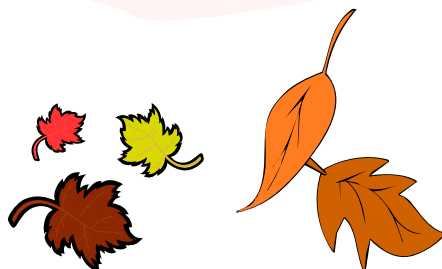


2006

A large, stylized tree with a pink trunk and a green canopy of leaves. The tree is centered behind the main text.

**Boise Parks &
Recreation
Community Forestry
Unit
Management Plan**



**LES BOIS TREE TASK FORCE
COMMUNITY FORESTRY MANAGEMENT PLAN
December 2005**

**BOISE PARKS & RECREATION DEPARTMENT
COMMUNITY FORESTRY UNIT**

Community forestry can be defined as the planning, design and management of trees and in and around communities for the purpose of maximizing their visual, social, economic and environmental contributions.

The Community Forestry Unit extends our appreciation and gratitude to the members of the Tree Task Force Committee, Boise Parks & Recreation staff, and other city staff representatives who assisted with developing this plan.

This 10 year Management Plan is a guideline to maintaining, and expanding the urban forest in Boise.

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**Parks &
Recreation**

**LES BOIS TREE TASK FORCE
COMMUNITY FORESTRY MANAGEMENT PLAN
MAY 2005**

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EXECUTIVE SUMMARY

An integral part of Boise's character and heritage are the trees and all the benefits that they provide the citizens of the community. The Boise Parks & Recreation Department Community Forestry Unit is responsible for the care and maintenance of 41,000 trees that are on public properties. There are over 10,000 trees on park properties, over 21,000 trees on public rights-of-way and over 10,000 trees along the Greenbelt and river. It is estimated that over the next five years the department will add over 95 acres of park property and 950 trees. In order to accomplish the proper care of these trees it is necessary to involve the Parks & Recreation Department and other agencies; Boise City Planning and Development, Ada County Highway District, Capital City Development Corporation, Downtown Business Association, Landscape Architects, Neighborhood Groups, Tree Nurseries, and citizens. It will take a group effort to ensure the urban forest that is here today remains healthy and vibrant for future generations.

Trees provide several significant community benefits:

- Trees can provide home energy savings of \$30.00 per year (for summertime cooling).
- Trees clean 330 pounds of carbon dioxide from the atmosphere.
- They absorb 10 pounds of air pollutants, including 4 pounds of ozone and 3 pounds of particulates.

“In the past, trees were often included in local plans primarily as beautification elements. Today many planners have realized that trees play a much greater role. They are a critical factor in human health and well being, affecting the overall quality of life in communities. Over the past 20 years urban tree researchers have learned that trees in urban areas improve air quality, conserve energy, reduce stormwater runoff, increase property values, attract businesses, reduce stress, increase healing, and decrease crime. More recently, researchers at the Center for Urban Forest Research have been able to place a dollar value on some of these benefits, such as stormwater runoff, air quality, and energy conservation.”

The Community Forestry Unit provides numerous services to the community: hazardous tree removal, hazard reduction pruning, clearance pruning, juvenile tree pruning, tree planting programs, emergency services, and educational programs. To keep up with the work it will be necessary to look closely at the way the Unit and the trees are managed.

In 1995 the first Tree Task Force was developed to make recommendations and to evaluate the Community Forestry Unit. The Task Force consisted of 14 members of the community with a broad range of professional backgrounds and interests. The committee was divided into four subcommittees: Maintenance & Operations, Planting Plan, Education & Volunteerism and Management & Administration.

A list of recommendations was formed, the report was approved by the Boise Parks & Recreation Board and City Council, and the recommendations implemented.

Since 1995 updates were made on the recommendations that were completed. Over the ten-year period most of those recommendations have been completed and updating and revising the plan was needed. In 2005 a new Task Force Committee was formed to put together a ten-year management plan.

The management plan is needed to oversee the urban forest of today and for future years. This plan is composed of four major elements:

- Administration and Education
- Maintenance and Operations
- Tree Planting
- Downtown Trees

The Administrative and Education section looks at the staffing needs, contracting, partnerships, and training of staff, Tree Steward Program and tree educational needs.

The Maintenance and Operations section deals with the needs of maintaining the urban forest. This section looks at tree pruning, tree removal and trends, contracting, integrated pest management, emergency response, tree hazards, tree irrigation, funding needs, abiotic and biotic problems in regard to trees and associated infrastructure problems.

The Tree Planting section looks at the tree planting needs on public rights-of-way, tree planting on park properties and other city-owned properties, tree planting on private developments, other planting opportunities and the operation of Cunningham Nursery.

The Downtown Tree Planting section deals with a unique area of Boise in the urban core. This section looks at who should be involved, partnerships, planning and spacing issues, tree species, irrigation, tree maintenance, tree education and infrastructure items.

Each of these sections contains a list of recommendations for managing Boise's urban forest. The committee identified a total of 68 recommendations. From this list the top 20 most important recommendations have been prioritized to be implemented first.

Within this report are the policies and ordinances regarding trees. These policies and ordinances guide the Community Forestry Unit in how it deals with trees in regard to legal issues.

Overall, this management plan will guide the Community Forestry Unit and guarantee that future generations will have a healthy urban forest. It is important that the community realizes the benefits of trees in our society and the values they bring to our everyday lives.

**LES BOIS TREE TASK FORCE
COMMUNITY FORESTRY MANAGEMENT PLAN
TOP PRIORITY RECOMMENDATIONS**

1. Fund contract services to respond to hazardous tree removal and maintain, at a minimum, the current seven to eight year hazard reduction pruning cycle by increasing the contract budget \$50,000 per year from the general fund for fiscal years 2006 and 2007. Thereafter provide annual increases in contract funding to maintain resources required for tree removal and pruning.
2. Expand the Tree Steward program to assist staff with additional work load. This group could be expanded by 20 to 25 people if one additional staff is in place to oversee the program.
3. It is recommended that one additional staff be hired or converted to oversee educational outreach programs, Tree Stewards Program, Volunteer Groups and web site.
4. Require that all new and reinvestment development provide a minimum eight foot wide irrigated space for rights-of-way tree planting, void of buried utilities conflicts. Work with Ada County Highway District and Utility Companies to place underground utilities in a way that frees up rights-of-way planting space.
5. Increase the required one to one ratio for tree removal / replacement and encourage additional tree planting in rights-of-way. Strive to achieve a planting ratio of two (2) to three (3) trees for each tree removed. Encourage adjacent property owners to plant trees beyond the minimum requirement.
6. Work with the North End and East End Neighborhood Associations to develop neighborhood specific planting plans, including replacement trees in parkways, which encourage planting of large stature trees. Create recommendations that address tree diversity, parkway limitations, homeowners' education and increasing the canopy coverage. The plans should be completed and adopted by the end of 2007.
7. Develop incentives for planting Class III trees in parkway planting sites where parkway widths are sufficient.
8. When replacing Class III trees (e.g. Silver Maples) in parkways narrower than 8 feet offer a narrowed list of Class II trees for consideration that only includes the largest of the Class II trees available.
9. Develop a tree pruning plan with Ada County Highway District for their nine (9) year street resurfacing cycle that raises the canopy appropriately for their operation in a way that is more beneficial to the health of the trees, more aesthetically balanced and more satisfying to the adjacent property owner.
10. Work with Capital City Development Corporation and Downtown Business Association and property owners / tenants to create a downtown core tree planting plan. Create a mapped layout identifying proposed species for all block faces in the plan areas. The plan shall consider the following:
 - Tree Diversity
 - Maintenance limitations
 - Microclimate constraints

- Aesthetics
 - Business concerns
 - The plan is to be completed and adopted by the end of 2006.
11. In cooperation with Capital City Development and Downtown Business Association, create a comprehensive maintenance strategy for the downtown tree plan to include:
 - Periodic widening of tree grates to provide trunk clearance
 - Annual pruning plan for volunteer Tree Stewards
 - Control and management of tree pests and diseases
 - Periodic inspection and maintenance of automated irrigation systems
 - Adjustments or removal of lighting strung in street trees
 12. Provide additional educational classes to various groups and professionals. Conduct tree classes including:
 - Various nurseries and green industry businesses
 - On the web
 - Various trade schools and high schools
 - The Botanical Gardens
 13. Determine best practices for the coexistence of grasses and trees.
 14. Work with Boise City Planning and Development, Developers and neighborhoods to create “Street Planting” along private property behind public rights-of-way (using class II or III trees).
 15. Provide opportunity and additional money for staff to attend training needed to keep certifications current. Attend various conferences; i.e. annual ISA Training Conference, INLA Training Conference and local training conferences
 16. Create a formal agreement with Ada County Highway District to cover tree maintenance, tree planting, tree replacement and infrastructure conflicts caused by trees.
 17. Coordinate alternative sidewalk replacement material / design plans with Ada County Highway District to protect trees while providing safe sidewalks.
 18. Develop, implement and enforce a Boise City Landscape Ordinance for existing and new site development.
 19. Continue with and expand on Park property tree replacement and new planting to maximize tree canopy coverage. Increase our estimated Tree Canopy land cover to 23,047 acres (33 percent).
 20. Provide control of Elm Leaf Beetle to meet the threshold for treatment of no more than 25% infestation in a tree.
 21. Create a comprehensive education strategy aimed at downtown property owners, tenants and developers. Education to include annual tree education seminars, regular communication through distribution of educational brochures or newsletters in cooperation with Capital City Development and Downtown Business Association. Create a short brochure for owners and tenants covering tree related issues such as planting, maintenance and removal. Investigate grant funding or cost sharing to complete printing materials.
 22. Create a process with Boise City Planning and Development in which Community Forestry is notified of impending development projects at the earliest opportunity; ideally well before the design review application is submitted. This will provide

Forestry with a chance to assure greater protection of existing trees on public rights-of-way and private property, and incorporate additional space for new tree planting.

23. Partner with local nurseries for contract growing using alternative funding. Monitor and evaluate cost savings and species quality.

LES BOIS TREE TASK FORCE

ADMINISTRATION AND EDUCATION SUBCOMMITTEE

Narrative

Boise is known for its tree-lined streets and forested parks. Named the “City Of Trees” Boise has over 41,000 publicly owned trees throughout the city and an estimated 250,000 private trees. Since the early 1950’s there has been a forestry program in place for caring for the public trees throughout the city. Over the years the program has developed into one of the best in the United States. Boise has been named a Tree City USA by the National Arbor Day Foundation for the past 26 years. The unit is also accredited by the Society of Municipal Arborist.

Boise has taken the lead in the state in urban forestry because of its tree maintenance and preservation of its urban forest. Recognizing that trees have many benefits and are an integral part of the communities infrastructure makes it imperative that creative strategies and partnerships are developed to continue to enhance and protect the urban forest. Research at The Center for Urban Forest Research shows that large-stature tree benefits are up to eight times more than small stature trees. “Large-stature trees deliver extensive savings and other benefits we can’t ignore.” Staff continually reviews its programs to find creative ways to accomplish its goals.

Currently, the Community Forestry Unit employs twelve full time staff and one seasonal staff. There is one City Forester, three Forestry Specialist, one Nursery Specialist, one Sr. Dept. Specialist, two Crew Chiefs, four Urban Arborist and one eight-month seasonal.

Each year the unit puts together a work plan showing the number of projected hours that will be spent performing various tasks.

Staff is continually updating and evaluating how the urban forest is managed. Within this report you will find the recommendations that are best suited to advance this program. It is important that the issues and challenges in this report be addressed to keep the Community Forestry Unit a viable and active part of our community. Protection and maintenance of the city's green infrastructure becomes more important as our city grows.

EDUCATION

Education is one of the best tools available to keep the citizens of Boise informed of proper tree care. Each year staff puts on several education classes that are available for the public to attend. These classes are meant to assist the people of Boise with proper tree care and answer questions about particular problems they may have with their trees. Classes are also given to professionals and organizations that can benefit from proper tree care.

There is a need to reach out to more groups and private citizens of the community. In order to do this more time commitment from staff is needed and will take away from other duties that they have. Assigning a new staff member to duties for presenting tree educational classes is greatly needed.

Recommendations:

- *Hire/convert one (1) additional staff to oversee educational outreach programs, Tree Steward Program, Educational classes, Volunteer Groups and maintain and expand web site.*
- *Provide additional educational classes to various groups and professionals. Conduct trees classes:*
 - a. *Various nurseries and green industry locations.*
 - b. *On the web.*
 - c. *Various trade schools and high schools.*
 - d. *At the Botanical Gardens.*
- *Develop procedures for approaching homeowners and tenants regarding proper maintenance and watering of trees. Contact neighborhood associations with tree maintenance information to be sent out in their newsletters.*
- *Develop a Marketing plan to inform the public of the Boise Tree Ordinance and Community Forestry planting programs that are available. Information should stress that homeowners should supply sufficient water for tree planting. Target homeowner associations, developers, rental property owners and neighborhood associations.*
- *Partner with neighborhood associations to help educate their members about proper tree maintenance.*

TRAINING

It is important that staff is kept properly trained in the duties that they are assigned. Most staff members presently hold an Arborist Certification and are required to accumulate educational credits for renewal every three (3) years. Some staff members also have additional Certifications (Tree Worker, Municipal Specialist & IPM). They are required to obtain additional educational credits to maintain certification.

Training is an essential element in keeping staff updated on the latest safety methods and best practices in the arboriculture industry.

With the advancement of technology additional training for staff will be needed to keep up and advance into the future.

Recommendations:

- *Provide opportunities for staff to attend training to keep certifications current (ISA Conferences, INLA Conference).*

TREE STEWARD PROGRAM

This program has been a beneficial program to the unit. This is a group of trained volunteers who do juvenile tree pruning and tree planting throughout the city. They prune up to 1000 trees each year and plant trees during our Releaf program. This group provided over \$17,000.00 in labor time over the past two years. Presently there are 20 members in the program. This program could be expanded if additional staff were to be hired to assist with the program.

Recommendations:

- *Expand the Tree Steward Program to assist with additional work load of the unit. This group could be increased by 20 to 25 people if one additional staff is in place to oversee the program.*
- *Expand Tree Steward activities to include tree inventory, leading new Tree Steward Trainees.*

PARTNERSHIPS AND MOU'S

Presently the unit partners with Idaho Power in removal of hazardous trees under powerlines. Idaho Power also provides for free tree replacement with Class I trees, that will not impact the powerlines in the future.

There are more partnerships that could be formed to assist with the educational needs of the unit, including:

- Educational opportunities with Idaho Nursery & Landscape Associations, Idaho Horticulture Conference
- Educational seminars with ISA Pacific Northwest Chapter
- Funding of educational classes taught by Idaho Community Forestry Advisory Council

The unit needs to have a formal agreement with the Ada County Highway District in regard to Tree Maintenance, tree removal, tree planting, tree replacement and infrastructure conflicts.

Recommendations:

- *Create opportunities for neighborhood associations to assist with education, tree inventories, tree replacement in parkways and planning. Work with the North End and East End Neighborhood Associations to develop neighborhood specific tree planting plans, including replacement trees in parkways, which encourage planting of large stature trees. Create recommendations that address tree diversity, parkway limitations, homeowner education and increasing the overall canopy coverage. The plans should be completed and adopted by the end of 2007.*
- *Create a formal agreement with the Ada County Highway District to cover tree maintenance, tree planting, tree replacement, and infrastructure conflicts with trees.*

- *Seek new partnerships with various groups and professional, i.e. Idaho Community Forestry Advisory Council, Pacific Northwest ISA, and the Idaho Nursery & Landscape Association.*
- *Create a formal agreement with Idaho Power to cover tree removal and planting under power lines.*
- *Create a community service day to get private tree companies and individuals involved in tree care.*

GRANTS

Seek out grants through various agencies (National Arbor Day Foundation, Idaho Department of Lands, and International Society of Arboriculture) for tree planting and educational seminars.

