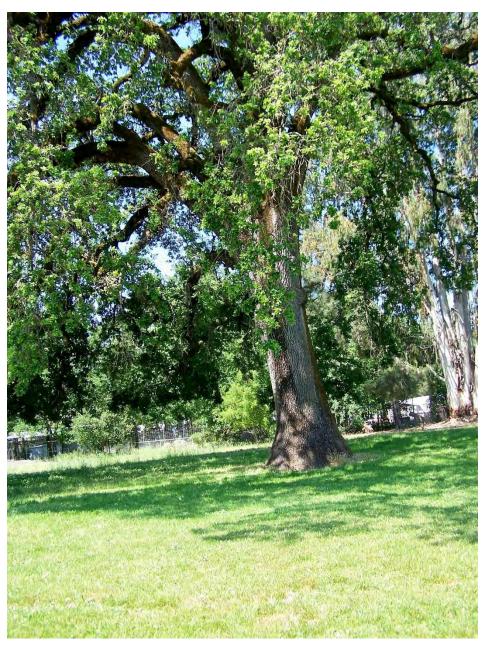
CITY OF UKIAH TREE MANAGEMENT GUIDELINES

TREE MANAGEMENT POLICIES FOR THE PROTECTION, OPERATION AND MAINTENANCE OF CITY PROPERTY



Adopted 12-01-10 & Revised 11-19-14

1.0 PURPOSE STATEMENT

The purpose of this document is to provide policy guidelines for the preservation, maintenance and enhancement of the urban forest in parks and other areas maintained by the staff and contractors of the City of Ukiah. These guidelines are based on policy from the *City of Ukiah General Plan Growth Management Program* adopted by the City Council December 6, 1995 and amended June 16, 2004 and the *City of Ukiah Community Forest Management Plan*, adopted by the City Council on November 3, 1993.

"Trees are a precious legacy which improve our quality of life and enhance our community image and pride. Trees enrich air and water quality, provide wildlife habitat, increase aesthetic value, reduce soil erosion, and help us to maintain a sense of rural community."

Community Forest Management Plan Vision Statement

2.0 <u>DEPARTMENTS AFFECTED</u>

- 2.1 Community Services Department
- 2.2 Public Works Department
- 2.3 Electric Utility Department
- 2.4 Planning and Community Development Department
- 2.5 Ukiah Municipal Airport

3.0 RESPONSIBILITY

The department directors shall be responsible for the implementation of these polices and guidelines and all staff shall be trained and shall abide by these guidelines and policies as outlined in this document. City Council shall approve any significant amendments or changes to the *Tree Management Guidelines and Policies* proposed by staff and community partners before they are adopted.

- **3.1** The Directors of the departments are responsible for the preservation, care and maintenance of trees as follows:
 - 3.1.1 Community Services Department is responsible for all trees in public parks including the Commemorative Program trees.
 - 3.1.2 Public Works Department is responsible for all trees in the public right of way and creeks.
 - 3.1.3 Electric Utility Department is responsible for trimming of trees to maintain clearance from primary electric lines and facilities
 - 3.1.4 Planning and Community Development Department is responsible for oversight of all landscaping plans filed by the applicant.
- **3.2 Partnerships:** Volunteers and/or community groups shall be important partners to achieve objectives for urban forestry.

4.0 **TRAINING**

City staff shall receive training on all procedures listed in this document, including on-site classes and/or training provided by Mendocino College and assorted qualified arboricultural professionals on a regular schedule to ensure that proper methods are utilized.

All City of Ukiah staff performing tree care duties within the City's urban forest shall attend a minimum of two training workshops annually.

A workshop for dormant care of trees will be held in the Fall/Winter months. A second workshop will occur in the Spring/Summer to train for the growing season. Workshops will include, but not limited to: proper seasonal maintenance; best practices for soil conditioning; proper pruning techniques; and plant identification. Workshops will generally be held in the field and last about two hours and will be run by a qualified arboricultural professional with expertise in best practices for urban forest care.

5.0 **POLICY GOALS**

The Tree Management Guidelines focus on long-term protection of the City's trees and have been developed for the preservation, planting, care, removal or disposition of trees, replacement planting in parks, along streets and in other public areas.

The City of Ukiah intends that these guidelines and policies shall remain in effect, however, they will be subject to change based upon arboricultural standards, community input and staff recommendations. Suggestions for changes to the Guidelines must be submitted in writing to a department director. They will then be discussed with community partners and staff and then submitted to the City Council for approval.

6.0 **GUIDELINES FOR TREE CARE AND MAINTENANCE**

Staff and contracted professionals shall utilize International Society of Arboriculture's Best Management Practices (ISA BMP) and/or American National Standards Institute (ANSI). A Glossary of terms is included in Section 9.0.

