consider using a survey similar to Document B in the Appendix.)	Agree. A survey will be provided to customers.	Phase 2 <i>Complete. KUB is conducting a monthly customer survey.</i>
6	All KUB employees, contract forester employees e.g. ACRT, and cutting crew contractors who have direct contact with property owners, should have copies of the Dispute Resolution process for distribution at all times, and should voluntarily offer it to property owners when questions are raised, or at any other appropriate time.	Agree.	Phase 2 <i>Complete. The Vegetation Management Customer Guide incorporates this option. The guide is available on the web, in KUB payment centers, and from foresters/ crews in the field. The KUB web site also has a dedicated page and online form for customers to engage the VMCA.</i>
7	KUB should establish a definitive process by which it receives complaints by mail, email, telephone, or in person and track how those complaints are acted upon with all data summarized and distributed to senior management and the Board of Commissioners to provide for accountability.	Agree. KUB will provide for tracking and reporting of customer interactions in one repository. KUB will hold internal oversight meetings with members of senior management, and KUB will also distribute quarterly progress reports.	Phase 1 <i>Complete. KUB maintains a database to track customer interactions. KUB is implementing an improved system that is customized to track concerns and special requests.</i> <i>KUB also held regular oversight meetings with members of senior management. KUB distributed quarterly and year-end progress reports to the Board in 2011 and 2012.</i>
8	Unless a question/answer is on a KUB FAQ list, all vegetation management calls should be transferred to a vegetation management representative.	Agree. KUB will review its vegetation management materials for call center representatives to ensure they are current, and will also ensure that call handling procedures are clear.	Phase 2 <i>Complete. Modifications have been made to call center reference materials.</i>

DISPUTE RESOLUTION

	Panel Recommendation	Response	Timeline and Status
9	If the policy is to cease work when a problem occurs, that policy should be enforced for all KUB customers regardless of location.	Agree. KUB will reinforce in its contractor training a directive that crews are required to suspend work at the request of a customer, as soon as their work activity may be safely stopped, until an agreement can be made with the customer about how to proceed.	Phase 2 <i>Complete. This practice is currently being used and negotiated agreements are being used to support this work. Contractor training includes review of the process for customer requests and instructions for stopping work and distributing the customer guide.</i>
10	A tracking process for intake forms should be dated, signed and monitored. If the issue is a complaint, an intake form, with contact information and the nature of the complaint, should be completed as soon as possible and tracked for each complaint received specifically to the contractor and cutting crew.	Agree. KUB will provide tracking and reporting of customer interactions in one repository.	Phase 2 <i>Complete. KUB maintains a database to track customer interactions. KUB is implementing an improved system that is customized to track concerns and special requests.</i>
11	If an on-site meeting is requested or required to resolve the issue, that should take place as soon as possible. At that on-site meeting, the dispute resolution process must be made clear orally and in writing. All agreements made at that meeting should be put in writing with a copy given to the customer and a copy attached to the intake form.	Agree. KUB will put agreements reached as part of the dispute resolution process in writing. Also, if an onsite meeting with a customer occurs, the dispute resolution process will be provided.	Phase 1 <i>Complete. Negotiated agreements, customer letters, and e-mails are being used to document dispute resolutions in writing.</i> <i>Complete. The Vegetation Management Customer Guide is given to customers at forester meetings and incorporates the dispute resolution process. Additionally, the VMCA developed written material to provide to customers.</i>

CONTRACTS AND CONTRACTORS

	Panel Recommendation	Response	Timeline and Status
1	<p>Increase the training currently being provided to crews who actually do the pruning.</p> <ul style="list-style-type: none"> • Develop materials for crews who are not highly literate. • Train crews using interactive hands-on training methods. Include communication skills as a training module for contracts. • Focus on electric hazards and safety, pruning mechanics, tree identification, and KUB policies and procedures, including customer relations and communication. • Train crews to identify common tree species. • Train crews to stop pruning when the customer says to stop and to distribute written information with contacts, telephone numbers and dispute resolution processes. 	<p>Agree.</p> <p>KUB currently has a qualification, orientation, and oversight process. KUB will evaluate contractor training requirements and identify areas for improvement.</p> <p>KUB will incorporate into contractor training a directive that crews are expected to suspend work at the request of a customer, as soon as their work activity may be safely stopped, until an agreement can be made with the customer about how to proceed. Contractors will be instructed to provide copies of KUB's vegetation management guide to concerned customers.</p>	<p>Phase 2</p> <p><i>Complete. KUB revised the qualification process for contractors. KUB revised its contractor training material in the Spring of 2011 and included interpreters for training sessions with non-English speaking crew members. KUB has also revised the rating system that manages contractor performance.</i></p> <p><i>Complete. This practice is currently being utilized and negotiated agreements are being used to support this work. Contractor training includes review of the process for customer requests and instructions for stopping work and distributing the customer guide.</i></p>
2	<p>A test in both English and Spanish should be administered to crews when training is completed. Each crew member must have a passing score by the end of training. Establish a minimum test score prior to crew members being cleared to work on the KUB system. Review available training/testing methods, materials, and methods available from industry sources to determine the best means of accomplishing this task.</p>	<p>Agree.</p> <p>Contractors will be competent and well trained, and KUB will work with contractors to identify training methods that help achieve consistent and comparable performance throughout the system.</p>	<p>Phase 2</p> <p><i>Complete. KUB has revised the rating system that manages contractor performance. To help achieve consistent performance, KUB revised contractor training material and included interpreters for training sessions with non-English speaking crew members.</i></p>
3	<p>Provide more continuing education for both supervisors and on-site crews. KUB supervisory role should be strengthened to ensure consistent standards.</p>	<p>Agree.</p> <p>KUB will evaluate industry best practices regarding contractor training and will consider supervisory training improvements based on the results.</p>	<p>Phase 3</p> <p><i>Complete. KUB's contractor orientation training was revised to address program changes, incorporate industry resources, and introduce a photographic guide to help crews</i></p>

CONTRACTS AND CONTRACTORS

	Panel Recommendation	Response	Timeline and Status
		<p>KUB currently has three certified arborists who receive training required to maintain their certifications.</p> <p>KUB intends to add two additional professional staff to the vegetation management program.</p>	<p><i>identify slow-growing species for reduced clearance.</i></p> <p><i>Complete.</i></p> <p>Phase 2 <i>Complete. Two additional foresters were hired in the summer of 2011.</i></p>
4	<p>Increase the effectiveness of KUB's contractor supervision by:</p> <ul style="list-style-type: none"> • establishing a total quality management process; • tracking contractor performance and using that information when awarding future contracts; • providing more effective, frequent and timely supervision of crews during and after the work by both KUB and contract crews to ensure quality pruning and appropriate cleanup; • conducting an evaluation of contract forester staff using random spot-checking and follow-up with property owners to see what they have been told; • using a reverse call process with customers to check the quality of the work with customers after a crew has completed a job (consider using the sample survey in Document B in the Appendix); and • establishing benchmarks so crews achieve a certain level of proficiency or go back for more training. 	<p>Agree.</p> <p>KUB will initiate a process improvement program for vegetation management and customer satisfaction.</p> <p>KUB will evaluate the current inspection process and identify areas for improvement.</p> <p>KUB will reevaluate the current benchmarks and methods used to ensure quality performance of tree contractors and contract foresters. KUB will disqualify contractors in the bidding process if their prior performance is inadequate.</p>	<p>Phases 1-3</p> <p><i>Complete. A process improvement team developed metrics and monitors performance to support continuous improvement.</i></p> <p><i>Complete. KUB hired two new foresters to strengthen KUB's supervisory role. KUB increased its field audits by almost a third in the past two years and also began quality control audits for contract foresters. Data is evaluated monthly.</i></p> <p><i>Complete. KUB revised the rating system that will be used to manage contractor performance.</i></p>
5	<p>Require an English speaking customer contact, in a vest, to be with the crew at all times.</p>	<p>Agree.</p>	<p>Phase 1</p> <p><i>Complete. This requirement is incorporated in contracts, and KUB performs field inspections to ensure compliance.</i></p>

CONTRACTS AND CONTRACTORS

	Panel Recommendation	Response	Timeline and Status
6	Award vegetation management contracts for a longer period of time. This would improve the standardization of practices.	Agree. KUB provides contract extensions for unit-priced contracts based on good performance. KUB will evaluate how to incorporate this for other contracts.	Phase 2 <i>Complete. KUB determined that longer term unit-priced contracts are beneficial, but longer term lump-sum circuit contracts are not desirable or practical at this time.</i>
7	Assess how contractor work is evaluated and ensure incentives are adequate to guarantee high performance. When contracts are awarded, those contractors who make and exceed their benchmarks should get greater consideration for additional contract awards.	Agree.	Phase 1 <i>Complete. KUB revised the rating system to manage contractor performance.</i>
8	Establish a public recognition program for cutting and cleanup crews for exemplary performance.	Agree. KUB will develop a public recognition program.	Phase 1 <i>Complete. KUB hosted an appreciation breakfast at contractor orientation meetings. KUB also prints customer compliments for contractors in employee newsletters and forwards them to their companies.</i>
9	Ensure all crews are trained to prune special status trees.	Agree.	Phase 1 <i>Complete.</i>
10	KUB must provide notice to property owners at least two weeks prior to conducting vegetation management activity on the property. The notice shall describe the dispute resolution process and opportunity to discuss pruning options with a KUB forester.	Agree. KUB will provide customers advance notice. Written materials will advise customers of the availability of dispute resolution options and how to find more information.	Phase 2 <i>Complete. Notification letters and the Vegetation Management Customer Guide incorporate the dispute resolution option. Foresters also distribute a flyer outlining the dispute resolution process to customers who want to appeal.</i>
11	Require contractors to remove all tree wood and debris, and grind stumps unless the owner requests otherwise.	Disagree. KUB's current program does not include stump grinding or wood removal due to an additional estimated annual cost to ratepayers of about	<i>Complete.</i>