ADMINISTRATION

Over the next ten years the Community Forestry Unit will go through many operational changes. The unit will gradually go more toward contracting its operations (tree removal, tree pruning & tree planting). Additional contract money will be needed to cover these expenses, but there will be fewer costs for personnel and maintenance & operations.

Reorganization of the Unit could be done and additional contracting could be added to compensate. The field staff could be lowered to three (3) full time staff to work in the parks. Administrative staff would need to increase to six (6) people to cover the additional work load of contracting, provide educational classes and oversee volunteers (Tree Stewards, etc.) The present nursery operations may be cut back to growing trees for parks. Trees for rights-of-way planting may be done through contract growing.

Some additional contract funding will be done through position vacancies.

Field staff operations would concentrate on tree care in the parks. All rights-of-way work would be accomplished through contracting.

The equipment used by the unit will be cut in half, reducing the equipment budget. With less equipment it is projected that 1 mechanic position could be vacated.

An increase in contract funds of \$50,000.00 per year will need to be added to the base budget because of the additional work load. Additional contract funds will come from position vacancies.

Recommendations:

- *Increase contract funds by \$50,000 on a yearly basis to accommodate additional contracting and convert staff vacancies to contract funding.*
- *Develop a reorganization plan for the Community Forestry Unit.*

RECOMMENDATIONS OF THE ADMINISTRATION AND EDUCATION SUBCOMMITTEE

1. Expand the Tree Steward Program to assist with additional work load of the unit. This group could be increased by 20 people with additional staff to oversee the program. Additional duties could include tree inventory and assisting with new Tree Steward trainees.
2. Create a formal agreement with the Ada County Highway District to cover tree maintenance, tree planting, tree replacement, and infrastructure conflicts with trees.
3. Hire/convert one additional staff to oversee educational outreach programs, Tree Steward Program, educational classes and maintain and expand web site.
4. Provide additional educational classes to various groups and professionals.
 - a. Various nurseries and green industry businesses.
 - b. On the web.
 - c. Various trade schools and high schools.
 - d. Idaho Botanical Gardens.
 - e. Neighborhood Associations.
5. Provide opportunities for staff to attend training to keep certifications current.
6. Develop an aggressive education plan to inform the public of the Boise Tree Ordinance and Community Forestry planting programs that are available. Information should stress that they should supply sufficient water for tree planting and established trees. Target home owners, home owner associations, developers and rental property owners.
7. Seek new partnerships with various groups and professionals, i.e. Idaho Community Forestry Advisory Council, Pacific Northwest ISA, the Idaho Nursery & Landscape Association, and Neighborhood Associations.
8. Create a formal agreement with Idaho Power to cover tree removal and planting under power lines.
9. Increase contract funds by \$50,000 per year.
10. Work with the North End and East End Neighborhood Associations to develop neighborhood specific planting plans, including replacement trees in parkways, which encourage planting of large stature trees. Create recommendations that address tree diversity, parkway limitations, homeowner education and increasing the canopy coverage. The plans should be completed and adopted by the end of 2007.

LES BOIS TREE TASK FORCE

Maintenance and Operation Subcommittee

A successful tree maintenance program is based upon the concept of "shared responsibility" by both property owners and local government. Programs which focus on preventative maintenance activities (proper planning, species selection, planting and routine pruning) versus crisis management (tree removal, fallen debris, and control of major insect and disease outbreaks) saves money and helps ensure that trees will grow to their full potential.

Boise Tree Ordinance Chapter 16 details the responsibilities of Boise Community Forestry and private property owners.

The Community Forestry Unit is responsible for the management of all activities involving trees on public property to ensure the overall health and conservation of Boise's trees as well as reducing public exposure to tree hazards. The City of Boise also has a limited jurisdiction of trees on private property when the trees are a risk to public safety or public property. The management role includes insect and disease control, pruning, inspection, tree removal, tree planting, and tree protection and preservation. Community Forestry is responsible for the removal of diseased, dead, and hazardous trees on public property, administration of public outreach and education programs, responding to tree-related emergencies, and maintaining the Laura Moore Cunningham Nursery. Although not required by ordinance the unit is also active in providing technical assistance to property owners, and development plan review.

City Ordinance Chapter 16 specifies that property owners are responsible for pruning all trees on public rights-of-way adjacent to their private property, as well as trees on their private property, to reduce public hazards and provide for safe public travel. A permit for any tree pruning, planting or any activity that may harm a tree on public rights-of-way must be obtained from Community Forestry prior to the beginning of work. The permit process allows Community Forestry and property owners to work together in appropriately accomplishing the desired task. Property owners are also responsible for routine maintenance tasks including watering and insect abatement. Improper irrigation is probably the most serious affliction that kills trees and prevents planting trees. A lack of irrigation is rampant particularly in the older parts of town. As the cost of water increases the irrigation problem will worsen. The opposite extreme of over watering is the #1 killer of newly planted trees particularly in newly developed sites.

Community Forestry currently provides some maintenance activities such as pruning, depending on available resources. However, there are distinct advantages to having city staff or tree services licensed by the City of Boise to perform these functions. Among the advantages are a high degree of consistency and quality assurance, increased levels of public and staff safety, significant cost savings through planned work scheduling and control in directing services to areas of greatest need.

Tree Pruning

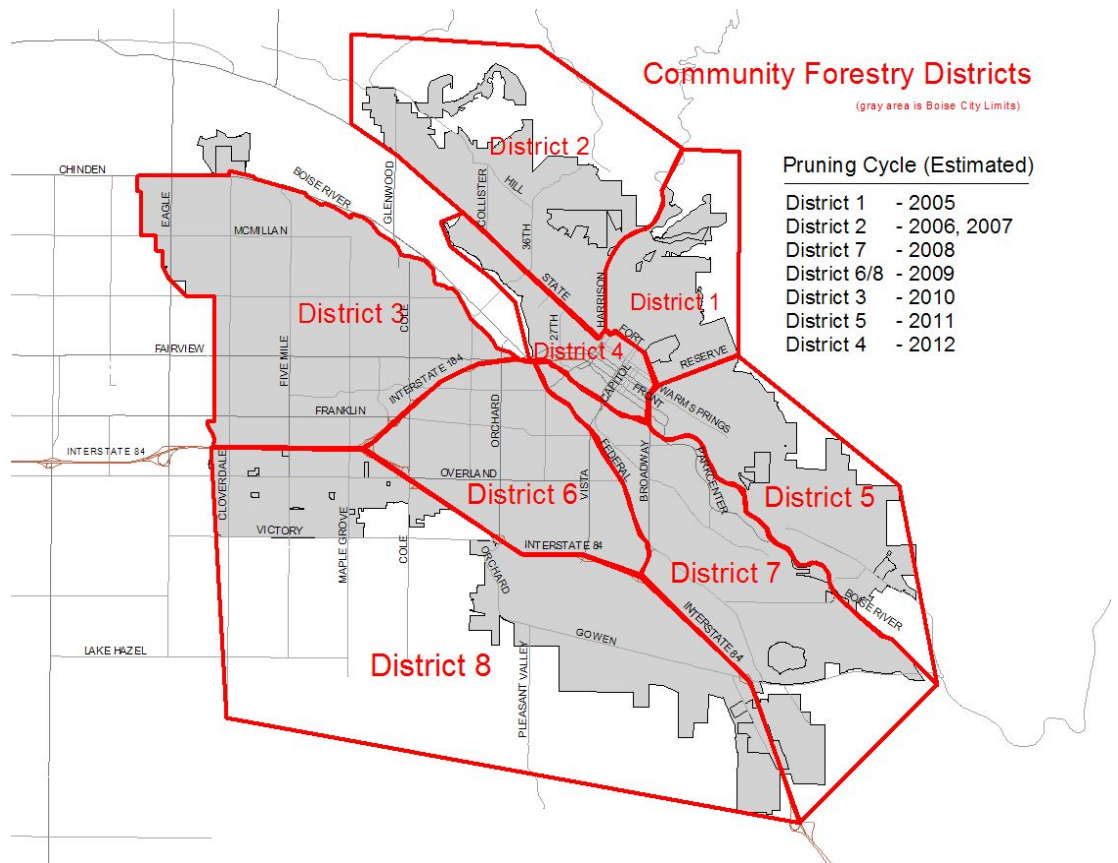
Tree pruning is the most important tree maintenance activity that reduces crisis management situations and improves the overall health, safety, and attractiveness of the urban forest. Community Forestry's tree pruning program is a systematic cycle through the entire city district by district. The current tree pruning cycle is about seven (7) to eight (8) years. This work is done on public rights-of-way and Park property and consists of doing hazard reduction and clearance pruning.

Hazard reduction pruning is the removal of branches from the tree that are dead, dying, broken, decayed or otherwise hazardous to the public.

Clearance pruning is the removal of branches from the lower part of the canopy to a height that allows for vehicular and pedestrian travel. The District Map below shows the districts in which the city is divided and the approximate year pruning is scheduled.

Community Forestry staff responds to a large number of fallen limbs ("limb calls") primarily in districts 1 and 2 which have the largest population of older trees that have not been pruned in several years. In contrast a small number of fallen branches and associated property damage occurred in recently pruned districts. This clearly shows the hazard reduction pruning program is working well. Pruning in District 1 is beginning in Fiscal Year '05. The number of fallen limbs, property damage and the possibility of injuries should decrease as pruning progresses through the area.

District Map



Tree Removal

In all communities, trees planted by early residents grow old and succumb to the forces of age. Those trees are removed and replaced with new trees that will mature and eventually reach the same fate. Boise reached that point many years ago. Many trees are close to the same age and as a group are reaching the end of their safe and useful life. Some can be pruned to reduce hazards and extend their life. However, at an increasing rate, many must be removed. The Silver Maple species is a particular problem. More limb calls and property damage result from fallen Silver Maple limbs or entire tree failure than all other species. It is expected that within the next 10 to 20 years most of the mature Silver Maples on public property (about 2,000) will have to be removed. Nearly 50% or 501 of the remaining Silver Maples in Districts 1, 2, 4 & 5 are planted in parkways less than 8 feet wide. To meet the goal of increasing canopy cover and to encourage that large stature trees are replaced with large stature trees, the city should consider offering incentives for planting Class III trees; and requiring that where Class II trees are mandated because of parkway width that the list of Class II trees listed for consideration be narrowed to the largest of the Class II trees that are available. Disease and insect infestations require the removal of other species. Community Forestry staff's prompt and reasonable hazard assessment identifies trees that must be removed verses trees that can be pruned to reduce public risk and extend the tree's useful life.

Recommendation:

- *Develop incentives for planting Class III trees in parkway planting sites where parkway widths are sufficient. When replacing Class III trees (e.g. Silver Maples) in parkways narrower than 8 feet offer a narrowed list of Class II trees for consideration that includes the largest of the Class II trees available.*

Tree Maintenance Contracting

Community Forestry staff assigned to field operations has been reduced in numbers over the past several years. The Boise Parks and Recreation Comprehensive Plan proposes further cuts in staff. Many tasks arise through the year that must be accomplished by staff such as limb calls, storm response, tree planting etc. It is very difficult to attend to those tasks, and respond to timely removal of hazardous trees, and sustain an effective pruning cycle despite increases in contract funding. Some of the money for lost staff funding was converted to contract service funds used primarily for tree pruning and large tree removal. In Fiscal Year 2004 it was necessary to convert money from other budget lines in order to keep up with hazard tree removal. With sufficient contract funding removal of large trees is done efficiently and timely and also ensures a substantial amount of tree pruning. Current staff is then able to respond to all other tasks as necessary as well as prune and remove trees as time allows. Due to the increasing resources necessary for tree removal, a one time \$50,000 was added to the base contract budget for Fiscal Year 2005. That money is not a permanent part of the base. Including the \$50,000.00 increase, the contract budget in FY '05 is about \$198,000. Of these funds \$110,000 is used for tree pruning and \$80,000 is used for tree and stump removal. The remaining funds are used for tree planting and miscellaneous tree maintenance care.

Table one on the following page shows a marked difference in staff hours for rights-of-way (r.o.w.) pruning, removal, and limb calls between fiscal year 2003 and 2004. Also contract dollar allocation decreased for pruning and increased for removal in 2004. Tree removal is an increasing demand on available resources. The tree pruning cycle may not be sustainable without sufficient resources and staff available for pruning.

TABLE ONE

FISCAL YEAR	2003	2004	2005 projected
BUDGET	\$973,860	\$953,642	\$931,956
PLANTING (hours park and r.o.w.)	2,133	1,762	1638
R.O.W. PRUNING (hours)	511	1,058	1993
PARK PRUNING (hours)	536	803	1223
R.O.W. REMOVAL (hours)	2,609	3,389	3298
PARK REMOVAL (hours)	1,693	1,594	1771
LIMB CALLS (hours)	1,738	1,412	1065
CONTRACT PRUNE (dollars)	\$100,000	\$80,000	\$110,000
CONTRACT REMOVAL (dollars)	\$59,550	\$78,490	\$80,000

Recommendation:

- *Fund contract services to respond to hazard tree removal. Maintain, at a minimum, the current seven to eight year pruning cycle by increasing the contract budget \$50,000 from the general fund for fiscal years 2006 and 2007. Thereafter provide annual increases in contract funding to maintain resources required for tree removal and pruning.*

Insect Control:

Elm Leaf Beetle (ELB), a beetle that can defoliate elm trees, is making an aggressive comeback in the Boise area. As a result it has become necessary to apply chemicals to control ELB. In the spring of 2004, Community Forestry injected about 200 trees with satisfactory results. In order to minimize the amount of chemical use and staff time, an Integrated Pest Management program identifies the affected areas for treatment. It is expected the pest will spread well beyond the 2004 area. It will be necessary to increase the amount of staff time and resources dedicated to the control of ELB.

Recommendation:

- *Provide control of Elm Leaf Beetle to an extent that meets the threshold for treatment of no more than 25% infestation in a tree.*

General Management Issues

Natural areas under the City's jurisdiction, such as Military Reserve and Hulls Grove, do not receive tree maintenance dollars except to abate immediate public safety hazards.

There is no management or maintenance plan to ensure that these resources and habitats are protected while also allowing recreational use.

Trees on other City-owned property (fire stations, wastewater treatment plants, rental property, Airport, etc.) also have no specific management plan.

Recommendations:

- *Develop a natural resource management plan to guide maintenance activities for reserves and other designated natural areas.*
- *Develop a tree maintenance plan for other city-owned property for the purpose of providing consistent management decisions and reducing liability.*

As additional park property is developed, additional maintenance funding is necessary. Maintenance Impact Statements (MIS) measure the manpower needed to maintain the new property. Through the MIS process, Community Forestry has been able to get additional funding for the maintenance of new parks. More areas are being annexed into the city limits bringing more trees and property into Community Forestry's management. These areas come with their own challenges, such as narrow planting strips, poor soils, and prior poor tree maintenance practices or construction damage to trees that must be addressed. No additional maintenance funding has been appropriated to meet the additional workload.

Recommendation:

- *Gain additional funding for the maintenance of newly acquired or developed public property and annexed property into the Boise city limits.*

Trees and grass coexist but each one has different maintenance needs, especially irrigation. Nation wide studies have determined the number one killer of newly planted trees is over watering. Boise is no exception to this practice. Those trees that are able to survive grow slowly and are more susceptible to disease and insects due to stressed conditions. It is not prudent to replace trees that die for this reason.

Recommendation:

- *Determine best practices for the coexistence of grass and trees so that trees in problem areas thrive and grow at a healthy rate.*

Volunteer groups have been a tremendous benefit to the accomplishment of needed work including planting, mulching, and pruning. An example is the "Tree Steward" program. Over the past four (4) years, this group of dedicated volunteers has planted hundreds of trees and pruned more than 3,000 trees in parks and along public rights-of-way. Pruning improves public and park maintenance workers safety and reduces long-term maintenance requirements on those trees.