Specific criteria as detailed in the ISA BMP shall be established and applied to for the removal and/or pruning of trees located in or on City property. The same criteria shall be used to evaluate the overall public benefit of the proposed work. In all cases, safety concerns shall receive priority. In addition, priority will be given to limiting removal, increasing forest canopy, and preserving appropriate vegetation on park property.

6.1 Tree Preservation: The health and physical state of trees shall be maintained and protected whenever possible. Instances not specifically covered elsewhere in this policy include:

- 6.1.1 Conservation of Landmark Trees: These are individual trees that are considered unique because of size, species, historical significance, and shall be given extra protections and consideration for retention. Refer to the Glossary of Terms.
- 6.1.2 Conservation of Commemorative Program Trees: These are individual trees or groves purchased by someone from the City of Ukiah to memorialize an individual or group. Refer to the Glossary of Terms.
- 6.1.3 Existing Trees: Staff shall change use patterns in root zones whenever practical. For example: Vehicles parked or materials stored in the root zone shall be subject to an education and/or enforcement campaign to reverse the damage to the tree roots; pathways causing excessive compaction around tree roots shall be relocated if other options are deemed insufficient. Fencing, boulders, logs and landscaping are reasonable deterrents to reduce further damage and shall be used whenever practical. Refer to ISA BMP *Integrated Vegetation Management*.
- 6.1.4 Special consideration shall be given for unique situations. Every effort shall be made to protect trees growing near underground streams.
- 6.1.5 Storm water flooding and sedimentation of drainage areas shall be properly considered before tree removal.
- 6.1.6 The relationship of vegetation to slope stability will be a primary consideration in all proposed vegetation management on slopes.
- 6.1.7 Diseased or Infested Plants That Pose Risk to Trees: Action shall be taken to effectively decrease risk to other trees from pests and diseases. This may include removal and destruction of affected materials, pesticide treatments and/or alternative cultural practices. Other qualified experts shall be consulted as needed. Refer to ISA BMP *Integrated Pest Management; City of Ukiah Integrated Pest Management Plan*.
- 6.1.8 Damage, Vandalism and Illegal Cutting: Action shall be taken whenever possible to investigate and prosecute vandalism and illegal cutting of city-owned trees. Compensation for damages shall be sought based on the appraised value in accordance with The Guide for Plant Appraisal as authored by the Council of Tree and Landscape Appraisers.
- **Planting:** Planning before planting can ensure that the right tree is planted in the right location. Proper tree selection and placement prevents tree damage and costly maintenance like trimming. Consideration of water requirements and climate and surrounding infrastructure such as sidewalks, sewer lines and overhead/underground power lines shall improve the chances for optimum growth potential. Refer to the *City of Ukiah's Master Tree List; City of Ukiah Tree Planting and Maintenance Recommendations*; ISA BMP *Tree Planting;* and ISA BMP *Tree Support Systems*.
- **6.3 Root Environment and Tree Root Zones:** Refer to the Glossary of Terms. Whenever feasible, a pro-active program of cultural practices shall be implemented to maintain the health and vitality of City trees. Refer to ISA BMP *Tree and Shrub Fertilization*.
 - 6.3.1 Trees in parks, fields and all other areas both developed and undeveloped:

6.3.1.1	Soil Compaction: Every effort shall be made to avoid the compaction of soil in root zones and to encourage penetration of rainfall deep into the soil.
6.3.1.2	Mulch: Organic material such as mulch and leaves shall not be removed under the tree canopy.
6.3.1.3	Crews shall, when feasible and practical, establish and maintain the areas under tree canopies free of turf and invasive plant species. The use of native grasses and plants are encouraged, as are plants associated with the trees above them. Special consideration shall be given to oak trees and the use of drought tolerant plants near them.
6.3.1.4	Parking: Vehicles and equipment should be parked on paved areas, streets and parking lots.
6.3.1.5	Pavement: The use of pavement within park and garden areas shall be limited as much as possible, especially under tree canopies. Whenever pavement is necessary the use of permeable materials is preferred. Remove the affected curb and damaged or cracked pavement due to root uplift when feasible. Level the section with mulch, chips, sand, or gravel rather than replacing the area with impervious materials.
6.3.1.6	Leaf Blowers: The use of leaf blowers is discouraged. Leaf blowers should not be used to blow debris with native soil.
6.3.1.7	Pesticides: The use of pesticides is discouraged. Please refer to the City Integrated Pest Management policy.
6.3.1.8	Stakes: In the unusual situation when stakes are needed they should be driven in outside the root ball. ISA BMP Tree Support Systems shall be followed.