CONTRACTS AND CONTRACTORS

	Panel Recommendation	Response	Timeline and Status
		\$780,000. A change is not recommended.	
12	Whether or not KUB has a recorded express easement which declares very specific legal rights, or whether KUB claims a prescriptive easement, KUB shall not act in any way to unreasonably cause damage to the property included either inside or outside the easement area which will interfere with the owner's enjoyment of his property, in violation of the established legal rights of the property owner. This requires not cutting or removing any trees or vegetation where said action is not reasonable or necessary to maintain the power lines.	Agree.	Phase 1 <i>Complete. KUB's guidelines and practices aim to comply with this philosophy. KUB has a right and responsibility to maintain its electric facilities for safety and reliability.</i>
13	Develop a policy that personal contact will be made with the property owner if KUB has to take equipment across or otherwise disturb the property.	Agree. KUB will require contractors to obtain written authorization from the customer to take trucks and vehicles across customer property.	Phase 1 <i>Complete.</i>
14	KUB should adopt a specific policy, communicate it to all vegetation management contractors, and incorporate it in all KUB vegetation management contracts regarding the protection of nesting birds and animals, in compliance with any state and federal laws. Contractors must be specifically aware of and obey Tennessee Code Annotated section 70-4-114 which states: "It is unlawful to disturb, mutilate, or destroy the home, nest or den of any protected wild animals or birds..." KUB should coordinate with TWRA and the Tennessee Natural Heritage database to clarify these requirements and incorporate the requirements into contractor training.	Agree that it is appropriate to benchmark best practices among other utilities regarding the protection of nesting birds and animals, in compliance with applicable laws.	Phase 3 <i>Complete. KUB consulted twelve utilities. Each utility confirmed that they manage tree work near nests on a case-by-case basis, as is KUB's current approach. All KUB foresters completed training to increase knowledge about how to protect nesting birds and other wildlife while complying with state and federal laws.</i>

CONTRACTS AND CONTRACTORS

	Panel Recommendation	Response	Timeline and Status
15	<p>Contract foresters e.g. ACRT should:</p> <ul style="list-style-type: none"> not mark trees for cutting or vegetation for removal that do not need to be cut or removed and only mark what is reasonable and necessary to be cut; not encourage property owners to have trees removed unless there is very substantial removal of canopy required of trees growing directly beneath power lines or the tree is dead, diseased, or structurally unsound; make property owners aware of the risk of electrocution or personal liability; be accurate in describing exactly what will be removed by KUB during tree pruning, especially when discussing clearances; inform the property owners of their right to be present when the cutting is done and the right to discuss their property with a KUB representative; and communicate with property owners how policies and/or practices have changed from previous cutting cycles. 	<p>Agree.</p> <p>KUB and/or its contractors will mark trees appropriately.</p> <p>KUB will communicate customer options, including tree removal and replacement as an alternative to pruning. KUB will only encourage customers to consider tree removal when significant tree pruning will be required, the tree is dead, unhealthy, or structurally unsound, or when the customer may prefer tree removal for aesthetics.</p> <p>KUB will include information in its communication materials that safety and reliability may be compromised when vegetation comes in contact with power lines.</p> <p>Newly drafted communication materials will be presented to a focus group for consideration.</p> <p>KUB will develop a vegetation management guide that describes current standards, and practices, including dispute resolution. The most current guide will be available during customer meetings.</p> <p>As a courtesy, KUB will provide a window of availability for customers to be present during routine pruning. This customer option will be included in KUB communications materials that contract foresters will have available to distribute in the field.</p>	<p>Phase 1 <i>Complete.</i></p> <p>Phase 1 <i>Complete. Negotiated agreements are in use.</i></p> <p>Phase 2 <i>Complete. This information is included in the Vegetation Management Customer Guide.</i></p> <p>Phase 1 <i>Complete. Three focus groups reviewed the Vegetation Management Customer Guide, and KUB incorporated their input with a professional public relations firm's assistance.</i></p> <p>Phase 2 <i>Complete. Three focus groups reviewed the Vegetation Management Customer Guide, and KUB incorporated their input with a professional public relations firm's assistance.</i></p> <p>Phase 2 <i>Complete. This option is available to all customers and is explained in the Vegetation Management Customer Guide. Foresters distribute the guides in the field.</i></p>



Vegetation Management Oversight Committee

Quarterly Update | March 2011

Background

KUB Resolution 1234 includes a provision for Staff to periodically report on the progress of the Vegetation Management Strategic Implementation Plan. This is the first Quarterly Report submitted in compliance with that Resolution. Immediately following the Resolution's passage in November 2010, KUB established an internal Vegetation Management Oversight Committee (VMOC) in response to the Tree Trim Policy Review Panel's recommendations and the public's input.

The VMOC has since developed a plan to implement changes to the program over the course of three phases and by establishing metrics and deliverables to ensure that we complete work as agreed. So far, all deliverables are either on or ahead of schedule. Phase 1 projects will be completed by June 30, and work on most Phase 2 commitments has begun and will continue through the end of this calendar year. This report includes status updates of key work under way across all phases.

Project Status Updates

Customer Notification and Communication Materials

With the assistance of a public relations firm and the input from three focus groups, KUB is developing a comprehensive Customer Guide and revising notification materials to customers who are scheduled for vegetation management work. Vegetation Management staff, field personnel, and the Vegetation Management Customer Advocate (VMCA) will use the guide when customers express concerns, ask about pruning options other than lateral pruning, or enter the dispute resolution process. KUB will also publish the guide on the website by the end of June 2011.

In addition to written materials and in keeping with past practice, KUB continues to offer Speaker's Bureau presentations to address homeowner associations' concerns or questions about vegetation management work. During the past quarter, five presentations have been requested and delivered.

KUB also plans to implement an automated telephone notification system to contact customers who have up-to-date phone numbers in our system before vegetation management work occurs in their areas. Customer Service plans to install the system in late spring 2011.

Contractor Selection and Performance Management

We are also working to make improvements to the prequalification process for contractors who bid on KUB vegetation management work. Vegetation Management and Procurement have finalized the contractor prequalification list for fiscal year 2012, and Phase I bids will open on April 18 and Phase II on May 18. KUB also made changes to the existing performance management system, consisting of an in-process field audit, post-work field audit, and a quarterly assessment by the Vegetation Management and Procurement staff members. KUB will closely monitor the new performance management system over the course of the year and make any further enhancements identified before issuing fiscal year 2013 bids next spring.



Vegetation Management Oversight Committee

Quarterly Update | March 2011

Process Improvement

Metrics have been established and are reviewed by the VMOC at its monthly meetings. Some of the metrics that we are tracking include customer interactions and complaints; contractor performance, and budget.

A process improvement team has reviewed several software system demonstrations intended to consolidate vegetation management customer data and manage work. The team is drafting an RFP, and we expect to select and implement a system this summer.

Negotiated Contracts

We have recently developed several negotiated agreements for tree work for customers who have questions or concerns, and we are piloting those agreements in the field. The agreements are intended to help methodically guide customers through the dispute resolution process and expedite their interactions with KUB.

Customers who request KUB crews to temporarily suspend work or object to upcoming work will be asked to plan the work that needs to be completed with a KUB forester. Foresters will use the Planned Work Agreement that provides a brief explanation about the standard options available:

- Lateral Pruning – KUB's standard pruning method
- Subordinate Pruning – A temporary pruning measure to remove a branch back to the proper lateral over more than one pruning cycle
- Tree Removal – Depending on the amount of tree work required, customers can opt to have their tree removed. In some cases, tree replacement is also an option.
- Private Pruning – Customers may hire a contractor at their expense to perform the work according to KUB's guidelines as stated in the Private Pruning Agreement
- Present for Pruning – Customers who wish to be present for the work may schedule a time for a crew to complete the work.

Customers who select one of these options may then be asked to sign a separate agreement that details guidelines and further explains the option. If the forester and customer do not reach agreement, the customer can explore nonstandard options with the VMCA, such as review by a third party expert, pruning using an alternative standard, mediation with customer cost sharing, or proposing an option of their own.

Customer Satisfaction

KUB is working on a customer survey and plans to conduct it in the coming months. Customer Service staff is also developing training for its representatives that will be delivered once the final version of the Customer Guide is complete.

Tree Planting Education

KUB plans to mail a letter this spring to local developers, landscape architects, and other target audiences regarding proper tree planting techniques as they relate to utility lines. Other opportunities that exist this spring to get the message out include an article in the March-April 2011 customer newsletter and distribution of materials at EarthFest and other similar events.



Vegetation Management Oversight Committee

Quarterly Update | March 2011

Property Owner/Landlord Contact Information

Pruning notices are typically mailed to the account holder at each address which can be renters rather than owners. KUB committed, to the extent possible, to extend advance pruning notification to property owners as well as renters. At this time, KUB only stores mailing information from a select number of landlords who choose to participate in KUB's Property Management Plan Program. Those landlords will receive advance notification of vegetation management work. KUB will continue to evaluate opportunities to obtain property owner addresses.

Dispute Resolution

In December, KUB appointed Betsy Ford as the Vegetation Management Customer Advocate (VMCA), and in January of this year, KUB launched a web page dedicated to dispute resolution. The page lists a three-step process, contact information, and includes an online form for customers to engage the VMCA. Even though this online tool has not been used by any customers to date, two customers have gone through the dispute resolution process since the VMCA was appointed in December.

Both customer issues were successfully resolved, one resulting in a tree removal and the other using stub-cutting as an alternative pruning method to KUB's standard options. No customers have considered mediation.



Vegetation Management Oversight Committee

Second Quarterly Update | June 2011

Implementation Plan Status: On schedule

Implementation Plan Overview and Status

KUB Resolution 1234 includes a provision for Staff to periodically report on the progress of the Vegetation Management Strategic Implementation Plan. This is the second Quarterly Report submitted in compliance with that Resolution.

KUB's internal Vegetation Management Oversight Committee's (VMOC) Implementation Plan includes deliverables scheduled for completion over the span of three phases. Phase 1 concluded on June 30, and KUB has begun or completed work on most Phase 2 and 3 commitments. This report includes status updates on key work under way across all phases.

Project Status Updates

Customer Notification and Communication Materials

KUB's comprehensive Vegetation Management Customer Guide is in production and is being distributed to customers who express concerns, ask about pruning options other than lateral pruning, or enter the dispute resolution process. The VM guide was also published to KUB's website earlier this month and is featured in the July/August edition of *Connection*, KUB's customer newsletter. KUB also revised other notification materials, including door hangers and notification letters, to reflect language in the VM guide. The revised material is now in use.

In addition to written materials and in keeping with past practice, KUB offered Speaker's Bureau presentations to 58 homeowners associations this quarter in an effort to proactively address concerns or questions about upcoming vegetation management work. During the past quarter, no homeowners associations requested presentations.

In June, KUB also implemented an automated telephone notification system to contact customers who have up-to-date phone numbers in our system before vegetation management work occurs in their areas. So far, 82 percent of the calls attempted have successfully reached customers or their answering systems.