Ada County Highway District (ACHD) is more aggressively requiring the replacement of hazardous or dilapidated sidewalks and curbs as the result of conflict with tree roots and

trunks. Community Forestry and ACHD have worked together to resolve the conflicts, as well as possible with the current methods and materials being used, to allow the sidewalk/curb repair with minimal impact on the tree. Long-term effects on the trees and on repeat damage to the sidewalk will be monitored. ACHD is currently exploring alternative solutions to the tree/sidewalk conflict.

Recommendation:

- *Coordinate alternative sidewalk replacement material/design plans with ACHD that protects trees while providing safe sidewalks.*

ACHD currently has a routine road resurfacing program that is on a nine (9) year cycle. Trees on public rights-of-way are pruned by ACHD or their contractor to accommodate passage of the equipment used for this service. However the trees are pruned only on the street side. Often the tree canopy is left asymmetrical and unsightly. To balance the tree canopy to an appropriate extent would cost ACHD more time and/or money while giving no additional accommodation to the operation. ACHD nine (9) year cycle does not match Community Forestry's pruning cycle. At this time a cooperative pruning plan does not exist.

Recommendation:

- *Develop a tree pruning plan with ACHD for their nine year street resurfacing cycle that raises the canopy appropriately for their operation in a way that is more beneficial to the trees' health, more aesthetically balanced, and more satisfying to the adjacent property owner.*

In summary, the community as a whole has been supportive of Forestry programs that encourage proactive maintenance activities, including pruning and increased maintenance and brush clearing along the Greenbelt, that result in improved public safety and less crisis management. With assistance from the Boise Parks and Recreation Department Community Forestry Unit, the community can meet the challenge of maintaining and enlarging the canopy cover provided by beautiful tree lined streets and shaded parks that everyone desires.

RECOMMENDATIONS OF THE MAINTENANCE AND OPERATIONS SUBCOMMITTEE

1. Develop incentives for planting Class III trees in parkway planting sites where parkway widths are sufficient.
2. When replacing Class III trees (e.g. Silver Maples) in parkways narrower than 8 feet offer a narrowed list of Class II trees for consideration that only includes the largest of the Class II trees available.
3. Fund contract services to respond to hazard tree removal and maintain, at a minimum, the current seven to eight year pruning cycle by increasing the contract budget \$50,000 from the general fund for fiscal years 2006 and 2007. Thereafter provide annual increases in contract funding to maintain resources required for tree removal and pruning.
4. Develop a tree pruning plan with ACHD for their nine (9) year street resurfacing cycle that raises the canopy in a way that is more beneficial to the trees' health, more aesthetically balanced, and more satisfying to the adjacent property owner.
5. Provide control of Elm Leaf Beetle to prevent no more than 25% infestation in a tree.
6. Coordinate alternative sidewalk replacement material/design plans with ACHD to protect trees while providing safe sidewalks.
7. Determine best practices for the coexistence of grass and trees so that trees in problem areas thrive and grow at a healthy rate.
8. Gain additional funding, through the MIS process, for the maintenance of newly acquired or developed public property and annexed property into the Boise city limits.
9. Develop a tree maintenance plan for other city-owned property (fire stations, wastewater treatment plants, rental properties, Airport, etc.) for the purpose of providing consistent management decisions and reducing liability.
10. Develop a natural resource management plan to guide maintenance activities for reserves and other designated natural areas.

LES BOIS TREE TASK FORCE

Comprehensive Planting Plan Subcommittee

Narrative

The Community Forestry Unit of the Boise Parks & Recreation Department review permits and review tree-planting activities on public and privately owned commercial properties. Over the past three (3) years, the Community Forestry Unit has managed the planting of 2,545 trees on public owned properties and public street rights-of-way. All trees considered for planting within public rights-of-way, must be approved by Community Forestry as per “Chapter 16, the Boise Tree Ordinance.” The trees consist of conifers and different broadleaf trees in three (3) class sizes; Class I are small trees which normally do not reach a large height (15-30 feet) or trunk diameter, Class II trees are of medium height (30-60 feet), Class III trees attain a large trunk diameter and height (60-100 feet). The City encourages the planting of Class III trees where possible and larger Class II species where Class III should not be planted. More information on tree size class, approved species and planting requirements, can be found in the Boise Parks & Recreation Department’s “Tree Selection Guide,” City Code, Chapter 16 Boise Tree Ordinance and Tree Planting Policy.

In 2003, Community Forestry prepared a Tree Statistics Report for Boise, Idaho. Within the report, 1,545 available planting spots were identified on public rights-of-way. It was estimated that more than half of these planting spots were not suitable for planting because of inadequate watering, poor soil conditions and adjacent property owners who do not want trees. Although the report recommended a four (4) to one (1) ratio of trees being planted to trees being removed, this included both rights-of-way and park properties.

There are many organizations and resources that assist with tree planting, plans and practices. For example, we have been working on conducting a comprehensive tree canopy analysis of Boise. Presently, the United States Department of Agriculture, Forest Service, Center for Urban Forest Research (University of California Davis), has requested the City of Boise to participate in a study to analyze annual tree benefits and costs.

In 2003, American Forest (founders of Global ReLeaf) conducted a preliminary analysis of Boise’s tree canopy coverage to estimate the land cover of trees in urban areas and the benefits trees provide to reduce pollution. Within the analysis area, trees cover 11,151 acres – 16 percent of the total area (which includes privately owned land) and remove 105,360,746 pounds of air pollution.

American Forest’s recommendation was to increase Boise’s tree canopy cover to 33 percent. Overall, tree canopy coverage within the City of Boise helps to improve CO₂ reduction, energy savings for cooling, storm water runoff and aesthetics. Other partner organizations and resources include; the Idaho Nursery and Landscape Association,

University of Idaho Extension, International Society of Arboriculture, the National Arbor Day Foundation, the American Nursery and Landscape Association and the Idaho Department of Lands.

There are trees within the rights-of-way and city parks that interfere with power lines. Idaho Power Company assists with the removal and replacement of these trees through their Tree Replacement Program. For each tree they remove, they provide the property owner or the city a \$50.00 voucher towards the purchase of a Class I tree. When the site is not suitable for a replacement tree, the purchased tree will be planted at another site under power lines.

Current planting activities are summarized below and recommendations were compiled to address the development of this Comprehensive Planting Plan. The recommendations include continuing current effective practices as well as the development of new standards and policies.

Tree Planting On Public Rights-Of-Way

It is City intent to maximize the utilization of each tree site by planting or cause the planting of Class III trees when site conditions allow. In contrast, those sites which do not allow for Class III trees will be encouraged to be planted with larger Class II species so as to avoid future liabilities, infrastructure conflicts and increase maintenance costs while maximizing the benefits that large stature trees provide.

The Ada County Highway District and the Idaho Department of Transportation own all public street rights-of-way within Boise City limits. The City of Boise and the adjacent property owner, however, are responsible for the management of trees planted within those rights-of-way. Street trees are planted within the public rights-of-way as new trees or as replacements (as required, per Boise Tree Ordinance) for trees that have been removed. Only one tree replacement is required for each tree removed. When large mature trees are removed, there is usually room to plant additional trees, but often the homeowner only wants one tree or the site condition is unsuitable for replacement trees. The City of Boise also plants and replaces trees on other Ada County Highway District and Idaho Department of Transportation properties within the city limits. These properties consist of medians, islands and slopes. Examples are; Vista Ave., Broadway Ave., Parkcenter Blvd., I-84 and Curtis road.

In the past three (3) years, 650 trees have been planted on public rights-of-way. Plantings take place only in rights-of-way with sufficient space for root establishment and future trunk growth. With the exception of replacement trees, all new street tree plantings are done with the consent of the adjacent property owner who agrees to supply sufficient water. Property owners can choose one or more planting options.

- They can purchase a tree from the City's Cunningham Nursery (planted by staff in spring and fall).
- Apply for a planting permit (planted by homeowner).

- Plant a free tree(s) from the ReLeaf Boise program (up to 100 trees per year are provided by Forestry and are planted by volunteers).

In order to present the Best Management Practices of the industry it is necessary to establish policies in regard to Planter Strip widths and Tree Spacing for proper tree and root growth. To prevent infrastructure damage (sidewalks, curbs, etc.) it is necessary to fit the right tree species with the planter strips. The following are the guidelines that have been established:

Class I Trees (Only allowed under overhead power lines)

- Spacing: Trees shall be spaced 20 to 30 feet apart
- New Planter Strips: Minimum 10 feet in width
- Existing Planter Strips: Minimum 8 feet in width - Limited Class I species

Class II Trees

- Spacing: Trees shall be spaced 30 to 40 feet apart
- New Planter Strips: Minimum 8 feet in width
- **Existing Planter Strips: Minimum 6 feet in width
- * Existing Planter Strips: Minimum 5 feet in width
- (Larger Class II trees from the list provided in Appendix A are encouraged, especially when replacing Class III trees.)

Class III Trees

- Spacing: Trees shall be spaced 40 to 60 feet apart
- New Planter Strips: Minimum 10 feet in width on arterials and collectors
- *New planter strips: Minimum 8 feet in width on neighborhood streets, allowing limited Class III species and within certain guidelines.
- *Existing Planter Strips: Minimum 8 feet in width, allowing limited Class III species and within certain guidelines.

* Guidelines: Root Barrier installation. Property owner may be required to enter into a license agreement with Ada County Highway District. Additional restriction may also be required. Another option will be to get a license agreement with ACHD to relocate the sidewalk.

** Guideline will be: Installation of root barrier.

The 2003 Tree Statistics Report for Boise identified 3,656 (19% of tree population) Class III street trees. As large mature trees decline, Community Forestry strives to replace them with a large growing tree. Forestry staff can locate potential Class III planting sites for ReLeaf Boise using the City of Boise’s GIS Resource Center-intranet Mapping Portal. Entire neighborhoods can be viewed at a glance to identify sufficient right-of way space for a Class III tree.

However, most new subdivision development and road widening projects have eliminated sufficient rights-of-way planting space and/or bury utilities in the rights-of-way where trees could have been planted. There is also sidewalk damage caused by tree roots that often discourages property owners to plant replacement or new

trees. Ada County Highway District has been working with Boise City (and other cities) to reduce this problem by requiring wider planter strips and setbacks for new development. Ada County Highway District has also installed several experimental “Rubber Sidewalks” (a rubber material that can be removed, have roots inspected and pruned, then be replaced) to see if they are durable and how well they might work.

Recommendations:

- *Encourage the planting of Class III trees in sufficient parkways, encourage the planting of Class II trees from the list of larger Class II trees when parkways are insufficient.*
- *Require that all new and reinvestment development provide a minimum eight feet wide, irrigated space for rights-of-way tree planting, void of buried utility conflicts.*
- *Gain a greater than the required one to one ratio for removal / replacement and encourage additional tree planting in rights-of-ways. Strive to achieve a planting ratio of two (2) to three (3) trees for each tree removed. Include suggestions within the Removal and Planting Letter that encourages adjacent property owner to plant trees beyond the minimum requirement. Define what the difference between a Class I, II or III tree and conifer is.*
- *Encourage Ada County Highway District to provide rights-of-way tree planting space through plan review. Recommend that this be included in the project planning process prior to plan review.*
- *Increase class III rights-of-way planting from 19% to 22% through the ReLeaf Boise program. Identify more planting spots by using the City of Boise GIS Resource Center Intranet Mapping Portal.*
- *Encourage City Council to continue funding tree plantings and maintenance on Ada County Highway District and Idaho Transportation Department medians, islands and slope properties.*
- *Develop an aggressive Education and Marketing plan to inform the public of the Boise Tree Ordinance and Community Forestry planting programs that are available. Information should stress that they should supply sufficient water for tree planting. Target home owner associations, developers and rental property owners.*
- *Review the Planning and Development Services Building Division’s regulations regarding single and multi-family home construction and planting issues. Include language in Landscape Ordinance that enforces existing rights-of-way planting space be retained rather than turned into parking spaces.*
- *Explore with developers possible incentives to plant rights-of-way trees during new home construction.*
- *Continue to coordinate with Idaho Power’s Tree Removal / Replacement program to purchase class I trees for planting under power lines.*
- *Require developers, instead of new home owners, to pay the cost of a new two (2) inch diameter tree(s) to replace trees that are damaged or removed due to construction.*

- *Promote planting by doing more advertising and media releases and incorporate with Arbor Day and Earth Day activities.*
- *Work with Ada County Highway District to include Community Forestry with experimental “Rubber Sidewalks.” Install them where rights-of-way planting locations are limited in parking strips or back of sidewalk.*
- *Contact and meet with homeowner associations for more planting participation during Releaf Boise.*

Tree Planting On City Parks and City Managed Properties

City-owned park sites and managed rights-of-way of varying acreage are dispersed across Boise. The Comprehensive Parks & Recreation Plan recommends continued acquisition of future park property. Acquisition of new park sites provides opportunities to expand our tree canopy within Boise’s community forest. The Design Unit of the Boise Parks and Recreation Department is responsible for creating master plans and specifications for park development, including designation of new planting sites.

A riparian planting plan along the riparian corridor / greenbelt has been developed for plant regeneration along the Boise River.

Individual citizens and groups have also donated trees, money, and/or volunteered their time to the City of Boise for planting trees on park properties.

In 1963, Girl Scout Troup 196 started a “Tree Trail Project” to name the trees throughout Julia Davis and Ann Morrison parks to serve the city, schools and youth groups. They received a grant to help fund the installation of bronze plaque markers that identified the tree and the troops that donated money. Many of the 60 trees and markers are still there today. Although the project was planned to be ongoing, it basically ended in 1966.

To further these goals, Community Forestry has been planting “trees of interest”, in Julia Davis and Ann Morrison parks and also along the Greenbelt between the parks.

The majority of park trees are Class I, II and conifer trees. In the past three (3) years, 1,895 trees have been planted on City of Boise park properties. The 2003 Tree Statistics Report for Boise identified 10,227 total park trees. Of these, 1,807 (18% of tree population) are Class III park trees.

Recommendations:

- *Continue with and expand on Park Property tree replacement and new tree plantings to maximize tree canopy coverage. Plant Class III trees in parks where possible, to increase canopy coverage from 18% to about 20*

to 22% as recommended by the Community Forestry 2003 Tree Statistics Report.

- *Identify declining trees and plan for replacement (under planting). Identify additional planting locations within park design master plans.*
- *Continue with the Tree Walk/Tree trail planting. Trees of interest are currently being planted along the greenbelt for the Tree Walk/Trail. Solicit donations of unique trees from nurseries. Complete initial trail by 2010.*
- *Educate and advise other City of Boise property managers to select and plant appropriate and healthy trees.*
- *Educate the public that a donation of a tree, to the city for public use, falls within the definition of a deductible charitable contribution.*

Tree Planting on Development Sites

The Community Forestry Unit also encourages the planting of trees on other public owned and private properties through coordination with the City's Planning and Development Services Department. Landscape plans received by Community Forestry staff are reviewed to assess significant trees which may be impacted by site development and to determine the effectiveness of newly proposed landscaping. Recommendations are then returned to the Planning and Development Services Department where they may be included into site development requirements. If adopted, it is the responsibility of the Planning and Development Services Department to ensure that the recommendations are implemented. However, due to limited City staff resources, there is little opportunity for enforcement, resulting in inconsistent compliance with those recommendations. Forestry staff has been working with Planning and Development Services to develop a Landscape Ordinance.

American Forests recommends increasing tree canopy coverage in commercial parking lots to 50% of the total paved area. Work with Planning and Development to increase canopy coverage in parking lots to a minimum of 25% (or as recommended by the Canopy Study). Incorporate this into the Landscape Ordinance.

Recommendations:

- *Develop, implement and enforce a Boise City Landscape Ordinance for existing and new site development.*
- *Seek ways to provide incentives to plant trees on private properties.*

Planting Opportunities

Despite Boise's growth and expansion, limited opportunities exist for tree planting, as rights-of-way in newly developing areas are not available. New road and sidewalk construction in recent years has not provided sufficient rights-of-way space for tree planting. Also, more existing planting spots are becoming unavailable due to neglect of public rights-of-ways. Private and other public properties provide the greatest opportunities to expand the community forest as they contain a great many potential

planting sites. Providing education and technical support may encourage increased planting on these properties and should be given a high level of consideration in helping to achieve Community Forestry goals.