6.4 Construction around Trees: Protection devices shall be installed to protect the tree and root zones when near or within construction zones. The root system extends at least to the edge of the canopy or drip line of the tree with most of the fine feeder roots active in the top few inches of the soil. These roots need air to stay healthy in order to provide the tree with nutrients and water. This root zone shall be protected from compaction, changes in soil grade, digging, or other disturbances.

Protective fencing and warning signage will be required around the root zone. All tree protection devices shall be visible, well-anchored, and approved in the field by the Supervisor or designee prior to clearing, grading, or beginning of construction and shall remain in place and maintained until the project is completed. Refer to ISA BMP Managing Trees During Construction and ANSI Construction Management and Standard.

- 6.5 Consultation with a Qualified Arboricultural Professional: When planning and designing a public improvement project the City shall seek the appropriate qualified expert when the project involves or is near a tree or trees.
- 6.6 **Pruning Standards:** The latest pruning standards established by the International Society of Arboriculture shall be used in the maintenance of trees and are detailed in the ISA Best Maintenance Practice booklets. Refer to ISA BMP Tree Pruning; ISA BMP Utility Pruning of Trees. Such maintenance will include:
 - 6.6.1 General pruning for clearance to prevent injuries and to facilitate maintenance and vehicle clearance.
 - 6.6.2 Pruning dead, dying, and diseased sections to improve the health and appearance of the tree and to prevent accidents.
 - 6.6.3 Pruning for clearance around lighting and overhead lines.
 - 6.6.4 Pruning back for authorized passage on service roads, walkways and paths.
 - Pruning requested by a private property owner. Such requests do not obligate 6.6.5 the Department to prune trees, shrubs, and/or vegetation. It is the responsibility of the business owner to plan their signage so that visibility is not affected by growing trees.
 - 6.6.6 Pruning in park areas identified as places of illegal or inappropriate activity in order to improve general visibility and increased police surveillance.
- 6.7 **Birds and Nesting:** Except in emergencies nesting birds or nests shall not be disturbed or harassed by pruning or removal activities. To avoid nesting season such activities shall occur between September 1st and March 31st. Fish and Game Code 3503: "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird..." The Migratory Birds Treaty Act of 1918 also applies.
- 6.8 **Unnecessary Wounding:** Because "topping" of trees can cause permanent damage by promoting decay, as well as unnatural, dense and weak branching structure, topping shall not be practiced or permitted except under special circumstances. Not only can a tree sustain wounds to the branches or top, it can also sustain wounds to the trunk. Therefore, these policies shall reinforce the protection of the trunk area from wounds associated with a lawn mower or other equipment.
- 6.9 Hazardous Tree Management: Public health, safety and general welfare will be maintained through the use of generally accepted professional practices of evaluation and treatment to reduce risks to people and property from hazardous trees. Attention to proper selection, planting and maintenance of new trees shall also be pursued to achieve longterm risk reduction.
 - 6.9.1 The City of Ukiah shall assess and manage the risk of tree failure within the limits of available fiscal and human resources. Priority shall be given to locations and situations with high probability of failure and high potential damage or injury that may result.

- 6.9.2 Notwithstanding an immediate hazard to safety and/or property, the City shall utilize a written tree risk assessment methodology established by the ISA (ISA Basic Tree Risk Assessment Form or equivalent) to evaluate the likelihood that part or all of a tree will fail and cause damage and/or injury by a qualified arboricultural professional. The components of the assessment shall include tree health, species profile, site factors, history of failures, tree defects/conditions, target assessment, risk categorization, mitigation options and recommend inspection intervals when warranted.
- 6.9.3 Corrective action for high hazard rated trees shall be reasonable and prudent and may include:
 - Moving any at-risk structures, equipment, fixtures or recreational sites;
 - Correction of the defect by pruning, cabling and bracing, or tree removal;
 - Closure of the area
- **7.0 Tree Removal:** The City shall provide 72 hours of advance notice of the intended tree or trees that shall be removed by posting a sign at the work site when feasible. The sign shall contain the reason for the removal of the tree and the appropriate city department's telephone number that the public may contact for further information. Tree removal will include:
 - 7.0.1 Trees that pose substantial risk or hazard to the public, adjacent properties or to public facilities.
 - 7.0.2 Dead, dying or diseased trees.
 - 7.0.3 Removal from properties being improved or developed under an approved design, however, prior consideration to retention shall be given whenever possible. Preference is to retain existing healthy trees when designing any development rather than attempting mitigation.
 - 7.0.4 Trees that block trails, drains or otherwise obstruct the use and function of infrastructure elements.
 - 7.0.5 Trees on sites that were over planted by design or are crowded from natural competition. As the landscape grows, the Supervisor with consultation with a qualified expert shall selectively remove trees on a site to maintain spacing for optimal tree growth and function.
 - 7.0.6 Removal requested by a private property owner. However, such requests do not obligate the City of Ukiah to remove or allow removal of any trees, shrubs, and/or vegetation.
 - 7.0.7 Consideration shall be given for providing trunk and limbs for service projects such as constructing benches and picnic tables. The use of wood chips for mulching material around trees and vegetation in the parks is encouraged.
 - 7.0.8 Any person aggrieved or impacted by a decision to remove a tree may appeal the decision during the noticing period. A letter stating the reason(s) for the