Contractor Selection and Performance Management

Vegetation Management and Procurement have successfully awarded all fiscal year 2012 contracts. Training for those crews is under way and has been updated to include changes to pruning standards and the dispute resolution process. Contractor appreciation breakfasts are being held at the training sessions to address one of the tree panel's recommendations.

KUB developed changes to the performance management system and communicated those changes to the contractors who will perform work under the new contracts. The changes include an enhanced reporting feature that will help KUB notify contractors of performance indicators in a timely and objective fashion. KUB will closely monitor the new performance management system over the course of the year and make any needed enhancements next spring before issuing fiscal year 2013 bids.



Vegetation Management Oversight Committee

Second Quarterly Update | June 2011

Implementation Plan Status: On schedule

Vegetation Management Staffing

In December, KUB determined that two additional foresters would be necessary to carry out the additional work resulting from program changes. The hiring process is underway, and the two foresters are expected to begin work this summer.

Replacement Tree Program Enhancements

Vegetation Management has enhanced the replacement tree program by offering a wider variety of low-growing tree and shrub species to customers. Accompanying the tree replacement request form is a new brochure that was developed to illustrate the different tree and shrub options available.

Process Improvement

The VMOC continues to evaluate tracked metrics, including customer interactions and complaints; contractor performance; and budget at its monthly meetings.

The process improvement team has completed the initial process improvement plan and will maintain process documentation as program changes occur.

The team has also selected and purchased a software system intended to consolidate vegetation management customer data and manage work. A project manager has been selected to coordinate implementation of the new system over the next few months.

Negotiated Contracts

Options exist for customers who have questions or concerns about tree work scheduled for their properties, and customers who prefer one of those options may be asked to sign a negotiated agreement. We reported last quarter that those agreements were being piloted in the field.

Written agreements help KUB and customers manage expectations, and they also serve as educational tools about proper tree pruning for utilities. When customers do not agree to one of the standard options, a KUB forester will refer customers to the dispute resolution process.

Customer Satisfaction

KUB is working on a customer survey and plans to pilot a monthly phone survey beginning later this summer. Customer Service staff is also conducting training for its representatives based on information in the newly released Vegetation Management Customer Guide.

Tree Planting Education

KUB mailed a letter this spring to over 400 local builders, developers, landscape architects, and other target audiences regarding proper tree planting techniques as they relate to utility lines. KUB also promoted tree planting information in an article in the March-April 2011 customer newsletter and distributed materials at EarthFest and other similar events.

Dispute Resolution

In the first quarter, the Vegetation Management Customer Advocate handled two customer issues. This quarter, two additional customer issues were resolved; one customer interaction resulted in an exception for reduced clearance and use of an alternate pruning method, and the other customer was not willing to engage in the dispute resolution process despite two attempts, resulting in a crew pruning the tree using KUB's standard pruning method. No customers have considered mediation.



Vegetation Management Oversight Committee

Third Quarterly Update | September 2011

Implementation Plan Status: On and ahead of schedule

Implementation Plan Overview and Status

KUB Resolution 1234 includes a provision for Staff to periodically report on the progress of the Vegetation Management Strategic Implementation Plan. This is the third Quarterly Report submitted in compliance with that resolution. The quarterly reports issued so far have summarized work completed over a three-month timeframe, but the next quarterly report will be an annual report that will summarize all work completed to date. KUB will present that report at a Board meeting this winter.

As you will recall, members of KUB's Vegetation Management Oversight Committee (VMOC) are working on deliverables scheduled over the span of three phases; the first phase ended on June 30 and the second phase is currently underway. The Tree Trim Policy Review Panel's recommendations resulted in 54 unique action items, and of those items 70 percent are complete, 24 percent are in progress, and 3 percent have not yet started. All work is either on schedule or ahead of schedule.

Project Status Updates

Customer Notification and Communication Materials

KUB's comprehensive Vegetation Management Customer Guide and other revised notification materials have been actively used in the field and online since June and are helpful to foresters when talking with customers.

In addition to written materials and in keeping with past practice, KUB offered Speaker's Bureau presentations to 37 homeowners associations this quarter in an effort to proactively address concerns or questions about upcoming vegetation management work. During the past quarter, one homeowners association requested a presentation and another homeowner's association requested KUB to be present to answer questions. KUB fulfilled both of these requests.

The automated telephone notification system has been in use since June 2011 to contact customers who have up-to-date phone numbers in our system before vegetation management work occurs in their areas. This quarter, 80 percent of the calls attempted have successfully reached customers or their answering systems. KUB regularly conducts a phone number campaign, but this quarter enhanced its efforts to ask customers to update their phone numbers to improve call accuracy. These phone number collection efforts also benefit other KUB processes related to customer communication.

Contractor Selection and Performance Management

KUB completed training for FY 12 contract crews to review changes to pruning standards and customer service expectations. KUB's Vegetation Management staff continues to perform field audits to ensure contract crews are in compliance with contract requirements, including having an English-speaking member on site who is wearing a customer contact vest. KUB takes corrective action when auditors observe noncompliance, and KUB is incorporating performance data in the new performance management system.

Vegetation Management Staffing

KUB hired two additional foresters this quarter who began work this summer. Both foresters have degrees in forestry or a closely related field, and both have several years of experience in utility and/or urban forestry. KUB now has five professional foresters on staff.



Vegetation Management Oversight Committee

Third Quarterly Update | September 2011

Implementation Plan Status: On and ahead of schedule

Process Improvement

The VMOC continues to evaluate metrics, which include customer interactions and complaints, contractor performance, budget, and dispute resolution, at its monthly meetings.

The process improvement team is maintaining process documentation as program changes occur.

The team expects to complete implementation of a software system this winter that will ultimately consolidate vegetation management customer data and manage work. The vegetation management team is testing and comparing computer models in the field to identify which option to purchase.

Reducing Duplication in Pruning Schedule

KUB committed to evaluate ways to prune overlapping lines more efficiently. Vegetation Management implemented scheduling changes for this fiscal year so that pruning can be completed along overlapping 13kV and 69kV lines at the same time. A scheduling plan for next fiscal year is underway.

Tree Planting Education

KUB signed an agreement with the University of Tennessee this quarter to develop a demonstration project intended to educate the landscaping students, professionals, and the general public about planting the right tree in the right place. The project will be located on the school's Ag Campus and is expected to be completed this winter.

Dispute Resolution

The Vegetation Management Customer Advocate has worked with eight customers to date; six disputes have been resolved, and two disputes are currently open. This quarter, two customer issues have been resolved—one with an engineering solution and the other with a tree removal and replacement option.

Vegetation Management Strategic Implementation Plan

Work Completed to Date

September 2011

The KUB Board of Commissioners approved Resolution 1234 in November 2010, endorsing the strategies recommended by staff to implement the Tree Trim Policy Review Panel's recommendations to improve KUB's Vegetation Management program. At the outset of implementation, work was scheduled across three phases, the first of which ended June 30th. Phase 2 work is underway and Phase 3 work will begin in January. Some work across the latter two phases was completed ahead of schedule, and this list represents work completed to date.

Program Implementation Oversight

- Established an internal Vegetation Management Oversight Committee (VMOC) which meets monthly and includes the CEO and COO
- Established deliverables with target completion dates across three phases to ensure work is completed as agreed
- Evaluated and monitored established metrics, including customer complaint data
- Distributed two quarterly reports to its Board of Commissioners pursuant to a provision in KUB Resolution 1234 for Staff to periodically report on the progress of the Vegetation Management Strategic Implementation Plan. An annual report presentation is scheduled for the Board in the next few months

Communications

- Conducted three focus groups, with assistance from a public relations firm, to update communication materials
- Created a new logo for KUB's Vegetation Management Program
- Published a *Customer Guide* for customer distribution which included photographs illustrating typical tree species and pruning techniques
- Posted the *Customer Guide* on the web as a pdf and revised former tree pruning pages to follow the guide
- Promoted the Customer Guide on the front page of www.kub.org, in the *Connection* customer newsletter, as a message on bills, in employee and retiree newsletters, in information that mails to new customers, on Facebook, and with posters in our Payment Centers; promotion also emphasized that guides are available on the web and free copies are in KUB payment centers
- Revised notification letters to customers informing them of upcoming tree pruning to reflect language from the new guide and input from the Panel
- Revised doorhangers with input from focus groups
- Purchased an automated telephone notification system and have used it to make calls to more than 4,400 customers to-date asking them to look for a letter in the mail about upcoming pruning
- Created a new Tree Planting Program brochure
- Enhanced the interactive tree pruning map on www.kub.org by making street-level information available

Process Improvement and Customer Service Training

- Established a process improvement team to develop a process model framework to support continuous improvement
- Purchased a software system to consolidate vegetation management customer data and manage work. Implementation is underway
- Reviewed Customer Service's call handling protocols, conducted training, and updated reference materials to ensure that calls are routed appropriately to Vegetation Management and/or the VMCA

Tree Planting Education

- Mailed a letter in the Spring of 2011 to over 400 local builders, developers, landscape architects, and other target audiences regarding proper tree planting techniques as they relate to utility lines
- Included an article in the March-April and September-October 2011 *Connection* customer newsletter about proper planting techniques that was mailed to over 210,000 customers; included a bill message about planting on March and September bills
- Distributed materials at EarthFest and other similar community events
- Signed an agreement with the University of Tennessee to develop a demonstration project to educate the public about planting the right tree in the right place. The project will be located on the school's Ag Campus

Standards Changes

- Discontinued removal of established and healthy overhanging limbs on distribution lines above the minimum 10-ft. clearance zone, thereby expanding the benefits of the special status tree program to most healthy trees
- Discontinued requirement of a standard five-foot clearance zone around down guys and coated street light conductors, limiting pruning or removal to vegetation in direct contact
- Discuss options with customers before removing maintained landscaping around poles

Contractor Training and Performance Management

- Revised contractor qualification program and incorporated changes in the Spring 2011 pre-bid process
- Revised the rating system that manages contractor performance
- Thanked and recognized contractors for their work at their annual training this Spring
- Provided updated circuit-pruning training for contractors
- Conducted field audits to ensure that contract crews have an English-speaking member on site who is wearing a customer contact vest
- Reinforced contractor training directive that requires contract crews to temporarily suspend work at the request of a customer
- Hired two new certified foresters to help the existing three certified foresters implement and facilitate changes in program standards