Recommendations:

- *Work with Boise City Planning and Development Services, Developers and Neighborhoods to create “Street Planting” along private property behind public rights-of-way (using class II or III trees).*
- *Recommend the Ada County Highway District, create a program that provides monetary assistance to property owners to purchase and plant trees on private property. For example, this is when rights-of-way trees are removed for street and sidewalk construction and rights-of-way planting space no longer exists.*
- *Increase Boise’s total estimated Tree Canopy land cover of 11,151 acres (16 percent) to (33 percent) as recommended by American Forests by advocating the increase of tree planting on private properties throughout Boise.*
- *Continue to work with the Center for Urban Forestry Research at U.C. Davis to conduct a Canopy Study for the City of Boise. Work to complete by 2006.*
- *Expand on or improve tree canopy density in existing public school parking lots and near hard surface play areas and school grounds.*
- *Explore how to expand tree planting on existing Idaho State and Federal Properties. Make staff available for consultation between government entities to discuss future planting planning to encourage replacement plantings. Contact the Idaho State Forestry Coordinator and Southwest Idaho Community Forestry Assistant, State Grounds personnel and Boise State University Horticulture Department to explore how the City can provide technical assistance.*
- *Explore expanding tree planting on existing Boise School District properties. Meet with Individual School Faculty to discuss tree planting educational opportunities and partnerships with Master Gardeners and Homeowner Associations. Encourage private industry tree professionals to participate in the ISA Certified Arborist Scholarship program. Ask participants to volunteer some of their required hours to a school planting project.*
- *Seek ways for staff to provide planting information and incentives/recognition for citizens, groups and associations.*
- *Plan a neighborhood program to plant and provide tree care for senior, disabled or health impaired citizens.*

Operation of Cunningham Nursery

The Community Forestry Unit operates a four acre tree nursery growing about 900 trees for new or replacement planting in parks and public rights-of-way. Trees are grown for a

variety of space, size, pest and disease resistance, drought tolerance and aesthetic considerations. Property owners can purchase rights-of-way trees, which are sold by trunk caliper inch of 1.5 inch, 2 inch and 2.5 inch. Parks are planted with two (2) inch caliper trees, and larger trees that are up to four (4) inch caliper. The larger trees are transplanted from the nursery to a park by using a tree spade. The majority of tree plantings are performed during the spring and fall months of the year.

In 2005, Community Forestry received a grant from the Idaho Department of Lands for a local tree nursery grow trees, or contract specifically for the City of Boise. The trees will be used for downtown area rights-of-way replacement trees, as well as the Cunningham Nursery program.

The Community Forestry's Nursery Specialist occasionally conducts educational tours of the nursery. The tours are usually attended by interested groups of various levels of school grades from elementary to university students.

Recommendations:

- *Continue operation of Cunningham Nursery.*
- *Every three years perform a cost analysis of staff growing trees vs. contractor growing trees.*
- *Partner with a local tree nursery for Contract Growing using alternative funding. Monitor and evaluate cost savings and species quality.*
- *Gain a greater diversity of species, cultivars and varieties. Limit no more than 10% genus of any one tree.*
- *Expand on growing large caliper three (3) to four (4) inches tree spade transportable trees for park planting and replacements.*
- *Provide more drought tolerant trees for dry soil areas.*
- *Continue to provide and/or expand on educational opportunities for the public.*
- *Provide plants for riparian and restoration plantings as per the River Corridor Study.*

RECOMMENDATIONS OF THE TREE PLANTING SUBCOMMITTEE

1. Encourage the planting of Class III trees in sufficient parkways, encourage the planting of Class II trees from the list of larger Class II trees when parkways are insufficient, keep an updated list of available larger Class II trees.
2. Require that all new and reinvestment developments provide a minimum eight feet wide, irrigated space for rights-of-way tree planting, void of buried utility conflicts.
3. Gain a greater than the required one to one ration for tree removal / replacement and encourage additional tree planting in rights-of-way. Strive to achieve a planting ration of two to three trees for each tree removed. Include suggestions within the Removal and Planting letter that encourages adjacent property owner to plant trees beyond the minimum requirement. Define what the difference between a Class I, II or III tree and conifer is.
4. Encourage Ada County Highway District to provide rights-of-way tree planting space through plan review. Recommend that this be included in the project planning process prior to plan review.
5. Increase Class III rights-of-way planting from 19% to 22% through the Releaf Boise program. Identify more planting spots by using the City of Boise GIS Resource Center Intranet Mapping Portal.
6. Encourage City Council to continue funding tree plantings and maintenance on Ada County Highway District and Idaho Transportation Department medians, islands and slope properties.
7. Develop an aggressive education and marketing plan to inform the public of the Boise Tree Ordinance and Community Forestry planting programs that are available. Information should stress that they should supply sufficient water for tree planting. Target home owner associations, developers and rental property owners.
8. Review the Planning and Development Services Building Division's regulations regarding single and multi-family home construction and planting issues. Include language in Landscape Ordinance that enforces existing rights-of-way planting space be retained rather than turned into parking spaces.
9. Explore with developers possible incentives to plant rights-of-way trees during new home construction.
10. Continue to coordinate with Idaho Power's Tree Removal / Replacement program to purchase Class I trees for planting under power lines.
11. Require developers, instead of new home owners, to pay the cost of a new two (2) inch caliper tree(s) to replace trees that are damaged or removed due to construction.
12. Promote planting by doing more advertising and media releases and incorporate with Arbor Day and Earth Day activities.
13. Work with Ada County Highway District to include Community Forestry with experimental "Rubber Sidewalks". Install them where rights-of-way planting locations are limited in parking strips or back of sidewalk.
14. Contact and meet with homeowner associations for more planting participation during Releaf Boise.

15. Continue with and expand on Park Property tree replacement and new tree plantings to maximize tree canopy coverage. Plant Class III trees in parks where possible, to increase tree canopy coverage from 18% to 22% as recommended by the Community Forestry 2003 Statistics Report.
16. Identify declining trees and plan for replacement (under planting). Identify additional planting locations within park design master plans.
17. Continue with the Tree Walk / Trail planting. Trees of interest are currently being planted along the Greenbelt for the Tree Walk / Trail. Solicit donations of unique trees from nurseries. Complete initial trail by 2010.
18. Educate and advise other City of Boise property managers to select and plant appropriate and healthy trees.
19. Educate the public that a donation of a tree, to the city for public use, falls within the definition of a deductible charitable contribution.
20. Develop, implement and enforce a Boise City Landscape Ordinance for existing and new site development.
21. Seek ways to provide incentives to plant trees on private properties.
22. Work with Boise City Planning and Development Services, Developers and Neighborhoods to create "Street Tree Planting" along private property behind public rights-of-way (using Class II or III trees).
23. Recommend the Ada County Highway District, create a program that provides monetary assistance to property owners to purchase and plant trees on private property. For example, this is when rights-of-way trees are removed for street and sidewalk construction and rights-of-way planting space no longer exists.
24. Increase Boise's total estimated Tree Canopy land cover of 11,151 acres (16 percent) to 33 percent) as recommended by American Forests by advocating the increase of tree planting on private properties throughout Boise.
25. Continue to work with the Center for Urban Forestry Research at U.C. Davis to conduct a Canopy Study for the City of Boise. Work to be completed by 2006.
26. Expand on or improve tree canopy density in existing public school parking lots and near hard surface play areas and school grounds.
27. Explore how to expand tree planting on existing Idaho State and Federal properties. Make staff available for consultation between government entities to discuss future planting planning to encourage replacement plantings. Contact Idaho State Forestry Coordinator and southwest Idaho Community Forestry Assistant, State Grounds personnel and Boise State University Horticulture Department to explore how the City can provide technical assistance.
28. Explore expanding tree planting on existing Boise School District properties. Meet with Individual School Faculty to discuss tree planting educational opportunities and partnerships with Master Gardeners and Homeowner Associations. Encourage private industry tree professionals to participate in the ISA Certified Arborist Scholarship program. Ask participants to volunteer some of their required hours to a school planting project.
29. Seek ways for staff to provide planting information and incentives/recognition for citizens, groups and associations.
30. Plan a neighborhood program to plant and provide tree care for senior, disabled or health impaired citizens.

31. Continue operation of Cunningham Nursery.
32. Every three (3) years perform a cost analysis of staff growing vs. contract growing trees.
33. Partner with a local tree nursery for contract growing using alternative funding. Monitor and evaluate cost savings and species quality.
34. Gain a greater diversity of species, cultivars and varieties. Limit no more than 10% genus of any one tree.
35. Expand on growing large caliper three to four inch (3-4 inch) tree spade transportable trees for park planting and replacements.
36. Provide more drought tolerant trees for dry soil areas.
37. Continue to provide and/or expand on educational opportunities for public.
38. Provide plants for riparian and restoration planting as per the River Corridor Study.

LES BOIS TREE TASK FORCE

Downtown Subcommittee

Downtown Subcommittee Narrative

Downtown is the heart of Boise. Years of effort in planning and development have paid off in the creation of a vibrant, diverse, safe and attractive downtown for the City of Trees. What role do trees play downtown? Who cares for the trees and what special challenges do they face?

Where is downtown Boise?

For the purposes of this report downtown is an area loosely defined by Broadway Avenue on the east, Fort Street on the north, N. 17th Street and Americana Boulevard on the west and the Boise River on the south.

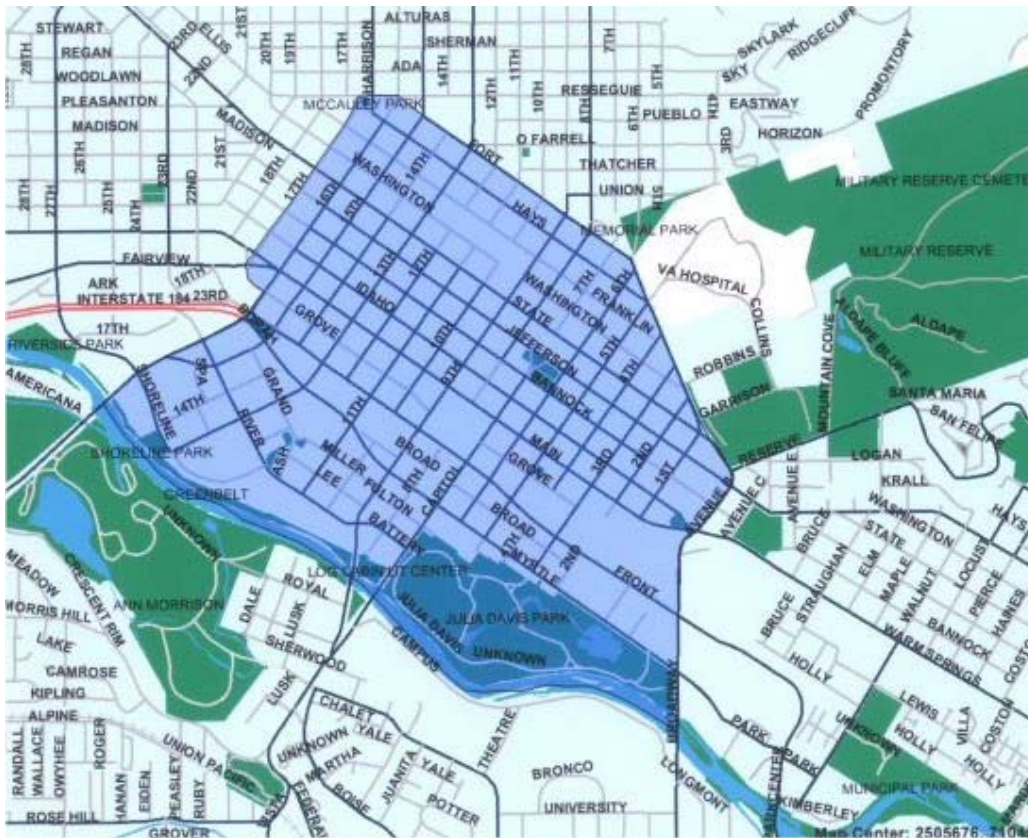


Figure 1 - Downtown Boise

The area shown above is larger but corresponds closely with the three urban renewal districts Boise City has adopted for Downtown Boise. The area includes a variety of land uses and street tree environments ranging from intense retail to quiet residential streets.

CCDC Urban Renewal Districts 2004

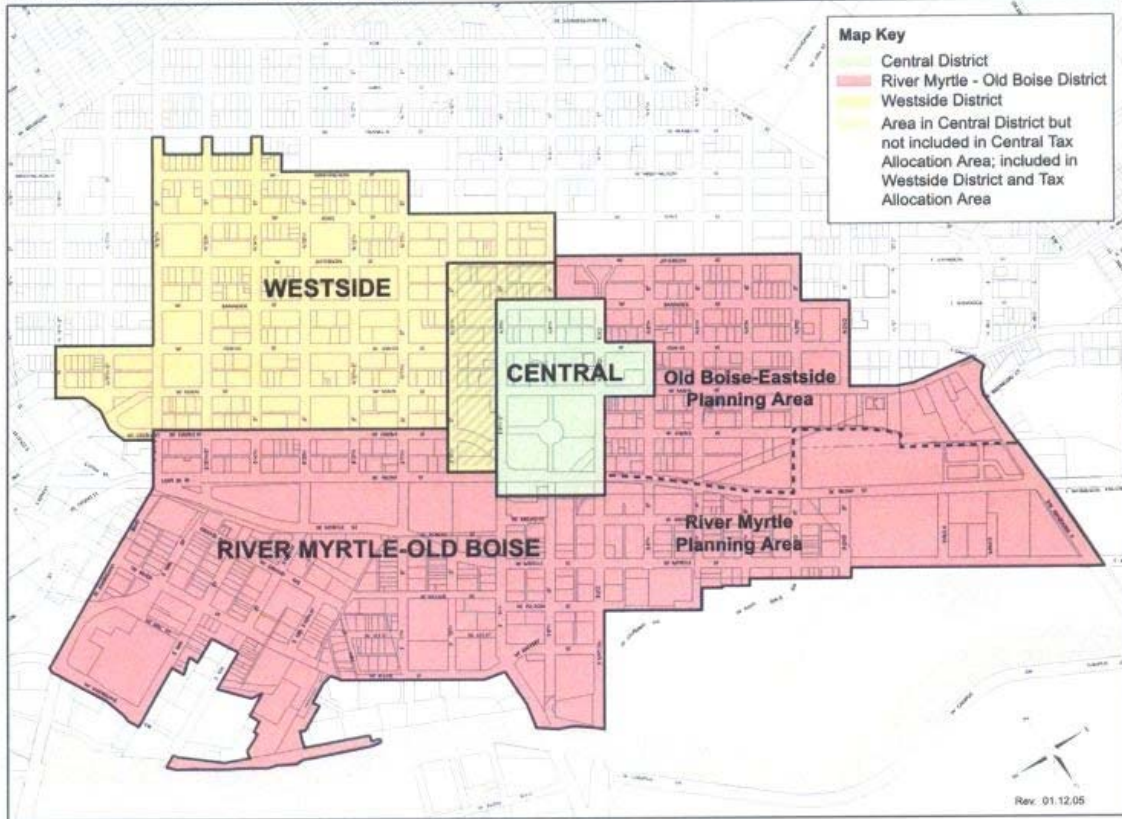


Figure 2 - CCDC Urban Renewal Districts

Who is Involved?