appeal must be submitted to the City Clerk's Office. An appeal automatically stops any action or non-action on the tree until the responsible Department Director has an opportunity to review and consider the appeal. When feasible, the Director will consult with the City's Tree Advisory Committee for additional input. The Director's decision on an appeal is the final administrative determination.

The Director's final determination may be appealed to the City Council. The appeal must be filed with the City Clerk's Office within 10 days of the Director's determination and must be accompanied by supporting documentation from a qualified arboricultural professional using the same tree risk assessment methodology established by the ISA as detailed in Section 6.9.2.

- 7.1 **Tree Replacement:** At least one tree shall be planted for every tree that is removed from City property. Replacement tree species shall be selected so that overall mature canopy volume will be maintained or increased. It is preferable to plant the replacement tree in close proximity to the original tree's location. The replacement tree may be located elsewhere, if local conditions contributed to the previous tree's failure (See Section 6.2). New locations should be found on the same site or in the same neighborhood at a location of similar or greater value. Preference shall be given for planting native trees whenever feasible.
- 7.2 Replacement Plantings: The City shall undertake the task of replacement plantings to mitigate the effects of vegetation removal and to reestablish the landscape and increase overall mature forest canopy. The City shall determine the species of tree to be planted on City property and the planting location. Every effort shall be made to select a species compatible with the existing tree plantings on the street, the neighborhood identity, the maturity of the trees, space available for growth, the presence of underground and overhead utility lines, utility poles, streetlights, driveway approaches and fire hydrants.
- 7.3 Phasing: The City of Ukiah when appropriate shall consider a phased approach to vegetation management to reduce potential short-term negative aesthetic and/or wildlife habitat impacts (associated with such actions).
- 7.4 Wildlife and Habitat: Trees and forested areas are recognized as important habitat for native wildlife and providing vital wildlife corridors. Trees, undeveloped landscapes and creeks will be managed to optimize them for wildlife habitat. Refer to the City of Ukiah Creeks Maintenance Policies and Procedures.

8.0 **SUMMARY**

These quidelines are set in place to enhance the urban forest within the City of Ukiah. As industry standards change in regard to tree care, this document shall remain flexible to incorporate needed changes.

9.0 **GLOSSARY OF TERMS**

For additional definitions, refer to the International Society of Arboriculture Best Management Practices

- 9.1 **Commemorative Program Tree Program** provides an opportunity for the public in celebrating an event or memorializing a loved one by the planting of a young tree or trees while improving the appearance and canopy of City parks. A tree or grove is purchased from the City of Ukiah to honor or memorialize an individual or group. Such tree(s) are identified and recorded by the City of Ukiah with the name of the tree species, dedicated individual or group and the name of the donor.
- 9.2 **Developed landscape** is property that has been graded and/or planted, and contains plantings that are distinct from typical native forest. These active and/or passive recreational landscape areas are routinely maintained by park staff for public use. Developed landscapes shall include, but are not limited to: lawns, athletic fields, boulevards, golf courses including pitch and putt, lawn bowling greens, play areas, squares, places, triangles, and swimming beaches.
- 9.3 Hazardous Tree is a tree that can be predicted to fail and has a high probability of striking people or property causing injury or damage.
- 9.4 Invasive exotic vegetation consists of species of plants that are not native to our region and exhibit aggressive growth to the exclusion of native or planted landscapes and wildlife.
- 9.5 **Landmark Trees** are individual trees that have been designated as unique because of size, historical/commemorative association, and distinct form, as an outstanding specimen or are important for wildlife habit. Such trees will be given extra protection and consideration for retention. Rules and regulations for landmark trees are defined in the City's Landmark Tree Program and/or Downtown Zoning Code.
- 9.6 **Topping** is the removal of the terminal shoot of a tree to a stub or lateral branch that is not sufficiently large enough to assume a terminal role or cannot be expected to achieve wound closure to inhibit decay.
- 9.7 **Tree Failure** is the breaking and falling of a tree or any substantial part of a tree. This does not include falling leaves or fruit.
- 9.8 **Tree Root Zone** is the area from the trunk to the drip line or the edge of the unpruned canopy around a mature, uninjured tree or the anticipated root zone of a young tree.
- 9.9 Qualified Arboricultural Professional is a tree care professional with a minimum of two years of experience in the evaluation and care of trees in combination with a professional license or certification that measures minimum competency in relevant subjects, including protection of public health, safety and welfare. Acceptable titles include Certified Arborist, Registered Consulting Arborist, Registered Professional Forester, and Landscape Architect.
- **Undeveloped Landscape** is property that contains native or volunteer (selfpropagated) plants and is not intended for recreational use except along designated trails. Undeveloped landscapes are (usually) not as intensively maintained as developed landscapes.