Customer Options and Dispute Resolution

- Created a checklist for foresters to use in customer conversations to help ensure that all available options are offered by KUB and considered by the customer
- Customer options are explained in the *Customer Guide* and further explained in negotiated agreements and in one-on-one meetings with foresters
- Began offering new options to customers who are not interested in standard pruning, including subordinate pruning and dispute resolution
- Developed seven standard agreements which clearly outline both KUB's and the customer's responsibilities for implementation of pruning options that vary from standard work, including dispute resolution
- Enhanced the Tree Planting Program to offer larger trees, a wider variety of low-growing trees, and flowering shrubs
- Offered pre-planning meetings with foresters to all customers by letter, and customers with previous concerns are proactively contacted before pruning occurs
- Provided option for customers to donate replacement trees to public locations in lieu of planting on their properties
- Appointed a Vegetation Management Customer Advocate (VMCA) who has developed a dispute resolution process and assisted seven customers to date
- Developed three new customer options for use in dispute resolution, including alternative pruning, mediation, and third-party expert review
- Created an online form, e-mail box, and phone line for customers to contact the VMCA

Vegetation Management Survey Monthly Report

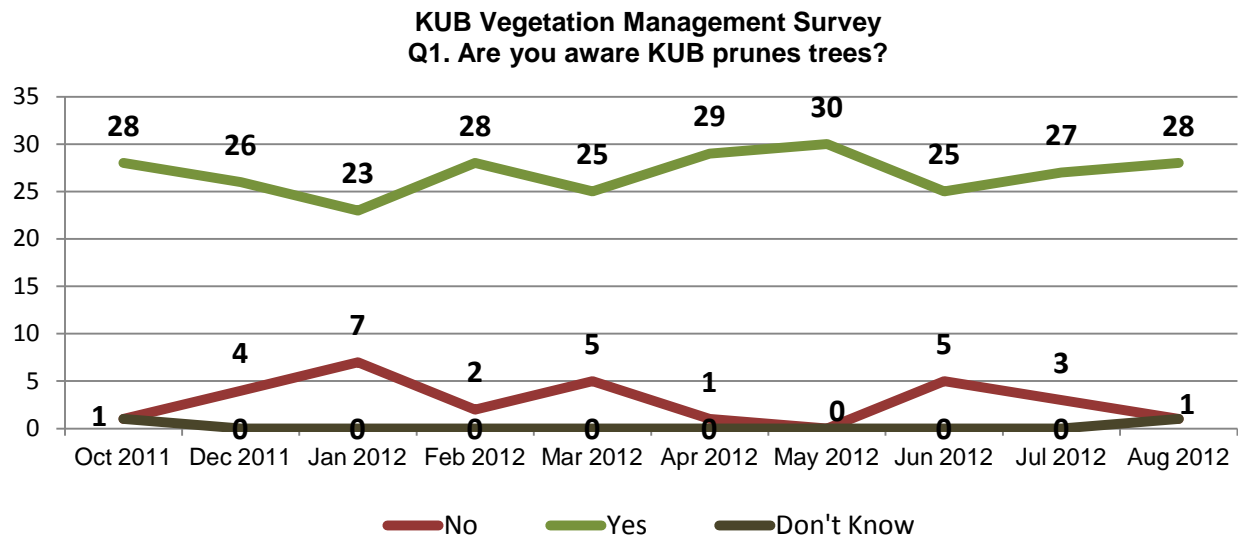
October 2012

Each month, KUB calls 30 customers to obtain feedback concerning its tree pruning practices. The call list is generated from customers who are notified of pending tree pruning activities on or near their home or business. KUB contacts customers after the pruning activities are completed to obtain their feedback. The following charts provide a summary of customer responses to the monthly Vegetation Management Survey.

[Note: November 2011 data was not obtained due to a process revision at that time.]

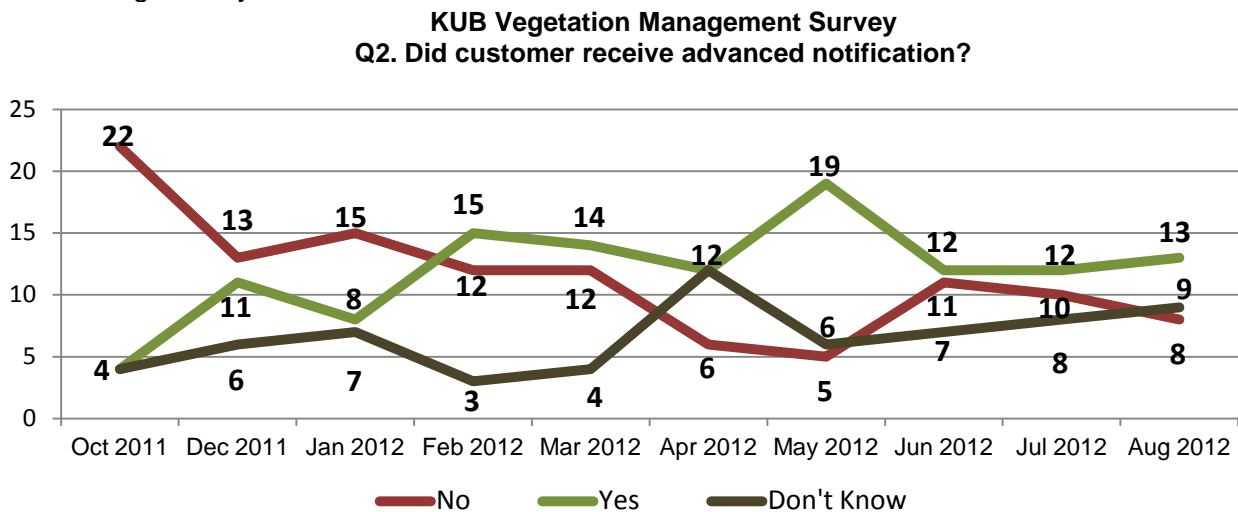
Customer Awareness of KUB Tree Pruning

The majority of customers surveyed consistently respond saying they are aware that KUB prunes trees. The lowest awareness level (76 percent) was reported among those responding to the January survey.



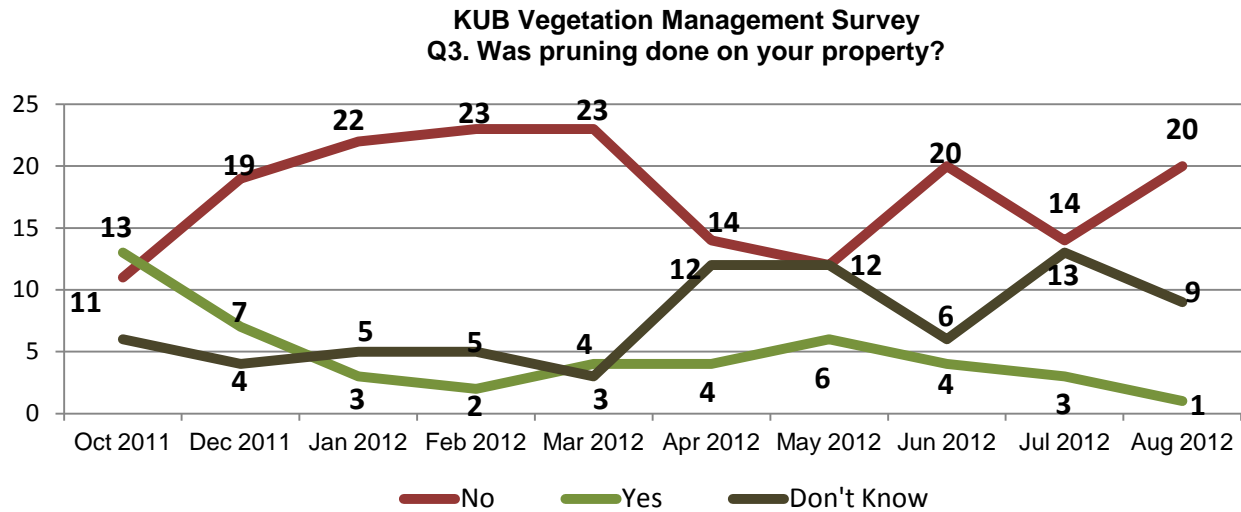
Advanced Notification of Tree Pruning Activities

The number of customers indicating they did not receive advanced notice of KUB tree pruning in their area generally decreased.



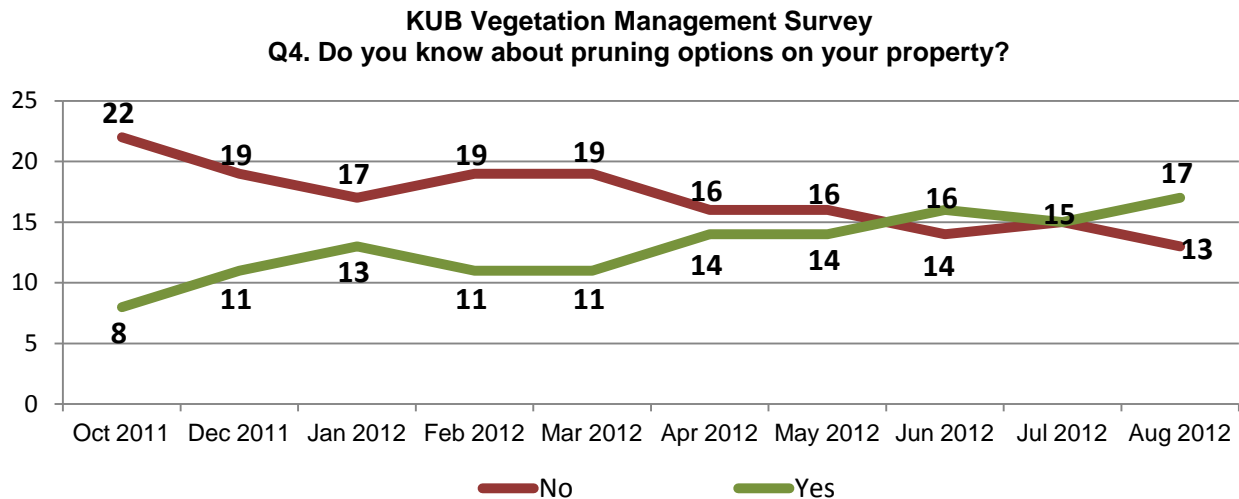
On-Property Pruning

Survey responses indicate that the majority of customers responding to the survey either do not have trees pruned on their property or are not aware if their trees were pruned.