As might be expected in an area the size of downtown, several organizations and thousands of property owners and tenants are involved in the management of the trees. Below is a list of key players that have an interest in the trees on public lands:

Boise Parks & Recreation Department/Community Forestry

Has the primarily responsible for management of trees on public rights-of-way downtown and throughout Boise City. The authority to do this is granted in Boise City code Title 9, Chapter 16 – Boise Tree Ordinance (see appendix). In addition, Boise City owns and maintains trees in downtown parks. Parks in this area include: Julia Davis Park, Capitol Park, Shoreline Park, Rhodes Park and CW Moore Park.

Ada County Highway District (ACHD)

Owens and oversees all public rights-of-way and uses on rights-of-way within Boise City. ACHD has a crew that provides maintenance of some rights-of-way trees, often near intersections and/or traffic control lights.

Capital City Development Corporation (CCDC)

The CCDC is a public agency that administers urban redevelopment projects for the City of Boise. Urban redevelopment projects can include planning and facilitating the development of retail, residential, office, hotel, cultural and institutional uses and public improvement projects under the guidance of adopted urban renewal plans. These plans contain detailed streetscape standards that outline how street rights-of-way are constructed and improved. Such plans help guide how the sidewalk, lighting, trees and other elements are put to use. CCDC and Community Forestry will have to work closely to craft a plan for street trees downtown.

Downtown Boise Association (DBA)

The DBA is a non profit corporation that was created by a majority of downtown business and property owners to manage the downtown Boise Business Improvement District (BID). The DBA's mission is to be the steward for the operation and promotion of downtown Boise as an attractive, safe and vibrant place in which to work, shop, live and play. Essentially the DBA functions as a “homeowners association” for downtown.

Property Owners and Tenants

Property owners might be private homeowners, absentee landlords, out of state corporations or any of a number of other possibilities. Property owners have the primary responsibility for day to day tree care, including watering, pest control and most pruning. If the owners are landlords, tenants are typically left with the responsibility of overseeing tree care. Often, the owners or tenants contract with a landscape maintenance company to provide any needed tree care. These maintenance companies must have a current license to prune or remove trees from public right of way.

Making a Place for Downtown Trees

Following are three discussions relating to different aspects of trees and their care in Downtown Boise: Planning & Development, Tree Planting, and Tree Maintenance. A short list of recommendations follows each discussion. The entire list of recommendations by the Downtown Boise subcommittee appears later in this document.

Planning and Development

Downtown Boise will continue to grow both in size and density. Much of the downtown rights-of-way is populated with mature trees, some of outstanding size. Development and redevelopment of property in the area can mean additional tree planting opportunities or it can mean facing the loss of mature trees to development of buildings, parking lots, and street redesign.

The role of Community Forestry in the process of development is quite limited. Currently, the Boise Planning & Development Services Department (PDS) forwards

development and construction design review applications to Community Forestry on a weekly basis. Staff reviews the application and any site or landscape plans to determine primarily if any rights-of-way or other public trees are affected, or if any tree planting opportunities are available on public rights-of-way. If so, staff may make requirements of the applicant regarding public trees. Staff may also make recommendations regarding existing and proposed trees on the private portion of the property. The recommendations are reviewed by PDS and can be included as a requirement, modified or rejected in their staff report. Though CCDC does not have regulatory authority when it comes to trees in street rights-of-way, the agency does have substantial influence regarding the streetscape and the environment in which street trees will be planted.

Often, when a development is planned, detailed plans are drawn and mostly finalized before Community Forestry has a chance to see them through the PDS design review process. At this point, it becomes difficult or impossible to require significant changes in design to preserve existing trees, or create adequate space for new tree planting. Forestry needs access during the initial planning and design stages to create or improve opportunities to preserve the health of existing trees and create additional opportunities for planting.

As stated above, CCDC has significant influence in regards to streetscape planning. Their planning documents (such as the *2025 Downtown Boise Redevelopment Plan* and the *River/Myrtle Street Urban Design Plan*) incorporate necessary standards for creating a unified appearance in the downtown area.

A vital bit of planning for trees appears in Appendix B of CCDC's *2025 Downtown Boise Redevelopment Plan*. Streetscape standards for streets within CCDC's development districts are outlined in this document:

The streetscape character map provides a specific plan for the improvement of streetscapes within the boundaries of the adopted urban renewal districts. The map determines the particular streetscape type to be applied to each street. The arrangement of the streetscape types on the map is consistent with the urban renewal plans and particularly with the planned land uses and pedestrian routes. For example, the neighborhood street type applies to those areas where housing is emphasized, and the urban-brick type applies to important pedestrian routes and to the downtown core. Minor exceptions may be appropriate depending on the nature and scope of adjoining development or other conditions.

The standards for each streetscape type are depicted in the streetscape diagrams and supporting streetscape standards text. The diagrams and text depict the surface materials, furnishings, and tree class and installation for each street type. With few exceptions, the standards for other streetscape types are to be followed rigorously with some variation permitted based on local conditions and circumstances.

Below is a copy of the streetscape character map. Please refer to the appendix to see copies of several of the streetscape diagrams. It is important to note that many of the streets in the map below are already populated with mature trees. Care must be taken to identify those areas where the proposed streetscape might conflict with existing conditions and existing trees. For the most part, existing conditions match the standards indicated on the character map. For example, Idaho Street between 4th and 5th is identified as a “neighborhood street” on the map, and the corresponding streetscape standard meaning it will have a right of way planting strip. Existing conditions here include a right of way planting strip with existing trees on most of the street, so little or no change is necessary as the streetscape develops on this block.

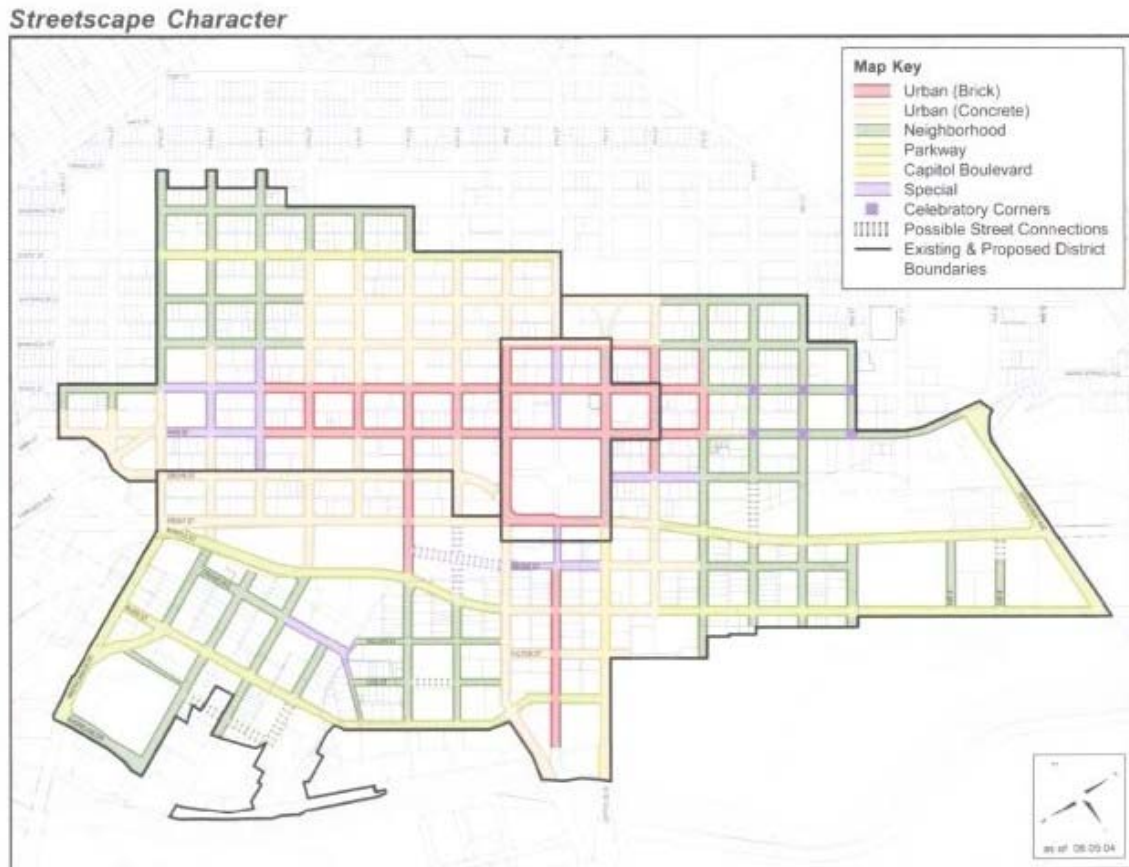


Figure 3 - CCDC Streetscape Character Map

When development does occur where trees currently grow, great care must be taken to protect those trees that are healthy, whether on public or private property. If public or private trees are to be preserved on a site, it can be difficult to convince developers and construction managers to place fencing or other protective measures to help preserve trees during construction. Also, a developer or architect may in good faith specify protection, but unless someone communicates these requirements to the construction workers it is often forgotten or ignored. Protective fencing is torn down or pushed aside and construction traffic then damages root systems and trees. It is very rare that a

construction project protects a tree from beginning to end. Commonly trees are damaged or their root system compacted by heavy equipment.

In cases where a right of way tree that was to be preserved is damaged or destroyed during construction, Community Forestry may require restitution or mitigation for the appraised value of the lost tree. Restitution can be made in the form of new trees planted back on to the original site or on other public land, or it can consist of cash payments made to Boise Parks and Recreation. There is currently no mechanism available that enables the City to enforce preservation or protection of existing private property trees in the downtown area.

If existing trees are to be protected, a process to enforce protection and preservation must be identified, whether through education, ordinance or a combination of the two.

Recommendations: Downtown Tree Planning and Development

- *Conduct annual meetings with CCDC and DBA to assess aggregate condition of downtown trees and plan maintenance and planting for the coming year.*
- *Create a process where Community Forestry is notified of impending development projects at the earliest opportunity; ideally well before the design review application is submitted. This will provide Forestry with a chance to assure greater protection of existing trees on public rights of way and private property, and incorporate additional space for new tree planting.*
- *Overlay current street tree inventory onto CCDC's "Streetscape Character" map to identify areas where proposed streetscape character might conflict with existing street trees. Identify corrective options.*
- *Work with Boise Planning and Development Services and CCDC involvement to develop and implement a tree preservation procedure that can be adopted into the development application process. This might be done through creation of a tree preservation ordinance or a permitting process similar to that in use in historic districts.*
- *Community Forestry should provide CCDC and Boise PDS with requirements and recommendations relating to conditional use and design review development applications in the downtown area.*

Planting New Trees Downtown

There are several challenges when planting trees in any downtown area:

- Limited planting space

This is one of the greatest challenges to maintaining a healthy urban forest in the downtown core. Until recently, small tree vaults were the norm for nearly all street trees in the urban core. Typically four (4) feet in diameter with concrete walls on all sides they left little space for the root expansion necessary for healthy tree growth.

In the past, sidewalk cutouts were also used as planters for trees. These were often created with no automatic irrigation, relying on property owners or tenants to water the trees by hand. Roots from trees often grow into the soil under the sidewalk, cracking and heaving the concrete. This obviously can cause trip hazards for pedestrians.

In the last five (5) years, larger tree wells have become standard, either six (6) feet in diameter or an elongated four (4) feet by eight (8) feet layout. This is definitely an improvement, and should allow for somewhat greater growth and longevity for trees in the urban core.

Outside of the urban core, most street trees are in “parkway” planters or wide tree lawns. These continuous parkway planters range from five (5) to twelve (12) feet in width. The wider planters are best, allowing for maximum tree growth with little impact to surrounding hardscape (sidewalks, curbs). As the downtown core expands, many parkways are being covered with sidewalk and tree wells become the norm.

A potential solution to limited planting space in areas where hard surfaces dominate the landscape comes in the form of something called “Structural Soil.” Simply put, Structural Soil is an aggregate of angular rock and soil which allows adequate compaction for concrete, asphalt or pavers to be placed on top, but which also provides space, soil and gas exchange for growth of tree roots. This mix is designed to allow plenty of rooting volume for greater and healthier tree growth without damage to the surrounding hardscape. The mixture is patented and a license is required to create a local supplier. Though not feasible for smaller sites, this application shows promise for larger developments.

- Availability of irrigation

Many of the older tree wells and sidewalk cutouts were created without automated irrigation in place. Over the years, Community Forestry has removed many trees in such locations due to decline and death. The current policy is to forbid the planting of replacement trees in these locations as regular irrigation is vital to tree survivability and growth.

Many of the parkway strips are also without automated irrigation; Forestry has applied the same policy to these sites. Through experience, Forestry has learned if such a site is not currently irrigated, the presence of a new tree is not likely to change that pattern.

New development and new tree wells are required to install automated irrigation though maintenance can still be a challenge. Over watering can be as much of a problem as drought.

- Difficult growing conditions
In any location, tree growth is limited by the conditions present in its surroundings. In a city, limited growing space, poor soil, heat, and exposure to sun and wind rank among the worst enemies of trees. The urban core has an abundance of all of these limiting factors. Finding ways to create more space for trees will definitely help, but survivability often comes down to choosing a tree species that is better able to survive in difficult conditions.
- Limited selection of species
Though many species are available for sale at retail nurseries, some species desirable for urban planting are unavailable or in short supply. This might be due to lack of interest in a particular species, its growth rate, or perceived problems.
- Owners and tenants
Some business and property owners perceive trees to be an obstacle to running their businesses and shops because trees create messes, block visibility of signs and displays and are costly to maintain.

The desire for the shade and natural aesthetics of trees in an urban area may conflict with the business owner's desire to attract more customers and limit spending on “less vital” items. Obviously business is here to stay; so are street trees. Through education and good planning, Forestry believes both can easily coexist.

- Poor maintenance
Many people do not understand how trees work or how to best care for them. Some people are just not interested in what is good or bad for plants. As a result, trees often go without any regular care or their care is turned over to the lowest cost landscape maintenance contractor available. The consequences can be trees that are topped or so poorly pruned and disfigured, they become liabilities to a property and to the City.

Community Forestry routinely prunes public trees throughout the city, but budget limitations force the care to be directed to those trees in dire need of maintenance. Those with significant decay and hazardous limbs are given first priority, which normally eliminates most “routine” pruning.

Education is crucial in helping owners, tenants and the contractors to understand that professional tree care can create assets rather than liabilities.

- Tree grates and guards
As trees grow and mature, their trunks can come into conflict with the grates covering the planting hole or with the guards around the trunks. Grates can girdle trunks in just a couple of years, without maintenance.

- If the grates are a necessity; they can be widened to accommodate a growing trunk with relative ease. The guards can be considered an aesthetic attribute in some cases, and may provide some limited protection to young trees. If left in place, the guards often damage the trees they were meant to protect. Their use should be limited and temporary.

Recommendations: Downtown Tree Planting

- *Work with CCDC, DBA and property owners/tenants to create a downtown core planting plan. Create a mapped layout identifying proposed species for all block faces in the plan area. The plan shall consider the following:*
 - a) Tree diversity*
 - b) Maintenance limitations*
 - c) Microclimate constraints*
 - d) Aesthetics*
 - e) Business concerns*

To be completed and adopted by end of 2006.
- *Collaborate with CCDC, DBA to develop a tree replacement policy. Policy should address these issues:*
 - a) Replacement when no automatic irrigation is present.*
 - b) Property owner's responsibility for irrigation.*
 - c) Assessment of liabilities for loss of trees due to lack of irrigation.*
 - d) Assessment of initial tree and planting costs. Owners should pay a portion of initial expense to give them a larger stake in trees' survival.*

To be completed and adopted by end of 2006.
- *Adopt the list of trees in Appendix A as the approved tree list for best use in downtown Boise. The list is not meant to be exclusive, but to establish a starting point for developers and landscape architects when selecting tree species. Continually evaluate these and other species and varieties for potential use in downtown environments.*
- *Establish standard tree well designs for use in the downtown core area. Standards to include the following:*
 - a) The current 6' X 6' and 4' X 8' sizes can be incorporated into this plan as the minimum size for all new tree wells.*
 - b) Style of grate to be used. Current is "Kiva" or "Fan" by Urban Accessories*
 - c) Style of tree guards to be used and conditions where use is appropriate. Special approval from Community Forestry and CCDC should be required to use the guards. A "maximum period of use" should also be identified to determine when guards should be removed.*
- *Boise City shall obtain a license for the development of a structural soil mix for use in downtown planting applications. Then identify a local supplier to create a mix. Complete acquisition of license by the end of 2005.*

Downtown Tree Maintenance

Maintenance includes pruning, pest control, irrigation, and leaf/litter cleanup. Since downtown has already been identified as the “heart” of Boise, it would seem that maintenance of the trees might have a higher priority than other public trees in the city. However, this has not been the case. Downtown trees suffer more abuse but get the same or even less attention than other trees in Boise. This is partly due to Forestry’s commitment to hazard reduction. Many of the downtown trees do not typically pose present hazards due to their limited size. Hence, they receive less attention than other higher risk trees.