10.0 ADDITIONAL RESOURCES

Additional City and other tree-related documents that incorporate tree guidelines are available electronically through the Intranet. The Department Director shall provide the *The International* Society of Arboriculture Best Management Practice booklets, American National Standards Institute related documents and Mendocino County ReLeaf materials to their employees.

These documents are:

- Municipal Code Article 2, Chapter 5, Number 5420 Street Tree Policy, Purpose and Intent (Ordinance 869, adopted 1987)
- Community Forest Management Plan
- Tree Protection and Enhancement Policy
- Tree Planting and Maintenance Recommendations
- Master Tree List
- Integrated Pest Management Plan, Community Service Department
- Creek Maintenance Policies & Procedures
- Form Based Zoning Preservation Tree List
- General Plan, Open Space and Conservation Element, adopted 12/6/1995; amended 6/16/2004
- Landscaping and Streetscape Design Guidelines
- Commercial Development Design Guidelines
- International Society of Arboriculture Best Management Practices (ISA BMP): Managing Trees During Construction; Tree Pruning; Integrated Pest Management; Tree Support Systems; Utility Pruning of Trees; Tree and Shrub Fertilization; Tree Planting; Tree Inventories; Integrated Vegetation Management
- American National Standards Institute (ANSI): Construction Management Standards
- Mendocino County ReLeaf Tree Care Guide
- Hillside Ordinance 9135

Required Parking Lot Tree List

The table below identifies trees required for planting in a parking lot and were selected specifically for Ukiah's climate and conditions specific to parking lots. The trees in the table were selected by the Tree Advisory Group based on their ability to survive in the conditions specific to parking lots. The Required Paring Lot Tree Table was approved by the City Council on April 18, 2012.

	Required Parking Lot Tree List												
Botanic Name	Average	Average	Evergreen	Fruiting	Drought	Mendocino	Crown		Suitable for		Cultivars		
	Height	Spread	Or	Or	Tolerant	Native	Туре	Confined	Overhead	Confined	& Notes		
Common Name	(feet)	(feet)	Deciduous	Flowering				Root	Wire	Crown			
								Spaces	Locations	Spaces			
Acer rubrum	40'	35'	Deciduous	No	Mod	No	Oval	Yes	No	No	'October Glory'		
Red Maple											cultivar		
Arbutus unedo	20′	20'	Evergreen	Yes	Yes	No	Rounded	Yes	Yes	Yes	Tree trained forms		
Strawberry Tree											only		
Carpinus betulus	45'	25′	Deciduous	No	Mod	No	Pyramidal	Yes	No	Yes	'Pyramidalis' &		
European Hornbeam											'Fastigata' cltvs		
x Chitalpa tashkentensis	25′	25'	Deciduous	Yes	Yes	No	Rounded	Yes	Yes	No	'Morning		
											Cloud'cultivar		
Eucalyptus gunnii	50′	35'	Evergreen	No	Yes	No	Oval	Yes	No	No			
Cider Gum													
Eucalyptus nicholii	40'	30'	Evergreen	No	Yes	No	Oval	No	No	No			
Willow-leaf Peppermint													
Ginkgo biloba	50′	30′	Deciduous	No	Yes	No	Spreading	Yes	No	No	'Autumn Gold' &		
Maidenhair Tree											'Saratoga' cultivar		
Gymnocladus dioica	50'	30'	Deciduous	No	Yes	No	Oval	No	No	No	'Espresso' culitvar		
Kentucky Coffee Tree													
Morus alba	30'	40'	Deciduous	No	Yes	No	Spreading	No	No	No	'Fan-San' & 'Kingan'		
Fruitless Mulberry											cultivars		
Olea europea	25'	25'	Evergreen	No	Yes	No	Spreading	Yes	Yes	No	'Swan Hill' &		
Fruitless Olive											'Wilsonii' cultivars		