Customer Awareness of Pruning Options on Property

In August, 57 percent of survey respondents indicated they were aware of the various options they have for tree pruning or removal, which is up from 26 percent in October 2011.



Letter - Pre-Planning Notice



[Date] [VM Pre-Planning Notice Letter – Final Approved Version – 8-24-11](#)

Dear KUB Customer:

Utility foresters contracted by KUB are beginning to plan for tree pruning and vegetation clearance work around overhead electric lines and related equipment in your area. The foresters will be evaluating tree and vegetation work required to maintain safe and reliable electric service.

The foresters will mark trees scheduled for pruning in the utility maintenance zone with blue or green paint. Trees and brush less than six inches in diameter that appear to be wild-growing or unmaintained will be marked with orange paint for removal within the utility maintenance zone and around poles and guy wires. If you have landscaped tall-growing vegetation in the utility maintenance zone, please contact KUB or the contract forester in advance of the work to discuss options.

The shading on the *enclosed map* shows the planned work area. See the *diagram on the back of the map* to learn more about KUB maintenance zones and pruning practices.

Please note this important information:

- **Customer Guide.** Do you want to know more about our tree pruning program? See KUB Tree Pruning: A Customer Guide, available online at www.kub.org. If you prefer a paper copy, contact the Vegetation Management staff (see below).

The guide explains utility maintenance zones, required clearances, and your customer options. It also covers wood removal, special status trees, tree removal and/or replacement, and more.
- **Vegetation Management Staff.** If you have questions or concerns about upcoming work, please contact KUB's Vegetation Management staff at (865) 558-6658, Monday through Friday, 7 a.m. – 9 p.m., or by e-mail at trees@kub.org. Please contact them immediately so your concerns can be addressed before pruning begins. For other KUB needs, call us at (865) 524-2911.
- **Dispute Resolution.** What if you still have unresolved issues after working with KUB's Vegetation Management staff? We will refer you to our Vegetation Management Customer Advocate.

We appreciate your understanding and patience while we work to provide safe and reliable electric service for you, your neighbors, and local businesses.

Sincerely,

Michael E. Patterson
Manager, System Operations

Enclosure

[code]

Letter - Combined Tree Pruning Notice



[Date] [Final Approved Version – 7-25-11](#)

Dear KUB Customer:

Contract tree crews will begin work in your area in two to four weeks. The work will involve tree pruning and utility maintenance zone clearance along the electric system, including overhead lines, poles, transformers, and related equipment. It may be several weeks after work starts before crews reach your property. Or crews could reach you more quickly, depending on your location.

The shading on the *enclosed map* shows the planned work area. See the *diagram on the back of the map* to learn more about KUB maintenance zones and pruning practices.

KUB uses lateral pruning methods, recommended by the Arbor Day Foundation and other tree care organizations, which remove the tree branch back to the closest lateral branch growing away from the power line, leaving no stub to decay. KUB maintains a **minimum 10-foot** safety maintenance zone around *distribution lines* and a **25-foot** maintenance zone around *high voltage transmission lines*. KUB foresters are available to meet with you (see contact information below) to discuss the type of lines that affect your property and the extent of work that will be required to attain proper clearances.

Please note this important information:

- **Customer Guide.** Do you want to know more about our tree pruning program? See KUB Tree Pruning: A Customer Guide, available online at www.kub.org. If you prefer a paper copy, contact the Vegetation Management staff (see below).
The guide explains utility maintenance zones, required clearances, and your customer options. It also covers wood removal, special status trees, tree removal and/or replacement, and more.
- **Vegetation Management Staff.** If you have questions or concerns about upcoming work, please contact KUB's Vegetation Management staff at (865) 558-6658, Monday through Friday, 7 a.m. – 9 p.m., or by e-mail at trees@kub.org. Please contact them immediately so your concerns can be addressed before pruning begins. For other KUB needs, call us at (865) 524-2911.
- **Dispute Resolution.** What if you still have unresolved issues after working with KUB's Vegetation Management staff? We will refer you to our Vegetation Management Customer Advocate.

We appreciate your understanding and patience while we work to provide safe and reliable electric service for you, your neighbors, and local businesses.

Sincerely,

Michael E. Patterson
Manager, System Operations

Enclosure

[code]

Door Hanger - Tree Pruning Notice (Distribution Lines)

KUB

TREE PRUNING NOTICE

As part of our effort to provide customers with safe, reliable electric service, KUB contract crews will be in your area within the next one to two weeks to prune trees and perform other vegetation management work. On the back of this card, you will find examples of work that may be required in the utility maintenance zone on your property to maintain safe and proper clearance around electric lines and poles.

Tree removal may be an alternative to tree pruning in some cases. If you would like to have a KUB forester visit your property to discuss tree removal or pruning plans, please call (865) 558-6658 as soon as possible to schedule an appointment.



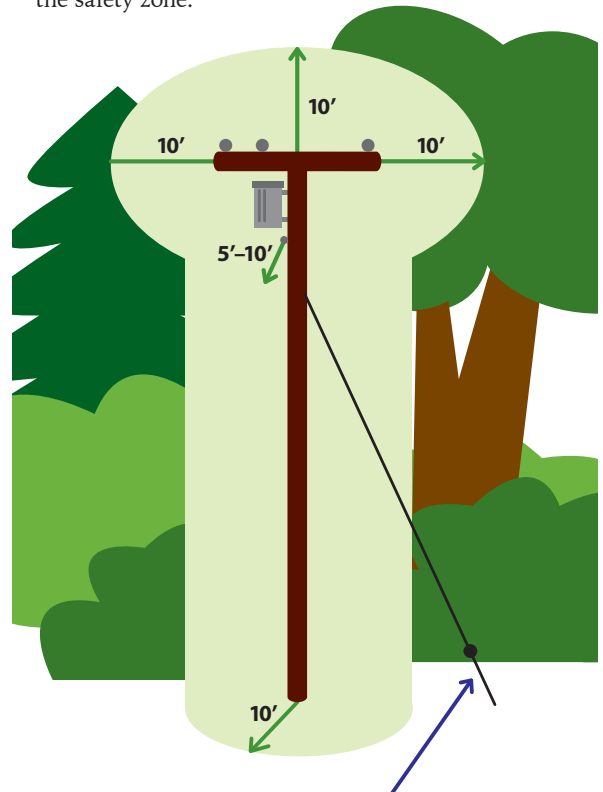
**For your complete
customer guide to
KUB tree pruning,
call (865) 558-6658
or visit www.kub.org.**

OVER



Vegetation Management work needs to be done in the utility maintenance zone on your property to maintain safe and reliable electric service. This work may include:

- Pruning tree(s) to maintain a minimum 10-foot safety clearance zone around electric distribution lines in the utility maintenance zone on your property.
- Removing dead, diseased, or weak limbs above the 10-foot safety clearance zone. Small limbs growing in this zone may also be removed as preventive maintenance.
- Removing trees, brush, and vines within the 20-foot utility maintenance zone along electric distribution lines.
- Removal of brush, vines, and small trees less than six inches in diameter which are threatening utility poles, lines or guy wires or will eventually grow into the safety zone.



KUB will prune where vegetation is in contact with or threatening to damage down guy wires.

Distribution Line Clearance Zone

DistributionPruneNotice-Y11M5-Orange

Door Hanger - Cleanup Return



**WE WILL
RETURN**

A KUB contract crew was unable to complete cleanup of wood chips, limbs, and other debris resulting from recent tree pruning work in the utility maintenance zone on your property today.

Our goal is to leave a property as clean as we found it, and we always try to complete this work in a timely manner. We apologize for any inconvenience this temporary delay may cause and appreciate your patience.

Weather permitting, we will return to complete this task by _____.



Reliable Power. Healthy Trees.

**For your complete
customer guide to
KUB tree pruning,
call (865) 558-6658
or visit www.kub.org.**

OVER

**WE WILL
RETURN**

Comments: _____

KUB has been recognized by the Arbor Day Foundation for our national leadership in properly caring for trees while meeting customers' needs for reliable utility service.

KUB contract crews are specially qualified to work around power lines and trained to use the lateral pruning method recommended by the Arbor Day Foundation to help protect the trees' health to the extent possible. We regularly evaluate our crews to assess their performance and conduct inspections to identify areas for improvement. Our goal is to ensure that KUB's Vegetation Management program is doing a great job for you.

While crews are working on your property, please feel free to speak with crew members identified by a special "Customer Contact" vest. The customer contact will be happy to answer your questions.

If you wish to discuss any tree-related concerns, please call our Vegetation Management Hotline at (865) 558-6658 Monday through Friday 7 a.m.-9 p.m. or e-mail us at trees@KUB.org. After hours, call (865) 524-2911.

OVER

VMWeWillReturn-Y11M5-Blue

Door Hanger - Tree Pruning Planning



TREE PRUNING PLANNING

As part of our effort to provide customers with safe, reliable electric service, KUB contract crews will be in your area soon to prune trees and perform other vegetation management work. In preparation, a KUB representative visited the utility maintenance zone on your property today.

On the back of this card, we have indicated work that needs to be completed to maintain safe and proper clearance around electric lines and poles.

If you have questions, please contact KUB immediately so we can schedule a forester to visit your property and discuss plans with you.



**For your complete
customer guide to
KUB tree pruning,
call (865) 558-6658
or visit www.kub.org.**

See back for comments.

KUB contract crews need to complete the following work in the utility maintenance zone on your property to maintain safe and reliable electric service.

- ☐ Prune tree(s) to maintain a minimum safety clearance zone around electric lines.
- ☐ Remove trees, brush, and vines within the 50-foot utility right-of-way along high voltage transmission lines.
- ☐ Remove trees, brush, and vines under distribution lines or around utility poles and guy wires.
- ☐ Remove small tree(s) (less than six inches in diameter) which will eventually grow into the safety zone.
- ☐ Tree(s) may have over 25 percent of the canopy removed to achieve the necessary clearance. KUB would like to discuss options with you.
- ☐ Other (see comments below).
- ☐ KUB would like to discuss removing a tree(s) on your property. Please contact KUB as soon as possible.

Our contract crews use the lateral pruning method recommended by the Arbor Day Foundation to help protect the health of your trees. These crews are specially qualified to work around power lines and trained to prune to industry specifications.

If you wish to have a private service prune your trees, please contact Vegetation Management.

If you have any questions or concerns, please contact the KUB representative listed below as soon as possible. We are available by appointment to discuss any work planned for your property.