There has been some confusion with regard to who performs maintenance of right of way trees. Property owners and tenants are either unaware that any organization regulates these trees, or assume that the City will take care of the trees since they are on right of way. In fact, according to City ordinance, the property owner adjacent to the tree has the primary responsibility for tree maintenance, including pruning (Title 9, Chapter 16, Section 8). The City often provides some maintenance services downtown, including annual inspections, pruning of trees by volunteer Tree Stewards and regular monitoring/treating elm leaf beetle infestations. CCDC also provides some funding for landscape maintenance on a limited number of sites in the urban core.

Downtown owners and tenants often string lights in street trees during the Christmas holiday and some use them all year long. If the lights are adjusted on an annual basis, there is no harm in this practice. However, strings of lights are often left in trees long after they have quit working. The cords can then girdle branches and trunks as the trees grow in diameter.

When trees die or are no longer viable due to condition or damage, Community Forestry provides removal service at no cost to the adjacent property owner. Typically, trees identified as removals by Forestry staff are posted for 30 days with a sign stating why the tree is being removed and if it will be replaced. If a tree is less than six (6) inches in diameter, however, it will not be posted; rather it is simply replaced.

No work on rights-of-way trees is allowed without first securing a free permit from Boise Community Forestry. This enables Forestry to manage the quality of care street trees are provided. Permits are currently required for planting, pruning and removals. If a property owner wants to hire a private tree service to prune or remove trees, the tree service must first be approved and licensed by Boise Community Forestry. Any private tree service must be licensed with Boise City prior to pruning or removing any rights-of-way tree. Removal of any elm tree on private property also requires the use of a licensed tree service, to help prevent the spread of Dutch Elm Disease.

Tree Task Force Recommendations: Downtown Tree Maintenance

- *In cooperation with CCDC and DBA, create a comprehensive maintenance strategy for downtown trees to include:
 - a) *Periodic widening of tree grates to provide trunk clearance*
 - b) *Annual pruning plan for volunteer Tree Stewards*
 - c) *Broad plan for control and management of tree pests and diseases*
 - d) *Periodic inspection and maintenance of automated irrigation systems*
 - e) *Adjustment or removal of lighting strung in street trees*To be completed and adopted by end of 2006.*
- *Create a comprehensive education strategy aimed at downtown property owners, tenants and developers. Should include annual tree education seminars, regular communication through educational brochures or newsletters and coordination with CCDC and DBA. Create a small brochure for owners and tenants covering tree-related issues such as planting, maintenance and removal. Investigate grant funding or cost sharing to complete printed materials.*
- *Boise Community Forestry, CCDC, DBA and perhaps ACHD shall draft an MOU which will outline the responsibilities of each organization in relation to tree planting, maintenance and removal. MOU to be completed and adopted by all agencies by the end of 2006.*
- *Community Forestry will provide an annual inspection and inventory of all trees on public right of way in the downtown area identified above. Inspection/inventory results will be made available to CCDC, DBA or any organization upon request. Inspections to include pest problems, general tree condition, grate and guard maintenance needs, irrigation problems and pruning needs.*

RECOMMENDATIONS OF THE DOWNTOWN SUBCOMMITTEE

1. Conduct annual meetings with CCDC and DBA to assess aggregate condition of downtown trees and plan maintenance and planting for the coming year.
2. Create a process where Community Forestry is notified of impending development projects at the earliest opportunity; ideally well before the design review application is submitted. This will provide Forestry with a chance to assure greater protection of existing trees on public rights-of-way and private property, and incorporate additional space for new planting.
3. Overlay current street tree inventory onto CCDC's "Streetscape Character" map to identify areas where proposed streetscape character might conflict with existing street trees. Identify corrective options.
4. Work with Boise Planning and Development Services and CCDC involvement to develop and implement a tree preservation procedure that can be adopted into the development application process. This might be done through creation of a tree preservation ordinance or a permitting process similar to that in use in historic districts.
5. Community Forestry should provide CCDC and Boise Planning and Development Services with requirements and recommendations relating to conditional use and design review development applications in the downtown area.
6. Work with CCDC, DBA and property owners/tenants to create a downtown core planting plan. Create a mapped layout identifying proposed species for all block faces in the plan area. The plan shall consider the following:
 - a. Tree diversity
 - b. Maintenance limitations
 - c. Microclimate constraints
 - d. Aesthetics
 - e. Business concernsTo be completed and adopted by the end of 2006
7. Collaborate with CCDC, DBA to develop a tree replacement policy. Policy should address these issues:
 - a. Replacement when no automatic irrigation is present
 - b. Property owner's responsibility for irrigation
 - c. Assessment of liabilities for loss of trees due to lack of irrigation
 - d. Assessment of initial tree and planting cost. Owners should pay a portion of initial expense to give them a larger stake in tree's survivalTo be completed and adopted by end of 2006
8. Adopt a list of trees in Appendix A as the approved tree list for best use in downtown Boise. The list is not meant to be exclusive, but to establish a starting point for developers and landscape architects when selecting tree species. Continually evaluate these and other species and varieties for potential use in downtown environments.
9. Establish standard tree well designs for use in the downtown core area. Standards to include the following:

- a. The current 6' x 6' and 4' x 8' sizes can be incorporated into this plan as the minimum size for all new tree wells.
 - b. Style of grate to be used. Current is "Kiva" or "Fan" by Urban Accessories.
 - c. Style of tree guards to be used and conditions where use is appropriate. Special approval from Community Forestry and CCDC should be required to use the guards. A "maximum period of use" should also be identified to determine when guards should be removed.
10. Boise City shall obtain a license for development of a structural soil mix for use in downtown planting applications. Then identify a local supplier to create a mix. Complete acquisition of license by the end of 2005.
 11. In cooperation with CCDC and DBA, create a comprehensive maintenance strategy for downtown trees to include:
 - a. Periodic widening of tree grates to provide trunk clearance
 - b. Annual pruning plan for volunteer Tree Stewards
 - c. Broad plan for control and management of tree pest and diseases
 - d. Periodic inspection and maintenance of automated irrigation systems
 - e. Adjustments or removal of lighting strung in street trees.To be completed and adopted by the end of 2006
 12. Create a comprehensive education strategy aimed at downtown property owners, tenants and developers. It should include annual tree education seminars, regular communication through educational brochures or newsletters and coordination with CCDC and DBA. Create a small brochure for owners and tenants covering tree-related issues such as planting, maintenance and removal. Investigate grant funding or cost sharing to complete printed materials.
 13. Boise Community Forestry, CCDC, DBA and perhaps Ada County Highway District shall draft an MOU which will outline the responsibilities of each organization in relation to tree planting, maintenance and removal. MOU to be completed and adopted by all agencies by the end of 2006.
 14. Community Forestry will provide an annual inspection and inventory of all trees on public rights-of-way in the downtown area identified. Inspection/inventory results will be made available to CCDC, DBA or any organization upon request. Inspections to include pest problems, general tree condition, grate and guard maintenance needs, irrigation problems and pruning needs.

RECOMMENDATIONS OF THE LES BOIS TREE TASK FORCE

1. Expand the Tree Steward Program to assist with additional work load. This group could be increased by 20 to 25 people with one additional staff to oversee the program. Additional duties could include tree inventory and assisting with new Tree Steward trainees.
2. Create a formal agreement with the Ada County Highway District to cover tree maintenance, tree planting, tree replacement, and infrastructure conflicts in regard to trees.
3. Hire / convert 1 additional staff to oversee educational outreach programs, Tree Steward, Educational classes and maintain and expand web site.
4. Provide additional educational classes to various groups and professionals. Conduct tree classes at:
 - Various nurseries and green industry businesses.
 - On the web.
 - Various trade schools and high schools.
 - Idaho Botanical Garden.
5. Provide opportunities and money for staff to attend training needed to keep certifications current. Attend various conferences; i.e. annual ISA Training Conference, INLA Training Conference, and local training conferences.
6. Develop an aggressive Education plan to inform the public of the Boise Tree Ordinance and Community Forestry planting programs that are available. Information should stress that they should supply sufficient water for tree planting and established trees. Target home owner associations, developers and rental property owners.
7. Work with the North End and East End Neighborhood Associations to develop neighborhood specific planting plans, including replacement trees in parkways, which encourage planting of large stature trees. Create recommendations that address tree diversity, parkway limitations, homeowners' education and increasing the canopy coverage. The plans should be completed and adopted by the end of 2007.
8. Develop incentives for planting Class III trees in parkway planting sites where parkway widths are sufficient.
9. When replacing Class III trees (e.g. Silver Maples) in parkways narrower than 8 feet offer a narrowed list of Class II trees for consideration that only includes the largest of the Class II trees available.
10. Seek new partnerships with various groups and professionals, i.e. Idaho Community Forestry Advisory Council, Pacific Northwest ISA, and the Idaho Nursery and Landscape Association.
11. Create a formal agreement with Idaho Power to cover tree removal and planting under power lines.

12. Fund contract services to respond to hazard tree removal and maintain, at a minimum, the current seven (7) to eight (8) year pruning cycle by increasing the contract budget \$50,000.00 per year from the general fund for fiscal years 2006 and 2007. Thereafter provide annual increases in contract funding to maintain resources required for tree removal and pruning.
13. Develop a tree pruning plan with Ada County Highway District for their nine year street resurfacing cycle that raises the canopy in a way that is more beneficial to the trees' health, more aesthetically balanced, and more satisfying to the adjacent property owner.
14. Provide control of Elm Leaf Beetle to prevent no more than 25% infestation in a tree.
15. Coordinate alternative sidewalk replacement material / design plans with Ada County Highway District to protect trees while providing safe sidewalks.
16. Determine best practices for the coexistence of grass and trees so that trees in problem areas thrive and grow at a healthy rate.
17. Gain additional funding, through MIS process, for the maintenance of newly acquired or developed public property and annexed property into the Boise City limits.
18. Develop a tree maintenance plan for other city-owned property (fire stations, wastewater treatment plants, rental properties, Airport, etc.) for the purpose of providing consistent management decisions and reducing liability.
19. Develop a natural resource management plan to guide maintenance activities for reserves and other designated natural areas.
20. Require that all new and reinvestment development provide a minimum eight (8) feet wide, irrigated space for rights-of-way tree planting, void of buried utility conflicts.
21. Gain a greater than the required 1:1 ratio for tree removal / replacement and encourage additional tree planting in rights-of-way. Strive to achieve a planting ratio of 2–3 trees for each tree removed. Include suggestions within the Removal and Planting letter that encourages adjacent property owner to plant trees beyond the minimum requirement. Define what the difference between a Class I, II or III tree and conifer is.
22. Encourage Ada County Highway District to provide rights-of-way tree planting space through plan review. Recommend that this be included in the project planning process prior to plan review.
23. Increase Class III rights-of-way planting from 19% to 22% through the Releaf Boise program. Identify more planting spots by using the City of Boise GIS Resource Center Intranet Mapping Portal.
24. Encourage City Council to continue funding tree plantings and maintenance on Ada County Highway District and Idaho Transportation Department medians, islands and slope properties.
25. Develop an aggressive Education and Marketing plan to inform the public of the Boise Tree Ordinance and Community Forestry planting programs that are available. Information should stress that they should supply sufficient water for tree planting. Target home owner associations, developers and rental property owners.

26. Review the Planning and Development Services Building Division's regulations regarding single and multi-family home construction and planting issues. Include language in Landscape Ordinance that enforces existing rights-of-way planting space be retained rather than turned into parking spaces.
27. Explore with developers possible incentives to plant rights-of-way trees during new home construction.
28. Continue to coordinate with Idaho Power's Tree Removal / Replacement program to purchase Class I trees for planting under power lines.
29. Require developers, instead of new home owners, to pay the cost of a new two (2) inch caliper tree(s) to replace trees that are damaged or removed due to construction.
30. Promote planting by doing more advertising and media releases and incorporate with Arbor Day and Earth Day activities.
31. Work with Ada County Highway District to include Community Forestry with experimental "Rubber Sidewalks". Install them where rights-of-way planting locations are limited in parking strips or back of sidewalk.
32. Contact and meet with homeowner associations for more planting participation during Releaf Boise.
33. Continue with and expand on Park Property tree replacement and new tree plantings to maximize tree canopy coverage. Plant Class III trees in parks where possible, to increase canopy coverage from 18% to 22% as recommended by the Community Forestry 2003 Tree Statistics Report.
34. Identify declining trees and plan for replacement (under planting). Identify additional planting locations within park design master plans.
35. Continue with the Tree Walk / Trail planting. Trees of interest are currently being planted along the Greenbelt for the Tree Walk/ Trail. Solicit donations of unique trees from nurseries. Complete initial trail by 2010.
36. Educate and advise other City of Boise property managers to select and plant appropriate and healthy trees.
37. Educate the public that a donation of a tree, to the city for public use, falls within the definition of a deductible charitable contribution.
38. Develop, implement and enforce a Boise City Landscape Ordinance for existing and new site development.
39. Seek ways to provide incentives to plant trees on private properties.
40. Work with Boise City Planning and Development Services, Developers and Neighborhoods to create "Street Tree Planting" along private property behind public rights-of-way (using Class II or III trees).
41. Recommend the Ada County Highway District, create a program that provides monetary assistance to property owners to purchase and plant trees on private property. For example, this is when rights-of-way trees are removed for street and sidewalk construction and rights-of-way planting space no longer exists.
42. Increase Boise's total estimated Tree Canopy land cover of 11, 151 acres (16 percent) to (33 percent) as recommended by American Forests by advocating the increase of tree planting on private properties throughout Boise.

43. Continue to work with the Center for Urban Forestry Research at U.C. Davis to conduct a Canopy Study for the City of Boise. Work to be completed by 2006.
44. Expand on or improve tree canopy density in existing public school parking lots and near hard surface play areas and school grounds.
45. Explore how to expand tree planting on existing Idaho State and Federal properties. Make staff available for consultation between government entities to discuss future planting planning to encourage replacement plantings. Contact Idaho State Forestry Coordinator and southwest Idaho Community Forestry Assistant, State Grounds personnel and Boise State University Horticulture Department to explore how the City can provide technical assistance.
46. Explore expanding tree planting on existing Boise School District properties. Meet with Individual School Faculty to discuss tree planting educational opportunities and partnerships with Master Gardeners and Homeowner Associations. Encourage private industry tree professionals to participate in the ISA Certified Arborist Scholarship program. Ask participants to volunteer some of their required hours to a school planting project.
47. Seek ways for staff to provide planting information and incentives/recognition for citizens, groups and associations.
48. Plan a neighborhood program to plant and provide tree care for senior, disabled or health impaired citizens.
49. Continue operation of Cunningham Nursery.
50. Every three years perform a cost analysis of staff growing trees vs. contract growing trees.
51. Partner with a local tree nursery for contract growing using alternative funding. Monitor and evaluate cost savings and species quality.
52. Gain a greater diversity of species, cultivars and varieties. Limit no more than 10% genus of any one tree.
53. Expand on growing large caliper (3-4 inch) tree spade transportable trees for park planting and replacements.
54. Provide more drought tolerant trees for dry soil areas.
55. Continue to provide and/or expand on educational opportunities for the public.
56. Provide plants for riparian and restoration planting as per the River Corridor Study.
57. Conduct annual meetings with CCDC and DBA to assess aggregate condition of downtown trees and plan maintenance and planting for the coming year.
58. Create a process where Community Forestry is notified of impending development projects at the earliest opportunity; ideally well before the design review application is submitted. This will provide Forestry with a chance to assure greater protection of existing trees on public rights-of-way and private property, and incorporate additional space for new planting.
59. Overlay current street tree inventory onto CCDC's "Streetscape Character" map to identify areas where proposed streetscape character might conflict with existing street trees. Identify corrective options.