	Required Parking Lot Tree List												
Botanic Name	Average	Average	Evergreen	Fruiting	Drought	Mendocino	Crown	Suitable for			Cultivars		
	Height	Spread	Or	Or	Tolerant	Native	Туре	Confined	Overhead	Confined	& Notes		
Common Name	(feet)	(feet)	Deciduous	Flowering				Root	Wire	Crown			
								Spaces	Locations	Spaces			
Plantanus x acerifolia	50′	50′	Deciduous	No	Yes	No	Rounded	Yes	No	No	Syn. x hispanica		
London Plane/Sycamore											'Columbia' &		
											'Yarwood' cultivar		
Saphora japonica	40'	30'	Deciduous	Yes	Yes	No	Rounded	No	No	No	'Regent' cultivar		
Japanese Pagoda Tree													
Ulmus parvifolia	40'	40'	Semi-	No	Yes	No	Spreading	Yes	No	No	'Athena' & 'True		
Chinese Elm			Evergreen								Green' cultivars		
Zelkova serrata	50'	40'	Deciduous	No	Yes	No	Vase	Yes	No	No	'Village Green'		
Sawleaf Zelkova											cultivar		

Request for Alternate Species. A species other than those listed in the Required Parking Lot Tree List above may be planted with approval from the Planning and Community Development Director. The request to use an alternate tree must be made in writing and include the following information as applicable:

- 1. Why species from the required tree list cannot be planted;
- 2. Why the alternative species proposed is a preferred and appropriate species;
- 3. Ability to provide beauty and shade;
- 4. Ability of the species selected to remain healthy and viable in the conditions in which it would be planted (such as size of tree well, landscaped island; soil conditions, location of utilities and overhead lines, proximity to building(s)/structure(s)).
- 5. Other information required by the Planning and Community Development Director.

Recommended Residential Tree List

The table below identifies trees recommended for planting in a residential setting and were selected specifically for Ukiah's climate. The trees in the list were selected by the Tree Advisory Group. The tree table was approved by the City Council on April 18, 2012.

			R	ecommen	ded Res	idential Tr	ee List				
Botanic Name	Average	Average	Evergreen	Fruiting	Drought	Mendocino	Crown		Suitable for		Cultivars
	Height	Spread	Or	Or	Tolerant	Native	Туре	Confined	Overhead	Confined	& Notes
Common Name	(feet)	(feet)	Deciduous	Flowering				Root	Wire	Crown	
								Spaces	Locations	Spaces	
Acer platanoides	60'	40'	Deciduous	No	Yes	No	Rounded	No	No	No	'Crimson King'
Norway Maple											
Acer campestre	30'	25′	Deciduous	No	Mod	No	Rounded	Yes	No	Yes	
Hedge Maple											
Acer circinatum	20'	20'	Deciduous	No	No	Yes	Vase	Yes	Yes	No	Needs afternoon
Vine Maple											shade
Acer griseum	25'	20′	Deciduous	No	No	No	Vase	Yes	Yes	No	Needs afternoon
Paperbark Maple											shade
Aesculus x carnea	40'	30'	Deciduous	Yes	Mod	No	Broad-	Yes	No	No	'Briotii' cultivar
Horse Chestnut							Rounded				
Albizia julibrissin	30'	30'	Deciduous	Yes	Yes	No	Spreading	Yes	Yes	No	Beautiful flowers but
Silk Tree											year-round debris
Arbutus unedo	20′	20'	Evergreen	Both	Yes	No	Rounded	Yes	Yes	Yes	Tree trained forms
Strawberry Tree											only
Arbutus x 'Marina'	30'	30'	Evergreen	Both	Yes	No	Oval	No	No	No	Needs open ground
Hybrid Strawberry Tree											for best growth
Calocedrus decurrens	60'	20′	Evergreen	No	Yes	Yes	Pyramidal	No	No	Yes	'Columnaris'
Incense Cedar											cultivar
x Chitalpa tashkentensis	25'	25'	Deciduous	Yes	Yes	No	Rounded	Yes	Yes	No	'Morning
											Cloud'cultivar
Catalpa speciosa	60'	30'	Deciduous	Yes	Yes	No	Oval	No	No	No	Beautiful flowers but
Hardy Catalpa											year-round debris
Cercis canadensis	25′	35'	Deciduous	Yes	Yes	No	Vase	Yes	Yes	No	'Oklahoma' culitvar
Eastern Redbud											