Comments: _____

Contact KUB Vegetation Management at (865) 558-6658 Monday through Friday 7 a.m.-9 p.m. or e-mail us at trees@KUB.org. After hours call (865) 524-2911.

OVER

VMPre-Plan-Y11M5-Red

Door Hanger - Tree Inspection Summary



TREE INSPECTION SUMMARY

Thank you for your concern about the tree(s) on your property that may be a threat to power lines. Trees often cause power interruptions and pose a serious danger when they come in contact with power lines.

At your request, a KUB representative has inspected the specified tree(s) to determine what action is appropriate for the safety and reliability of your electric service. Your inspector has left recommendations on the back of this card. If you have any questions or concerns, please contact the inspector using the information on the back.



Reliable Power. Healthy Trees.

**For your complete
customer guide to
KUB tree pruning,
call (865) 558-6658
or visit www.kub.org.**

See back for comments.

TREE INSPECTION SUMMARY

- ☐ The tree(s) in question requires pruning. KUB will perform the work as soon as possible.
- ☐ Removing the tree(s) in question is appropriate. Please sign the attached removal form and return to KUB. We will schedule removal upon receipt of the signed form.
- ☐ The tree(s) in question threatens the service line providing service directly to your home. KUB does not prune around these lines. You should contact a professional tree service for this work. Contact KUB to have the lines lowered so the crews can work safely. We will reconnect the line when you are finished pruning. Please remember, these lines do pose a risk of electrocution. Never prune limbs that are touching or in close proximity to power lines.
- ☐ The tree(s) in question does not pose an immediate threat to the power lines and may be pruned by KUB during the next scheduled pruning in your area.
- ☐ The tree(s) in question does not currently pose a threat to power lines.
- ☐ We were unable to locate the problem you described. Please contact the inspector with additional information.

Comments: _____

For all tree-related concerns, contact our Vegetation Management Hotline at (865) 558-6658 Monday through Friday 7 a.m.-9 p.m. or e-mail us at trees@KUB.org. After-hours call (865) 524-2911.

OVER

TreeInspectSummary-Y11M5-Yellow

Door Hanger - Tree Pruning Notice (Transmission Lines)



TREE PRUNING NOTICE

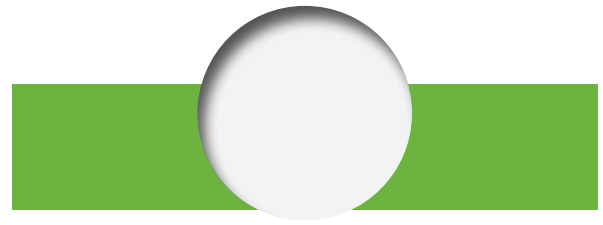
As part of our effort to provide customers with safe, reliable electric service, KUB contract crews will be in your area within the next one to two weeks to prune trees and perform other vegetation management work. On the back of this card, you will find examples of work that may be required in the utility maintenance zone on your property to maintain safe and proper clearance around electric lines and poles.

Tree removal may be an alternative to tree pruning in some cases. If you would like to have a KUB forester visit your property to discuss tree removal or pruning plans, please call (865) 558-6658 as soon as possible to schedule an appointment.



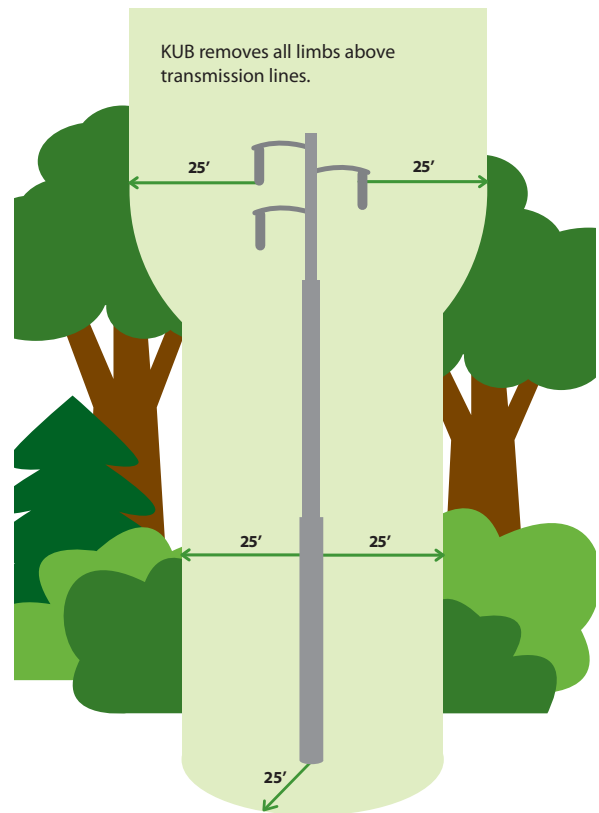
For your complete customer guide to KUB tree pruning, call (865) 558-6658 or visit www.kub.org.

OVER



Vegetation Management work needs to be done in the utility maintenance zone on your property to maintain safe and reliable electric service. This work may include:

- Pruning tree(s) to maintain a minimum 25-foot safety clearance zone around high voltage lines.
- Removing all limbs above the 25-foot safety zone on trees over high voltage lines in the utility maintenance zone on your property.
- Removing trees, brush, and vines within the 50-foot utility maintenance zone along high voltage transmission lines.
- Removal of brush, vines, and small trees less than six inches in diameter which are threatening utility poles, lines or guy wires or will eventually grow into the safety zone.
- Removal of hazardous trees.



Transmission Line Clearance Zone

TransmissionPruneNotice-Y11M5-Green

Door Hanger - Tree Pruning Rework Notice



TREE PRUNING REWORK NOTICE

Inspection of recent tree pruning and vegetation clearance work in your area has been performed to ensure quality.

Although tree work was recently performed on your property, our inspector has found it will be necessary for our contractor to come back and make corrections. This will include:

- ☐...clean up
- ☐...pruning for minimum clearance
- ☐...removing dead/weak limbs
- ☐...correcting pruning cuts
- ☐...tree removal
- ☐...brush and/or vine cutting
- ☐...applying herbicide to stumps to prevent regrowth

There will be a quick turnaround time for this work, so please contact KUB immediately if you have any questions.



Reliable Power. Healthy Trees.

**For your complete
customer guide to
KUB tree pruning,
call (865) 558-6658
or visit www.kub.org.**

OVER

TREE PRUNING REWORK NOTICE

Comments: _____

KUB has been recognized by the Arbor Day Foundation for our national leadership in properly caring for trees while meeting customers' needs for reliable utility service.

KUB contract crews are specially qualified to work around power lines and trained to use the lateral pruning method recommended by the Arbor Day Foundation to help protect the trees' health to the extent possible. We regularly evaluate our crews to assess their performance and conduct inspections to identify areas for improvement. Our goal is to ensure that KUB's Vegetation Management program is doing a great job for you.

While crews are working on your property, please feel free to speak with crew members identified by a special "Customer Contact" vest. The customer contact will be happy to answer your questions.

If you wish to discuss any tree-related concerns, please call our Vegetation Management Hotline at (865) 558-6658 Monday through Friday 7 a.m.-9 p.m. or e-mail us at trees@KUB.org. After hours, call (865) 524-2911.

OVER

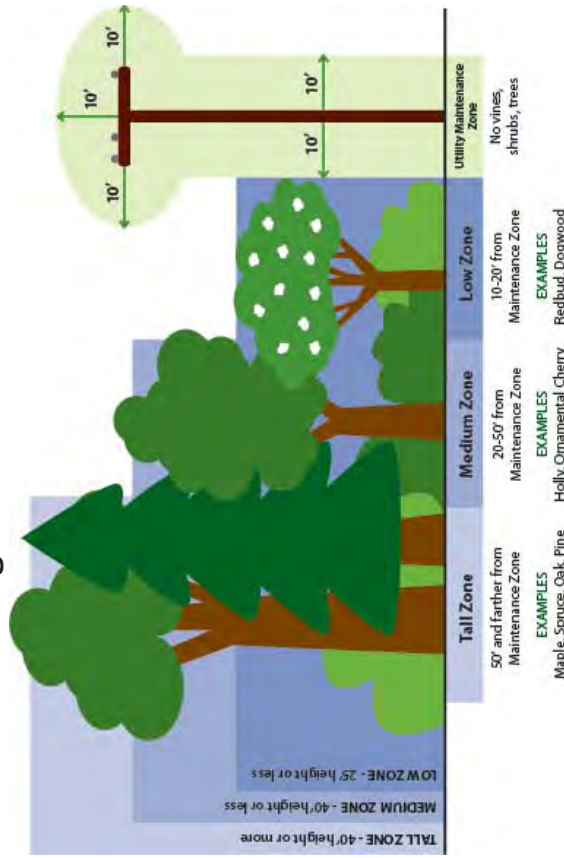
VMRework-Y11M10-Gray

Planting Guidelines Near Electric Lines

KUB will mail plastic stakes to you between November and March so you may mark where you want your tree planted. All trees must be planted a minimum of 10 feet away from electric distribution lines and 25 feet away from transmission lines.

If you place a plastic stake in a location that conflicts with overhead or underground utilities or other physical barriers, KUB will try to contact you at the telephone number you list on the request form. If we cannot reach you, our planting contractor will adjust the location to meet tree planting guidelines.

Planting Near Distribution Lines



524-2911 www.kub.org

Customers who are eligible for a replacement tree may choose to donate the tree to a public location. If you live in Knoxville or Knox County, you can pick a local park and we will work with the appropriate departments to identify a planting site and appropriate tree for the location. Outside Knox County, KUB will work with you to identify potential public sites. Written consent from property owners must be given to a KUB forester before a tree will be planted.



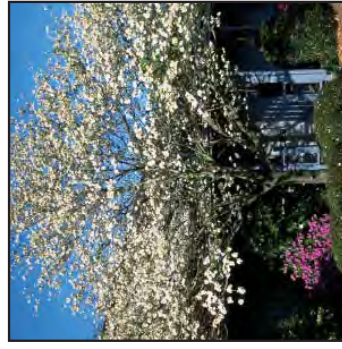
VMTR5M11Y

Tree Planting Program

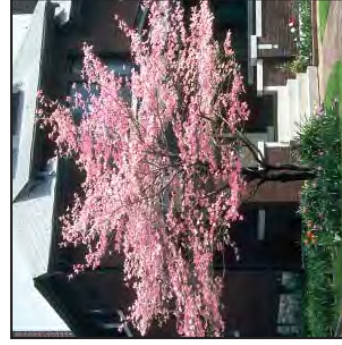


This brochure can help you select a replacement tree or shrub. You may choose any tree or shrub pictured in this brochure.