60. Work with Boise Planning and Development Services and CCDC involvement to develop and implement a tree preservation procedure that can be adopted into the development application process. This might be done through creation of a tree preservation ordinance or a permitting process similar to that in use in historic districts.
61. Community Forestry should provide CCDC and Boise Planning and Development Services with requirements and recommendations relating to conditional use and design review development applications in the downtown area.
62. Work with CCDC, DBA and property owners/tenants to create a downtown core planting plan. Create a mapped layout identifying proposed species for all block faces in the plan area. The plan shall consider the following:
 - a. Tree diversity
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 - e. Business concerns
 To be completed and adopted by the end of 2006
63. Collaborate with CCDC, DBA to develop a tree replacement policy. Policy should address these issues:
 - a. Replacement when no automatic irrigation is present
 - b. Property owners responsibility for irrigation
 - c. Assessment of liabilities for loss of trees due to lack of irrigation
 - d. Assessment of initial tree and planting cost. Owners should pay a portion of initial expense to give them a larger stake in tree's survival
 To be completed and adopted by end of 2006
64. Adopt a list of trees in Appendix A as the approved tree list for best use in downtown Boise. The list is not meant to be exclusive, but to establish a starting point for developers and landscape architects when selecting tree species. Continually evaluate these and other species and varieties for potential use in downtown environments.
65. Establish standard tree well designs for use in the downtown core area. Standards to include the following:
 - a. The current 6' x 6' and 4' x 8' sizes can be incorporated into this plan as the minimum size for all new tree wells.
 - b. Style of grate to be used. Current is "Kiva" or "Fan" by Urban Accessories.
 - c. Style of tree guards to be used and conditions where use is appropriate. Special approval from Community Forestry and CCDC should be required to use the guards. A "maximum period of use" should also be identified to determine when guards should be removed.
66. Boise City shall obtain a license for development of a structural soil mix for use in downtown planting applications. Then identify a local supplier to create a mix. Complete acquisition of license by the end of 2005.
67. In cooperation with CCDC and DBA, create a comprehensive maintenance strategy for downtown trees to include:

- a. Periodic widening of tree grates to provide trunk clearance
 - b. Annual pruning plan for volunteer Tree Stewards
 - c. Broad plan for control and management of tree pest and diseases
 - d. Periodic inspection and maintenance of automated irrigation systems
 - e. Adjustments or removal of lighting strung in street trees
- To be completed and adopted by the end of 2006
68. Create a comprehensive education strategy aimed at downtown property owners, tenants and developers. Should include annual tree education seminars, regular communication through educational brochures or newsletters and coordination with CCDC and DBA. Create a small brochure for owners and tenants covering tree-related issues such as planting, maintenance and removal. Investigate grant funding or cost sharing to complete printed materials.
69. Boise Community Forestry, CCDC DBA and perhaps Ada County Highway District shall draft an MOU which will outline the responsibilities of each organization in relation to tree planting, maintenance and removal. MOU to be completed and adopted by all agencies by the end of 2006.
70. Community Forestry will provide an annual inspection and inventory of all trees on public rights-of-way in the downtown area identified above. Inspection/inventory results will be made available to CCDC, DBA or any organization upon request. Inspections to include pest problems, general tree condition, grate and guard maintenance needs, irrigation problems and pruning needs.

COMMUNITY FORESTRY POLICIES

To guide its policies and programs, the Community Forestry Unit of the Boise Parks & Recreation Department relies upon laws contained within the Boise City Tree Ordinance. This section of the Boise City Ordinance was adopted by the Mayor and Council in 1952 and revised & updated in 2000.

The following policies have been written to describe how programs are currently being implemented. They will help to guide the Community Forestry Unit in its daily operations as intended in Chapter 16 of the Boise City Ordinance. Furthermore, they may be authorized by the City Forester in the execution of his duties as they relate to the conservation of public tree resources and to the provision for public safety.

It is recommended that these policies be reviewed annually and additional policies be considered as needed.

TREE PRUNING POLICY

Background

This policy will define tree pruning on public properties within the jurisdiction of the Community Forestry Unit. It will also address trees that are situated on private property that constitute a hazard to public safety in regard to tree pruning. These issues are addressed in the Boise City Ordinance, Chapter 16 section 09-16-06.3, 09-16-08, 09-16-13 and 09-16-14.

General Pruning Policy

The pruning of trees on public rights-of-way is done at no charge to adjacent property owners. The City has been divided into eight (8) districts. Each of these districts is inspected for trees that pose a hazard from dead, dying, or low branches or other hazards. Trees are pruned on an approximate eight (8) year cycle. Only those trees that are in need of pruning are done in this time frame. After we have gone through all districts, staff will start inspection of the first district again. Community Forestry will not break with the systematic district pruning schedule in order to prune individual public owned trees unless such tree(s) constitute an immediate public hazard. Otherwise, if a homeowner wants a tree pruned that is not within the district being worked in, they are required to hire a private licensed tree service to do the pruning. All trees are pruned to American National Standards Institute A-300 Standards.

Private property trees are not pruned by city crews. Trees that are on private property and have been determined to pose a safety hazard or public nuisance are sent notices by Community Forestry to take care of the problem. If the owner does not remedy the problem, we can by city ordinance, Chapter 16 section 09-16-05.2, have the work done and charge the property owner for the cost of this work.

Trees that are on park properties are inspected yearly for safety hazards and are pruned on a priority basis. Because of the pedestrian traffic in these areas, it is important that staff inspect and eliminate potential hazards in a timely manner.

Trees that are on other city owned properties (fire stations, waste water treatment plants, rental properties, airport, etc.), are subject to city ordinances that require a licensed tree service to do the work. Any tree work can be done by in-house staff, but must be approved the Community Forestry Unit. All work does require a permit from our office.

Topping of trees is not permitted on public properties and is highly discouraged on private property. Any tree found to be topped on public property will be removed at the discretion of the City Forester and an assessed value will be placed on the tree and charged back to the adjacent property owner as set forth in Chapter 16 section 09-16-11 of the Boise City Ordinance.

It is unlawful for any person to prune any tree on public property without first getting a permit issued by the Community Forestry Unit. Permits will only be issued to adjacent property owners or a city licensed tree service. All work will be done under the supervision of the City Forester and according to American National Standards Institute A-300 Standards.

HAZARDOUS, DISEASED AND INFESTED TREE ABATEMENT POLICY

Background

This policy defines the role of the City Forester and the responsibilities of property owners, agents or others as it relates to the abatement of hazardous, diseased or infested trees on both public and private properties.

General Policy - Public Properties - Street Trees

The City Forester will conduct or cause to be conducted a survey of all trees on public street rights-of-way on an ongoing basis throughout the year. Trees in alley ways within any public rights-of-way are excluded. All trees found to be hazardous, diseased or infested will be appropriately treated or removed according to priority and within the guidelines of hazard tree removal or insect abatement procedures. In the event that trees are determined to be an immediate hazard, the City Forester may remove or cause to be removed within twenty-four (24) hours of determination. In the event of highly contagious disease such as Dutch Elm Disease, the City Forester will remove or cause to be removed after ten (10) days public notice.

General Policy - Public Properties - Parks

The City Forester will conduct or cause to be conducted an annual inspection of all trees growing on park properties. Any trees which are confirmed to be hazardous, diseased or infested may be removed at the discretion of the City Forester.

General Policy - Private Properties

The City Forester may also require owners of trees situated on private properties (including trees within alley rights-of-way) that have become hazardous, diseased or infested to remove or cause the removal of such trees. The cost for removal of these tree(s) is the responsibility of the property owner(s) or agents. Property owners or agents also have the responsibility to notify the City Forester of any tree(s) situated on their private property which may be hazardous, diseased or infested.

TREE REMOVAL POLICY

Background

This policy defines tree removal activities as they relate to dead, dying, diseased, infested or hazardous trees either within any street rights-of-way or upon private property adjacent to any street or other public grounds. Specific authorizations are contained within Chapter 16 sections 9-16-6 through 9-16-14 of the Boise City Ordinance.

General Removal Policy - Publicly Owned Trees

The intent of this policy is twofold in that public safety and property remain protected by the removal of hazardous trees, however it is also our intent to protect and preserve trees on public property whenever feasible. Specifically, property owners desiring to extend the life of existing trees which may require work that will abate the public hazard and is not within Forestry's maintenance plan or budget may have the option of completing such work upon approval of the City Forester and at the expense of the property owner(s).

Regulations and Permits - Publicly Owned Trees

It is unlawful for any person to remove any tree from any street rights-of-way unless a permit is first issued by the City Forester. If application for a removal permit is approved, all work must be completed by a licensed tree service under the supervision of the City Forester. Permittees include either the adjacent property owner(s) or any private tree service licensed by the City Forester. Whenever, in the opinion of the City Forester, any trees are removed it shall become a condition of the permit for removal that such tree(s) be replaced.

Notification Procedures and Removal Dates - Publicly Owned Trees

Notification for the removal of hazardous, diseased or infested trees is provided by the City Forester's office. Property owners or the general public may request that tree(s) be removed by first scheduling a tree inspection through the City Forester's office. If inspection results confirm that removal is warranted, tree(s) will be removed by the City without cost to the adjacent property owner(s) except in cases of damage assessments and restitution. A period of six (6) months or less may expire before such removal(s) actually occur, except for tree(s) which may pose an immediate hazard. The property owner(s) adjacent to any tree(s) to be removed within public rights-of-way will receive a written notice from the City Forester's office at least 30 days in advance of all scheduled tree removals unless emergency removal is necessary. Additionally, any tree(s) scheduled for removal will be affixed with a public notice stating the reason for removal and the number of replacement trees required for replanting. Signs will be placed at least 30 days in advance of most scheduled removal(s). Diseased trees will have signs placed at least ten (10) days in advance of scheduled removal. Emergency removals will have no minimum time line for public notification signage.

Notification Procedures and Removal Dates - Privately Owned Trees

Trees situated on private property that are either hazardous, diseased or infested shall be removed as determined by the City Forester when such trees pose or may pose a threat to public safety or the health of any publicly owned tree(s). Written notification shall be provided to the property owner(s) in the form of a correction notice, which specifies a reasonable time for the property owner(s) to complete such actions. Removal cost(s) shall become the responsibility of the property owner(s). If work is not completed in the specified time, the City Forester may cause the work to be done and resulting costs will be assessed to the property owner(s) in accordance with Chapter 16 of the Boise City Ordinance.

Notification Procedures and Removal Dates - Other Trees Requiring Removal

- 1) **Unauthorized Construction Activities**
Trees on public properties requiring removal due to damages caused by unauthorized construction activities (i.e. roadwork, sidewalk installation or repair, or utility installation or repair) shall be removed by staff or a tree service licensed by the City Forester. All costs for removal and restitution of damages shall be the responsibility of the person(s) causing such damages as described in the Damage Assessments and Restitution section of this policy. The City Forester shall determine a reasonable time to complete such action upon notification of the person(s) causing such damage.
- 2) **Authorized Construction Activities**
Trees on public properties requiring removal for authorized construction activities shall be removed by a tree service licensed by the City Forester. The costs of removal shall be the responsibility of the person(s) or agency performing the construction. Specific exemptions may be approved at the discretion of the City Forester. Damage assessments, restitution requirements and construction provisions shall be identified by the City Forester in advance of construction activities and shall become a condition of approval authorizing such activities.
- 3) **Trees in Conflict with Power Lines**
The City Forester may cause the removal of or allow the Idaho Power contracted tree service to remove any tree(s) which pose or may pose a public safety hazard when in conflict with overhead energized power lines in accordance with permit requirements. In most cases, removal costs are borne by Idaho Power. Replacement trees will be required when planting is feasible in accordance with tree planting policies.

INSECT AND DISEASE CONTROL PLANT HEALTH CARE POLICY

Background

This policy defines insect and disease control activities as they relate to injurious pests and tree pathogens which may severely damage or destroy individual or entire populations of trees both on public and private properties. Specific authorizations are contained within Chapter 16 sections 9-16-6, 9-16-8, 9-16-8.2, 9-16-13 and 9-16-14 of the Boise Tree Ordinance. The Boise Parks & Recreation Department's Chemical Pesticide Management Guidelines is the document used for implementing the principals of Integrated Pest Management (IPM), an approach which uses multi-faceted strategies that minimize the impact on the environment and human health.

General Policy

The intent of this policy is to:

- A. Protect tree resources from the effects of damaging insects and/or diseases through a prevention program integrating Plant Health Care (PHC) principals.
- B. Significantly reduce the use of harmful pesticides by continuing to improve our Integrated Pest Management (IPM) program..

To summarize these concepts, our policy since 1985 has been to control pests only when absolutely essential to protect trees and to use the most environmentally yet economically practical methods and materials.

Plant Health Care and Integrated Pest Management Guidelines

Guidelines leading to reduction in the use of harmful pesticides:

- A. Prevent problems through:
 - Environmentally compatible site designs
 - Selecting tree species which are resistant to major pests
 - Accepting only high quality plant material
 - Assuring trees are planted properly
 - Providing continual care
 - Increasing the diversity of plant species which have proven track records
- B. Control only when necessary by:
 - Distinguishing “good bugs” from “bad bugs”
 - Determining “acceptable levels” of insect or disease populations which are known to damage tree resources
 - Monitoring insect populations (pheromone traps) to determine life cycle development, reproduction levels and potential for damage to trees
 - Using common sense and considering the entire tree population, not just the individual tree

C. Treat problems intelligently by:

- Using cultural and/or biological methods where practical
- Choosing pesticides which have no toxicity (biopesticides), or the lowest toxicity, yet are effective
- Selecting application methods which are target specific and timed to control pests when in the most vulnerable stage
- Evaluating effectiveness and making adjustments to the program when necessary

TREE PLANTING POLICY

Background

This policy defines tree planting activities as they relate to trees within public rights-of-way, Boise City Parks and City owned properties. Specific authorization is contained within Chapter 16, sections 9-16-6 through 9-16-9 of Boise City's Ordinance.

General Planting Policy

The intent of this policy is directed at managing the planting, and increasing the number of trees planted along Boise's streets and neighborhoods and to select or approve only those tree species which are best suited for each site. It is also staff intent to maximize the utilization of each tree site by planting or causing the planting of trees which are long-lived and large growing when site factors allow. In contrast, those sites which do not allow for large growing trees will be planted with smaller growing tree species so as to avoid future liabilities, infrastructure conflicts and increased maintenance costs. On specific sites where mature trees may have limited life expectancies, new trees may be under planted in order to reduce future impacts on shade qualities for that site. Overall, our goal is to promote maximum tree canopy coverage on public properties within Boise City limits while maintaining a diversity of tree species, genus and age classes. Trees selected for planting should be of applicable specifications and standards as defined by the American Standard for Nursery Stock, 1996 edition, ANSI Z60.1, American Association of Nurserymen. Trees shall be of specimen quality, indicate vigorous growth, and be free of injury and pests.

Regulations and Permits for Planting on Public Property or Rights-of-Way

It shall be unlawful for any person(s) to plant any tree on any public property or public rights-of-way, as defined in Chapter 16 of the Boise Tree Ordinance, unless a planting permit is first issued by the City Forester. The City Forester has the authority to regulate the species, class types and spacing of trees upon issuance of all tree planting permits.