	Recommended Residential Tree List													
Botanic Name	Average	Average	Evergreen	Fruiting	Drought	Mendocino	Crown		Suitable for		Cultivars			
	Height	Spread	Or	Or	Tolerant	Native	Туре	Confined	Overhead	Confined	& Notes			
Common Name	(feet)	(feet)	Deciduous	Flowering				Root	Wire	Crown				
								Spaces	Locations	Spaces				
Cercis occidentalis	20'	15′	Deciduous	Yes	Yes	Yes	Vase	Yes	Yes	Yes	Tree trained forms			
Western Redbud											only			
Chionanthus retusus	25'	30′	Deciduous	Yes	No	No	Spreading	No	Yes	No	Slow growth			
Chinese Fringetree														
Cornus capitata	25'	20′	Evergreen	Yes	No	No	Vase	No	Yes	No				
Evergreen Dogwood														
Cornus florida	25'	25′	Deciduous	Yes	No	No	Rounded	No	Yes	No				
Eastern Dogwood														
Cornus x rutgersensis	20'	20′	Deciduous	Yes	No	No	Rounded	No	Yes	No	'Celestial'			
Galaxy Hybrid Dogwoods											cultivar			
Cornus x 'Eddie's White	30'	25'	Deciduous	Yes	No	No	Rounded	Yes	No	No				
Wonder'														
Cotinus coggygria	15′	15′	Deciduous	Yes	Yes	No	Rounded	Yes	Yes	No	'Velvet Cloak' &			
Smoke Bush											'Royal Purple'			
Diospyros kaki	35′	30′	Deciduous	Yes	Yes	No	Rounded	Yes	No	No	'Fuyu' cultivar			
Persimmon														
Koelreuteria bipinnata	40'	30'	Deciduous	Yes	Yes	No	Spreading	No	No	No				
Chinese Flame Tree														
Magnolia grandiflora	25′	15′	Evergreen	Yes	Mod	No	Upright	No	No	No	'Little Gem' cultivar			
Southern Magnolia														
Malus species	20'	20'	Deciduous	Yes	Mod	No	Spreading	Yes	Yes	No	Prairie Fire' 'Snow			
Crabapple											Drift'			
Maytenus boaria Mayten Tree	35'	30′	Evergreen	No	Yes	No	Rounded	Yes	No	No	'Green Showers' cultivar			
Nyssa sylvatica	40'	25'	Deciduous	No	No	No	Upright	No	No	No				
Tupelo							_							
Quercus douglasii	35'	25'	Deciduous	Yes	Yes	Yes	Spreading	No	No	No	Slow growth, good			
Blue Oak											for clayey soils			

	Recommended Residential Tree List													
Botanic Name	Average	Average	Evergreen	Fruiting	Drought	Mendocino	Crown		Suitable for	Cultivars				
	Height	Spread	Or	Or	Tolerant	Native	Туре	Confined	Overhead	Confined	& Notes			
Common Name	(feet)	(feet)	Deciduous	Flowering				Root	Wire	Crown				
								Spaces	Locations	Spaces				
Quercus garryana Oregon Oak	45'	35′	Deciduous	Yes	Yes	Yes	Spreading	No	No	No	Good for clayey soils			
Quercus kelloggi	40'	30'	Deciduous	No	Yes	Yes	Rounded	No	No	No	Predominate oak of			
Black Oak											the western hills			
Quercus lobata	100′	80'	Deciduous	No	Yes	Yes	Spreading	No	No	No				
Valley Oak														
Quercs suber	60'	40'	Evergreen	Yes	Yes	No	Rounded	Yes	No	No				
Cork Oak														
Quercus wislizeni	40'	40'	Evergreen	No	Yes	Yes	Rounded	No	No	No				
Interior Live Oak														
Sophora japonica	40'	30'	Deciduous	Yes	Yes	No	Rounded	No	No	No	'Regent' cultivar			
Japanese Pagoda Tree														
Ulmus parvifolia	40'	40'	Semi-	No	Yes	No	Spreading	No	No	No	'Athena' & 'True			
Chinese Elm			Evergreen								Green' cultivars			

Trees from the Required Street Tree List, Required Parking Lot Tree List, Required Parks Tree List, and Required Riparian Tree List are also appropriate for planting in a residential setting.

The trees in these tables were selected based on their ability to thrive in the conditions unique to each setting (street planter strip, parking lot, park, riparian area). In order to provide for the long-term health and vitality of the tree selected, it is recommended that the tree selected be compatible with the residential setting in which it would be planted (e.g lawn and irrigation, overhead lines, creek side, pavement/impervious surfaces, limited drainage).

Required Street Tree List

The table below identifies trees required for planting as street trees. The required street trees were selected specifically for Ukiah's climate and conditions specific to a street tree setting. The trees in the table were selected by the Tree Advisory Group based on their ability to survive in the conditions specific to street trees, such as confined root spaces, overhead wires, and/or confined crown spaces. When selecting a tree from the list, careful consideration should be given to the setting in which the tree will be planted. The Required Street Tree List was approved by the City Council on April 18, 2012.