If you have any questions or comments, please contact KUB Vegetation Management at 865-558-6658.



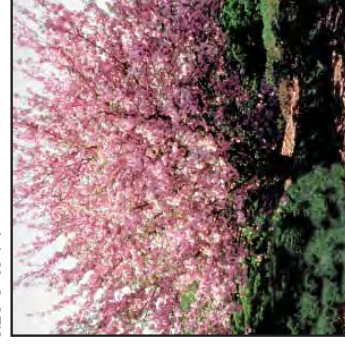
White Dogwood: 25' mature height, deciduous, full shade to full sun, white spring blooms, green leaves. Planting size 6' to 7'.



Pink Dogwood: 25' mature height, deciduous, full shade to full sun, pink spring blooms, green leaves. Planting size 6' to 7'.



Eastern Redbud: 25' mature height, deciduous, partial shade to full sun, rosy pink spring blooms, green leaves. Planting size 6' to 7'.



Kwanzan Cherry: 15' to 25' mature height, deciduous, full sun, pink spring blooms, green leaves. Planting size 6' to 7'.

Brochure - Tree Planting Program (Side 2)



White Flowering Crabapple: 15' to 20' mature height, deciduous, full sun, fragrant white spring blooms, green leaves. Planting size 6' to 7'.



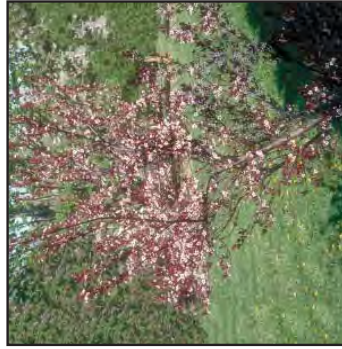
Fosters Holly: 15' to 25' mature height, evergreen, full sun, white spring flowers, deep red berries, glossy, dark green leaves. Planting size 4' to 5'.



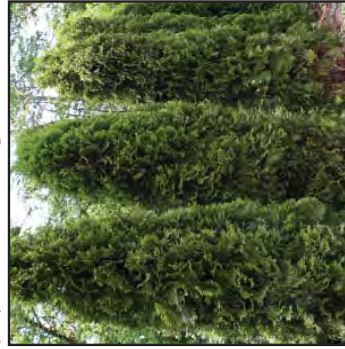
Purpleleaf Sand Cherry: 7' to 10' in height, deciduous, full sun to light shade, white and pink spring flowers, green leaves. Planting size 4' to 5'.



Red Flowering Crabapple: 15' to 20' mature height, deciduous, full sun, fragrant red spring blooms, green leaves. Planting size 6' to 7'.



Purpleleaf Plum: 15' to 25' mature height, deciduous shrub, full sun, fragrant white and pink spring blooms, purple leaves. Planting size 6' to 7'.



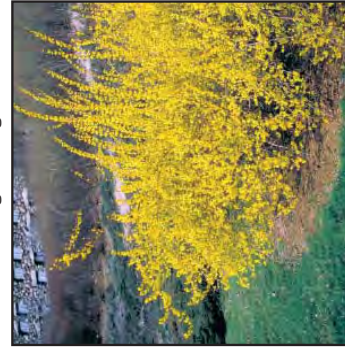
Emerald Green Arborvitae: 10' to 15' mature height, evergreen, full sun, shimmering emerald green foliage. Planting size 4' to 5'.



Grape Myrtle: 15' to 20' in height, deciduous, full sun, pink or red spring blooms, green leaves. Planting size 4/7 gallon.



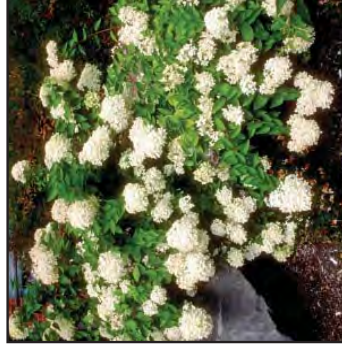
Fragrant Lilac: 8' to 15' mature height, deciduous hardy shrub, partial shade to full sun, light purple spring flowers. Planting size 3 gallon.



Forsythia: 8' to 10' mature height, deciduous shrub, partial sun to full sun, yellow spring blooms. Planting size 3 gallon.



Golden Globe Arborvitae: 2' to 3' mature height, evergreen shrub, partial to full sun, golden yellow foliage. Planting size 5 gallon.



Pee Gee Hydrangea: 10' to 20' mature height, deciduous shrub, partial shade to full sun, white summer flowers. Planting size 3 gallon.

Selecting Your Tree and Where to Plant It

Refer to the tree planting diagram on the back of this brochure to help you determine what replacement tree will best meet your needs. Be sure to mark a location in accordance with the planting guidelines outlined in the diagram. All trees and shrubs offered by KUB are appropriate for planting in the low zone. Encroachment is less likely whenever plantings are placed beyond the minimum 10' of clearance.

**Two replacement shrubs of this variety will be offered for each replacement tree.*

Form - Subordinate Pruning Agreement

Circuit _____



Subordinate Pruning Agreement

Subordinate pruning is best suited for trees that have not been pruned before. It is a temporary measure to remove a branch back to the proper lateral over more than one pruning cycle. This technique is an option if there is a lateral branch smaller than the recommended size where an initial cut can be made to give KUB adequate clearance. In the next pruning cycle, KUB's crew will make the proper lateral cut for the health of the tree. If the tree's branches endanger electric lines before the next routine pruning cycle, however, KUB might return sooner to make the proper pruning cut.

CUSTOMER INFORMATION		
Last Name	First Name	KUB Acct. #
Street Address	Apartment/Unit #	
City	State	ZIP
Daytime Phone (Preferred)	Other Phone Number(s)	
E-mail Address		

As KUB and I have agreed, a contract tree crew will make subordinate pruning cuts to the _____ tree(s) located at _____ and marked with _____ on my property.

- I am the homeowner and/or am legally authorized to make decisions on behalf of this property.
- KUB has offered, and I have declined, other standard options to achieve adequate clearance, including the preferred industry standard lateral pruning method, private pruning, tree removal, and tree replacement (if applicable).
- I understand that subordinate pruning allows for making cuts at the nearest lateral, which may not necessarily be the proper lateral for the health of the tree(s). I understand that crews will return in one to four years to prune the tree(s) listed above using the lateral pruning method.
- I acknowledge that the subordinate pruning that I have requested may compromise the health of my tree, and I assume full responsibility for the results.
- I acknowledge that subordinate pruning may cause regrowth that can introduce potential safety hazards and compromise electric reliability if it comes into direct contact with KUB electric facilities. If this happens before KUB's next regularly scheduled pruning cycle, KUB might return to achieve adequate clearance using the lateral pruning method.
- During KUB's next pruning cycle (in one to four years), crews will make proper lateral pruning cuts to achieve its standard clearance requirement. Subordinate cuts will not be available to the tree(s) again.

Please sign and date to acknowledge you agree to each of the statements listed above.

Customer

Date

KUB Representative

Date

White Copy:
Yellow Copy:

KUB Vegetation Management Department
KUB Customer

VMSPAY11M5

Form - Tree Work Authorization Form



Tree Work Authorization Form

KUB's tree contractor will prune and/or remove trees and brush around KUB's electric utility right of way in your neighborhood in the upcoming weeks. Our pre-work survey shows that the work described below is likely necessary to ensure the safety and reliability of KUB's electric lines.

THERE WILL BE NO CHARGE FOR THIS SERVICE.

Please indicate your agreement to this work by signing below. Your signature verifies that you have a legal interest in the property and you are authorized to grant access and give permission for KUB contractors and equipment to enter the property and perform the needed work.

Tree stumps may be treated with a KUB-approved herbicide to control re-growth where appropriate. Neither KUB (or its tree contractor) nor any city or county agency is responsible for removal or disposal of stumps, wood, or debris associated with this work, except as specified below.

KUB tree work is prioritized based on safety and utility service reliability. KUB reserves the right to decline all tree work after further evaluation.

Authorization for Tree Work

Customer Name _____ Phone Number _____

Street Address _____

City/State/ZIP _____

Description of Trees _____

Description of Work _____

Trees marked with ____ X ____ Y ____ Z

Line Type: _____ Circuit Name: _____ Hazard/Non-Hazard

Location on Property: Front/Back/Side

Customer Signature _____ Date _____

KUB Representative _____ Date _____

Form - Tree Request Form



Tree Request Form

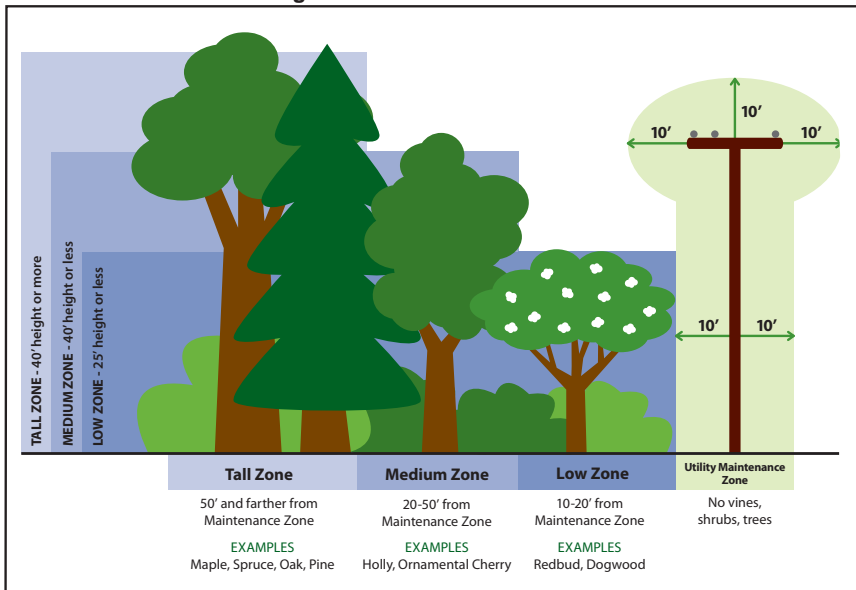
CUSTOMER INFORMATION

Last Name		First Name		KUB Acct. #
Street Address			Apartment/Unit #	
City		State	ZIP	
Daytime Phone (Preferred)		Other Phone Number(s)		
E-mail Address				
Tree Planting Location (If different than above)				
City		State	ZIP	

Indicate Your Replacement Choices

#	Trees
	Crape Myrtle
	Eastern Redbud
	Emerald Green Arborvitae
	Fosters Holly
	Kwanzan Cherry
	Pink Dogwood
	Purpleleaf Plum
	Purpleleaf Sand Cherry
	Red Flowering Crabapple
	White Dogwood
	White Flowering Crabapple
#	Shrubs
	Forsythia*
	Fragrant Lilac
	Golden Globe Arborvitae
	Pee Gee Hydrangea*

Planting Guidelines Near Distribution Lines



*Two shrubs of this variety will be offered for each replacement tree.