	Required Street Tree List												
Botanic Name	Average	Average	Evergreen	Fruiting	Drought	Mendocino	Crown		Suitable for		Cultivars		
Common Name	Height (feet)	Spread (feet)	Or Deciduous	Or Flowering	Tolerant	Native	Туре	Confined Root Spaces	Overhead Wire Locations	Confined Crown Spaces	& Notes		
Acer rubrum Red Maple	40′	35′	Deciduous	No	Mod	No	Oval	Yes	No	No	'October Glory' cultivar		
Acer campestre Hedge Maple	30′	25′	Deciduous	No	Mod	No	Rounded	Yes	No	Yes			
Carpinus betulus European Hornbeam	45′	25′	Deciduous	No	Mod	No	Pyramidal	Yes	No	Yes	'Pyramidalis' & 'Fastigata' cltvs		
Celtis occidentalis American Hackberry	60′	40′	Deciduous	No	Yes	No	Rounded	No	No	No			
Celtis sinensis Chinese Hackberry	40′	40'	Deciduous	No	Yes	No	Rounded	No	No	No	Concerns about potential invasiveness		
Cercis canadensis Eastern Redbud	25′	35′	Deciduous	Yes	Yes	No	Vase	Yes	Yes	No	'Oklahoma' culitvar		
Crataegus phaenopyrum Washington Hawthorn	25′	20′	Deciduous	Yes	Yes	No	Vase	Yes	Yes	Yes			
Ginkgo biloba Maidenhair Tree	50′	30'	Deciduous	No	Yes	No	Oval	Yes	No	Yes	'Autumn Gold' & 'Saratoga' cultivar		
Koelreuteria paniculata Golden Rain Tree	40′	30′	Deciduous	Yes	Yes	No	Rounded	No	No	No			
Laurus nobilis Grecian Laurel	35′	25′	Evergreen	No	Yes	No	Pyramidal	Yes	No	No			
Pistacia chinensis Chinese Pistache	40′	40′	Deciduous	Yes	Yes	No	Rounded	Yes	No	No			
Plantanus x acerifolia London Plane/Sycamore	50′	50′	Deciduous	No	Yes	No	Rounded	Yes	No	No	Syn. x hispanica 'Columbia' & 'Yarwood' cultivar		

	Required Street Tree List												
Botanic Name	Average	Average	Evergreen	Fruiting	Drought	Mendocino	Crown		Suitable for		Cultivars		
	Height	Spread	Or	Or	Tolerant	Native	Туре	Confined	Overhead	Confined	& Notes		
Common Name	(feet)	(feet)	Deciduous	Flowering				Root	Wire	Crown			
								Spaces	Locations	Spaces			
Prunus cerasifera Purple Leaf Plum	25′	20'	Deciduous	Yes	Yes	No	Vase	Yes	Yes	Yes	'Thunder Cloud' & 'Krauter Vesuvius' cultivars		
Pyrus calleryana Flowering Pear	35'	20'	Deciduous	Yes	Yes	No	Oval	Yes	No	Yes	'Chanticleer' & 'Aristocrat'		
Quercus kelloggi Black Oak	40'	30'	Deciduous	No	Yes	Yes	Rounded	No	No	No	Needs open ground for best growth		
Quercus Ilex Holm or Holly Oak	40'	30′	Evergreen	No	Yes	No	Oval	Yes	No	No			
Quercus rubra Eastern Red Oak	75′	50′	Deciduous	No	Yes	No	Spreading	No	No	No			
Robinia x ambigua Purple Robe Locust	45′	35′	Deciduous	Yes	Yes	No	Oval	Yes	No	No	'Purple Robe' cultivar, needs training		
Ulmus 'Frontier' Hybrid Elm	45'	45′	Deciduous	No	Yes	No	Vase	No	No	No			
Ulmus parvifolia Chinese Elm	40′	40′	Semi- Evergreen	No	Yes	No	Spreading	Yes	No	No	'Athena' & 'True Green' cultivars		

Request for Alternate Species. A species other than those listed in the Required Street Tree List above may be planted with approval from the Director of Public Work and Director of Planning and Community Development. The request to use an alternate tree must be made in writing and include the following information as applicable:

- 1. Why species from the required tree list cannot be planted;
- 2. Why the alternative species proposed is a preferred and appropriate species;
- 3. Ability to provide beauty and shade;
- 4. Ability of the species selected to remain healthy and viable in the conditions in which it would be planted (such as size of tree well, overhead wires, soil conditions, location of utilities and overhead lines, proximity to building(s)/structure(s)).
- 5. Other information required by the Public Works Director and/or Planning and Community Development Director.