We know trees are important to you and the environment. Because you have a significant tree that has to be removed to keep power lines safe, KUB is offering you a replacement tree. KUB's contractor will plant the tree in your yard in a mutually agreed on location that will not interfere with overhead or underground utilities.

Planting Guidelines. All trees must be planted a minimum of 10 feet away from electric distribution lines and 25 feet away from transmission lines. The diagram illustrates how to plant the right tree in the right place [all plantings must follow these height and distance guidelines]. Encroachment is less likely whenever plantings are placed beyond the minimum 10 feet of clearance.

Planting Timeline. KUB contractors plant trees between November and March. Each tree is guaranteed to produce leaves in the spring after it is planted. No replant requests will be accepted by KUB after June 1 following the initial planting. If KUB's tree removal work is not completed on your property before March 1, replacement trees will be planted the following fall.

Mark Your Location Preference. KUB will mail plastic stakes to you between November and March so you may mark where you want your new tree planted. If you place a plastic stake in a location that conflicts with overhead or underground utilities or other physical barriers, KUB will try to contact you at the telephone number you list on this form. If we cannot reach you, our tree planting contractor will adjust the location to meet tree planting guidelines.

Customer Signature _____

Date

KUB Representative _____

Date

White Copy: KUB Vegetation Management Department
 Yellow Copy: KUB Customer

VMTRFY11M5

Form - Private Pruning Agreement



Circuit _____

Private Pruning Agreement

CUSTOMER INFORMATION

Last Name	First Name	KUB Acct. #
Street Address	Apartment/Unit #	
City	State	ZIP
Daytime Phone (Preferred)	Other Phone Number(s)	
E-mail Address		

PRIVATE PRUNING REQUIREMENTS

Required Completion Date	Minimum Required Clearance
--------------------------	----------------------------

CUSTOMER ACKNOWLEDGEMENTS

- I must hire a contractor that is qualified to safely prune trees near power lines.
- I must ensure that my contractor understands the minimum required clearance and completes work by the required completion date (see clearance requirement and date above).
- I will contact Vegetation Management by calling 558-6658 to request a one-time extension if work cannot be completed by the agreed on date.
- I will contact Vegetation Management by calling 558-6658 to schedule an inspection when my contractor has completed work.
- I understand that if KUB's inspection shows that my contractor did not achieve the minimum required clearance, I must arrange for further pruning and call KUB again at 558-6658 for a final inspection by the new date KUB will assign.

DESCRIPTION OF TREE(S)/COMMENTS

--

AGREEMENT

I agree to arrange for my trees to be privately pruned at my expense and according to the terms above, instead of having KUB's contract tree crews prune during their scheduled work. The private contractor must complete the work before the required completion date above so that KUB may perform all inspections in a timely and cost-effective manner. If the work is not completed on time or the completed work does not pass KUB's final inspection, I agree to allow KUB to prune my tree(s) using its existing pruning standards and procedures.

Customer _____

Date _____

KUB Representative _____

Date _____

White Copy:
Yellow Copy:

KUB Vegetation Management Department
KUB Customer

VMPPAFY11M6

Handout - Dispute Resolution Process



Vegetation Management Dispute Resolution Process

KUB works hard to provide safe and reliable electric service through proper tree pruning. If you have a concern about pruning, KUB's Vegetation Management Customer Advocate (VMCA) will work with you to find a resolution that balances your tree's health and appearance with ensuring your vegetation is a safe distance from KUB's electric lines.

Here's how the dispute resolution process works:

Step 1. Evaluate

The VMCA will review your experience to make sure that your interactions with KUB and its pruning contractors followed our processes and professional standards. This can often be done over the phone.

Step 2. Review

The VMCA will hear your concerns as well as a KUB forester's position. In addition, the VMCA may request a meeting with you to evaluate the situation in person to cover all possible options.

Step 3. Consider and Discuss Options

Following the review, the VMCA will give you a written summary of all possible options, including the standard options the forester covered. Discussion will take place during this step. Turn over to see a list of options.

Step 4. Complete the Work

After you and the VMCA reach an agreement, KUB will schedule the work to be completed. You may choose to be present during the work.

(Continued on back)



Customer Options

Please see the Customer Guide for more detailed information. You should have already received a guide, or they are available on www.kub.org or in KUB payment centers.

Note: Each option listed may not apply to every situation. Some of the options listed below require signed agreements.

Standard Options

- Tree removal and replacement
- Private pruning
- Subordinate lateral pruning
- Reduced clearance for low-growing or slow-growing species
- Engineering solutions

VMCA Options

- Standard options listed above
- Alternate pruning solution
- Third-party expert review
- Customer proposal
- Mediation with customer cost-sharing



To contact the Vegetation Management Customer Advocate, please call 594-7900 or e-mail treeadvocate@kub.org

Qualified Citizen Review Committee
November 8, 2012
By: Dawn Ford, Facilitator

Summary of Feedback

The general opinion of the participants on the Qualified Citizen Review Committee was that KUB's responses to the Tree Trim Policy Review Panel recommendations were effective and exceeded what most utilities are doing to accommodate their customers in relation to vegetation management. They felt the members of the original Tree Trim Policy Review Panel should be gratified that so many of their recommendations were adopted.

One participant said, "The response to the recommendations is by far the most complicated procedure of any utility I know. Most utilities do not go to this extent to educate and communicate with their customers." Another said, "It is very impressive how thorough KUB has been." Another commented that "It looks like KUB is bending over, particularly in the area of customer service and outreach."

The discussion was grouped around the following four thematic areas established by the Tree Trim Policy Review Panel:

- ◆ Aesthetics, implementation, and preventive actions
- ◆ Customer communications and public education
- ◆ Dispute resolution
- ◆ Contracts and contractors

Comments regarding aesthetics, implementation, and preventive actions

The group was impressed with the changes made in the pre-planning process and the tree replacement program. As a group, they believe the changes in the pre-planning process have been positive and have been well implemented. One participant said that "KUB goes out of its way to let customers know what their trees will look like after trimming." A member of the committee who had trees pruned since program changes have been implemented said, "I had experience having my trees pruned by KUB in the past, and the experience I had this time was much better than three years ago. In the past, tree trimming brought strong feelings in my neighborhood. Now we get notifications. We get telephone numbers with actual people attached to them. The arborists were wonderful. The crew was wonderful. I didn't want my trees trimmed, but I understood why it had to be done."

Members of the committee did feel more information should be shared about planting the right tree in the right place and trees that can become a problem if planted near a power line. They thought this information could be added to the new "KUB Tree Pruning Customer Guide."

A couple of the committee members believe KUB has been very sensitive to customer concerns about ground-to-sky pruning but expressed concern that the new policies could result in trees falling on power lines during extreme weather situations.

Comments regarding communication and public education

Participants felt the communication plan in relation to the vegetation management program is very comprehensive. They were all impressed with the “KUB Tree Pruning Customer Guide.” One participant said, “This is a good tool, and KUB should be proud of it.”

However, they also believe a greater effort should be made to get the guide in the hands of customers. They suggested that any time a KUB employee has a face-to-face encounter with a customer the guide should be distributed. Some concern was expressed that it isn’t enough to say it is available on-line, as a number of people still don’t have access to the Internet.

Those who had looked at the website felt people could find out anything they needed to know about tree trimming. “I could see where trimming was being done down to the street and neighborhood. I found out they were trimming close to my road. Before, I wouldn’t find out till they were on my street. This is an excellent process.” At the same time, they questioned how many members of the public use the website for this purpose.

Members of the committee also felt KUB should be more proactive in letting neighborhood associations know when they are going to be trimming. Then the association could announce it in their newsletters and request someone to speak at their meetings. One committee member suggested asking the City of Knoxville to include information about the trim cycles in their newsletter.

They made a minor suggestion that when KUB refers to applicable outreach events in recommendation #22 they define what these events would be.

Comments regarding dispute resolution

Members of the committee generally felt the dispute resolution process is straight forward and there is ample opportunity to find information about the process. They were impressed that complaints go to the CEO for review and are tracked.

A concern expressed by the committee is that there is no time frame incorporated in the dispute resolution process. They all felt a reasonable amount of time should be established during which customers can exercise their rights under the process. Otherwise they believe a customer could drag out the process causing an unreasonable interruption of the trim cycle.

Comments regarding contracts and contractors

The group felt that KUB’s efforts to train contractors and educate the public about the ANSI 300 standards “go over the top.” They were generally impressed with all the training efforts. One participant said, “They are executing in the field as well as can be expected.”

They expressed concern that a time frame should be established for recommendation #13 regarding written agreements if KUB has to take heavy equipment across private property. The group felt the contractor needs to get their work done in a reasonable amount of time and questioned how long they should be expected to delay before getting a written agreement.

Some members of the committee felt that a special effort should be made to inform the public that KUB will not take out stumps when trees are removed. The group believes KUB made the right decision not to remove stumps due to the cost that would be incurred, but they also believe there is a public misconception that this will be done.

They suggested a word change in recommendation # 5, which states it is required that an English speaking customer contact be with crews at all times. They felt “English” should be changed to “bi-lingual” One participant commented that using the word “English” implies that we’re a single cultural country. They also suggested that contractors be surveyed concerning what changes they believe are working well.

Miscellaneous

The committee reviewed the Vegetation Management Survey Report. They questioned who was surveyed. It was unclear if the person interviewed was the household member who actually saw the door hanger or spoke with a KUB representative. If KUB continues this survey, they think it is important to develop a set of specific qualifying questions to determine who was communicated with at the property. Otherwise, they are concerned that the data is not valid. “Information is more meaningful with more specificity about the audience.” It is possible that this is being done, but it was unclear on the chart who was surveyed.