No trees shall be planted within five feet (5') of any underground utility. Prior to planting, all person(s) should refer to The Underground Facilities Damage Prevention Code (Idaho Code Chapter 22 Sections 55-2202).

No tree, which by species, will grow to a height at maturity that will interfere with energized overhead power lines, shall be planted under or near overhead energized power lines.

Tree Spacing

The spacing of trees planted on street rights-of-way is important for the health and growth of the tree. Each tree needs the proper space to allow for maximum crown space and proper root space.

The following are the guidelines set forth by the Boise Community Forestry Unit for trees planted on street rights-of-way:

In order to present the Best Management Practices of the industry it is necessary to establish policies in regard to Planter Strip widths and Tree Spacing for proper tree and root growth. To prevent infrastructure damage (sidewalks, curbs, etc.) it is necessary to fit the right tree species with the planter strips. The following are the guidelines that have been established:

Class I Trees (Only allowed under overhead power lines)

- Spacing: Trees shall be spaced 20 to 30 feet apart
- New Planter Strips: Minimum 10 feet in width
- Existing Planter Strips: Minimum 8 feet in width - Limited Class I species

Class II Trees

- Spacing: Trees shall be spaced 30 to 40 feet apart
 - New Planter Strips: Minimum 8 feet in width
 - **Existing Planter Strips: Minimum 6 feet in width
 - * Existing Planter Strips: Minimum 5 feet in width
- (Larger Class II trees from the list provided in Appendix A are encouraged, especially when replacing Class III trees.)

Class III Trees

- Spacing: Trees shall be spaced 40 to 60 feet apart
- New Planter Strips: Minimum 10 feet in width on arterials and collectors
- *New planter strips: Minimum 8 feet in width on neighborhood streets, allowing limited Class III species and within certain guidelines.
- *Existing Planter Strips: Minimum 8 feet in width, allowing limited Class III species and within certain guidelines.

* Guidelines: Root Barrier installation. Property owner may be required to enter into a license agreement with Ada County Highway District. Additional restriction may also be required. Another option will be to get a license agreement with ACHD to relocate the sidewalk.

** Guideline will be: Installation of root barrier.

Inspections

Person(s) interested in planting or having a tree planted within the public rights-of-way must first call the City Forester's office to request a planting inspection.

**CHAPTER 16
BOISE TREE ORDINANCE**

- 09-16-01. TITLE**
- 09-16-02. DEFINITIONS**
- 09-16-03. FINDINGS**
- 09-16-04. STATEMENT OF PURPOSE**
- 09-16-05. JURISDICTION**
- 09-16-06. ESTABLISHMENT AND DUTIES OF THE CITY FORESTER**
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- 09-16-08. RESPONSIBILITIES OF ADJACENT PROPERTY OWNERS**
- 09-16-09. PERMITS**
- 09-16-10. DAMAGING, DESTROYING OR MUTILATING PUBLIC TREES**
- 09-16-11. COMPENSATORY PAYMENTS**
- 09-16-12. PENALTIES FOR VIOLATION**
- 09-16-13. PUBLIC NUISANCES**
- 09-16-14. ABATEMENT OF PUBLIC NUISANCES**
- 09-16-15. LICENSING OF PRIVATE TREE SERVICES**
- 09-16-16. APPEALS**
- 09-16-17. SEVERABILITY**

09-16-01 TITLE

This Chapter shall be known as the Boise Tree Ordinance.

09-16-02 DEFINITIONS

For the purposes of this Chapter, the following words and phrases shall have the following meanings:

ADJACENT PROPERTY OWNER: Any person owning property adjacent to public rights-of-way.

ALTERNATE HOST PLANT: One of two kinds of plants on which a pest must develop to complete its life cycle.

ANSI A300: The American National Standard for Tree Care Operations - Tree, Shrub and Other Woody Plant Maintenance - Standard Practices. This is a document offering basic performance standards for tree pruning, published in 1995 by the American National Standards Institute (ANSI) or the same as amended from time to time.

ARBORICULTURE: The cultivation of trees, including planting, pruning, removal or any other action which affects the growth and maintenance of trees.

CITY: The City of Boise City, Idaho.

CITY FORESTER: The City Forester or the City Forester's designee.

CRITICAL ROOT ZONE: The area under a tree extending from the base of a tree in all directions to an imaginary line 10 feet outside of the dripline or as determined at a preliminary site inspection by the City Forester.

DUTCH ELM DISEASE: A disease condition in elm trees caused by fungal organisms known by the scientific names *Ophiostoma ulmi* or *Ophiostoma novo-ulmi*.

ELM TREE: Any species of the genus *Ulmus*.

HAZARD: Any tree, public or private, with visibly defined structural defects likely to cause failure of all or part of the tree, and be a danger to public safety.

PERMIT: Written approval issued by the City and required for any activity on public trees or within the critical root zone of public trees.

PERSON: Any individual, firm, partnership, corporation, association, company or organization of any kind.

PEST: Any insect, disease or other organism harmful to trees.

PRUNING: The practice of cutting tree limbs according to standards contained in ANSI A300.

PUBLIC PROPERTY: Any property owned by, dedicated to, or deeded to, the public or for the public's use. City parks, public rights-of-way and other publicly owned, controlled, leased or managed properties are included in this definition. This definition excludes any federal or state owned properties except where otherwise provided by contract or law.

PUBLIC RIGHTS-OF-WAY: Improved or unimproved public property owned by, dedicated to, or deeded to the public or for the public's use, for the purpose of providing vehicular, pedestrian and other public use. Such public property provides circulation and travel to abutting properties and includes, but is not limited to, streets, sidewalks, landscaping, provisions for public utilities, cut and fill slopes, and open public space. For the purposes of this Chapter, alleys are excluded from this definition.

PUBLIC SAFETY: The condition of being safe from bodily harm and/or property damage resulting from tree conditions and/or failures while using public property.

PUBLIC TREES: Any tree (inclusive of roots within the critical root zone) whose trunk is located, partly or in whole, on public property.

TOPPING: "Rounding" or "heading back" or any other term that can be described as severe cutting back of limbs within a tree crown to buds, stubs, or laterals not large enough to assume a terminal role or as defined in ANSI A300.

TREE: Any woody plant, which is 15 feet or more in height at maturity, with a single or multiple trunk, often unbranched for several feet above the ground and having a definite crown.

09-16-03 FINDINGS

Whereas the City finds trees are important elements of the environment which promote and protect public health, safety, and general welfare of the community by providing:

- A. A vital contribution to the aesthetic character of the community and the region's natural beauty;
- B. Cost-effective protection against severe weather conditions with cooling effects in the summer months and insulating effects in winter;
- C. Economic support of local property values;
- D. Improved air and water quality with the absorption of pollutants, assimilation of carbon dioxide and generation of oxygen, and the reduction of excessive noise and adverse impacts caused by noise pollution;
- E. A reduction of the adverse impacts of land disturbing activities such as runoff from impervious surfaces, soil erosion, land instability, and sedimentation pollution; and
- F. Habitat, cover, food supply and corridors for a diversity of wildlife.

09-16-04 STATEMENT OF PURPOSE

This Chapter establishes regulations and standards necessary to ensure that the City continues to realize the benefits provided by the Community Forest. It is not intended to resolve or regulate disputes over trees on private property that do not affect general public safety. This ordinance is enacted to:

- A. Promote the general welfare of the City by establishing and maintaining the maximum amount of canopy coverage provided by trees for their functions as identified in 09-16-03;
- B. Preserve and enhance the City's environmental, economic and social character with mature trees;
- C. Protect public safety, health & welfare;
- D. Encourage site and utility planning, building, and development practices to prevent indiscriminate removal or destruction of trees and avoid unnecessary disturbance to trees within the City and its Area of Impact;
- E. Maintain trees in a healthy, non-hazardous condition through application of tree care standards contained in ANSI A300;
- F. Establish and maintain appropriate species diversity and age classes in order to provide a stable and sustainable community forest;

- G. Establish a process by which trees are to be planted, pruned and removed;
- H. Implement the goals and objectives of the City's Comprehensive Plan.

09-16-05 JURISDICTION

- 09-16-05.1 Public Property The City Forester shall manage and regulate the planting, maintenance, protection, removal and replacement of all public trees within the City limits; thus exercising the City's authority to do so granted pursuant to the provisions of Idaho Code 50-312 - Improvements of Streets, Idaho Code 50-317 - Removal of snow, ice rubbish and weeds, Idaho Code 1415 (7) Responsibilities of single county-wide highway districts within cities – Final decision on urban renewal projects – Settlement of questions.
- 09-16-05.2 Private Property The City Forester shall have jurisdiction over trees located on private property which are found to be public nuisances as defined in 09-16-13 and may cut and remove those trees from all private property within the city and the public rights of way abutting the same and may assess the cost thereof against the property so cleared, and against the property abutting public rights of way so cleared, as provided for in Idaho Code 50-317. The assessment shall be collected as provided in Idaho Code 50-1008.

09-16-06 ESTABLISHMENT AND DUTIES OF THE CITY FORESTER

The Director of the Parks & Recreation Department shall designate an individual as the City Forester and authorize such person to perform the duties imposed and exercise the powers granted by this chapter. For the purposes identified in 09-16-04, the City Forester, subject to the provisions of this Chapter and available resources, is hereby authorized to carry out the following duties:

- 09-16-06.1 Administrative/Management Duties:
 - A. Develop, administer and maintain a Community Forestry Management Plan;
 - B. Administer a program of public outreach and education relating to Community Forestry and the planting and care of trees;
 - C. Maintain a licensing program as set forth in 09-16-15;
 - D. Administer and maintain a permitting procedure for all planting, pruning, protection and removal of trees as set forth in 09-16-09;
 - E. Establish and maintain an inventory of all public trees;
 - F. Maintain a Community Forestry budget to be contained within, but as a separate division of, the budget of the Boise Parks & Recreation Department. The City

may expend funds to plant, maintain or remove trees in accordance with the provisions of this Chapter, the Community Forestry Management Plan and existing policies;

- G. Oversee and require compliance with the Dutch Elm Disease (DED) management program as required by this Chapter, and other pest management programs as may be adopted by the Board of Parks & Recreation Commissioners;
- H. To facilitate the proper selection, planting and maintenance of trees in residential, commercial and industrial developments within City limits and the Boise City Area of City Impact, the City Forester shall review and provide comment on development applications when such applications are submitted to the City Planning & Development Services Department;
- I. Establish policies to carry out the provisions of this Chapter;
- J. Perform all necessary acts to ensure that all public trees conform with the Community Forestry Management Plan and this Chapter;
- K. Annually provide public notification of the requirements of this Chapter.

09-16-06.2 Tree Planting Duties:

- A. Establish and maintain specifications for tree planting on public property;
- B. Maintain a nursery for the growing of the species of trees permitted on public property, and to sell and plant the same, upon the payment of established fees.

09-16-06.3 Tree Maintenance Duties:

- A. Order the pruning or removal of public trees to ensure public health, safety and welfare while considering the health of the tree and other elements of the infrastructure;
- B. Declare trees as public nuisances as defined in 09-16-13. Abatement of public nuisances shall be completed as identified in 09-16-14;

09-16-06.04 Tree Removal Duties

- A. Remove trees located on public rights-of-way which have been declared to be a public nuisance as defined in 09-16-13;
- B. Any trees on public rights-of-way scheduled for removal shall be affixed with a public notice stating the reason for removal. Such notice shall be posted not less than 30 days prior to scheduled removal date unless determined by the City Forester to be an emergency or immediate hazard to public safety.

09-16-06.5 Tree Protection Duties:

- A. To avoid creating public nuisances or damaging public trees, the City Forester is authorized to require their protection (including the critical root zone) from construction or other harmful practices.

09-16-07 INTERFERENCE WITH THE CITY FORESTER UNLAWFUL

It shall be unlawful and shall be a misdemeanor to interfere with the City Forester, any Boise City Police Officer, Boise City Code Enforcement Officer or any Ada County Highway District personnel in the performance of their duties connected with the enforcement of this Chapter.

09-16-08 RESPONSIBILITIES OF ADJACENT PROPERTY OWNERS

Any person in possession of private property shall maintain trees upon adjacent public rights of way and any trees upon private property which may affect public property, in a safe, healthy condition in compliance with the provisions of this Chapter. Adjacent property owners have the following responsibilities:

09-16-08.1 Responsibilities for public trees

- A. Obtain Permits
 - 1. Meet all requirements and obtain all permits necessary for work done (including, but not limited to, pruning and removal) on any public trees as required in 09-16-09;
 - 2. Meet all requirements and obtain all permits necessary prior to commencing repair of damage done to public streets or sidewalks adjacent to any public trees as required in 09-16-09;
 - 3. Meet all requirements and obtain all permits necessary for any tree planting on public property as required in 09-16-09;
- B. Routine Tree Maintenance
 - 1. Pruning of trees located on public rights-of-way adjacent to the owner's private real property.
 - a. Prune and maintain such trees according to ANSI A300, except sections 5.5 and 5.6, which are deleted;
 - b. Topping, heading, shearing or rounding over are not acceptable forms of tree pruning and are not allowed on public trees unless first approved by the City Forester;
 - c. Except as otherwise determined by the City Forester, branches that overhang sidewalks or streets shall be pruned to provide

sufficient vertical clearance over the sidewalk and street so as not to interfere with public travel;

- d. Trees shall be pruned to remove dead limbs or other limbs that are considered a public nuisance as defined in 09-16-13;
2. Control pests on trees located on public rights-of-way adjacent to the owner's private real property;
3. Provide water sufficient to keep trees located on public rights-of-way adjacent to the owner's private real property in a healthy, growing condition.

C. Protection/Preservation

1. Obtain a permit from the City Forester before performing any activity which may harm any part of a public tree (inclusive of the critical root zone);
2. Notify the City Forester when any part of a public tree is damaged or destroyed.

09-16-08.2 Responsibilities for private trees

A. Routine Tree Maintenance

1. Removal or pruning of trees located on the owner's private real property that are considered a public nuisance as defined in 09-16-13;
2. Pruning of trees located on the owner's private real property that are considered a public nuisance as defined in 09-16-13. Branches that overhang sidewalks or streets shall be pruned to provide sufficient vertical clearance over the sidewalk and street so as not to interfere with public travel;
3. Control of pests on trees located on the owner's private real property which may, upon determination by the City Forester, pose a threat to public trees;
4. Removal of all debris (wood, branches & leaves) from public property by sunset of the day on which any tree work is done.

09-16-08.3 Responsibilities for Alley Trees

- A. Prune, remove or otherwise abate public nuisances as defined in 09-16-13.

09-16-09 PERMITS

- A. No person may perform any of the following acts without first obtaining from the City Forester a permit for which no fee shall be charged, and nothing in this

section shall be construed to exempt any person from the requirements of obtaining any additional permits as required by law:

1. Plant trees on public rights-of-way or in any public places,
2. Prune, cut, remove or otherwise disturb any public tree. This provision shall not be construed to prohibit owners of property adjacent to public rights-of-way from watering or fertilizing such trees;
3. Attach any object to public tree(s);
4. Dig, trench, excavate or pile soil or any other materials within the critical root zone of any public tree(s);
5. Prune or remove any elm tree on or within public or private property.

B. Permit Application Procedures

1. Contact the City Forester via mail, phone, fax or email prior to commencement of the proposed work;
2. Upon inspection, the City Forester may issue a permit to perform any of the acts specified in part A of this section;
3. The City Forester may condition the approval of any permit.

C. Requirements: Tree Planting Permits.

1. Each application for a planting permit shall designate the species and variety of public tree proposed. The City Forester shall designate the location of the planting;
2. Approval of tree species, spacing, placement and minimum tree well sizes shall be obtained from the City Forester prior to issuance of a permit;
3. Whenever any tree is planted or set out in conflict with the provisions of this Chapter, it shall be lawful for the City Forester to remove or cause removal of the same. The cost of removal of such tree may be charged to person responsible for the planting thereof.

D. Requirements: Tree Pruning/Removal Permits.

1. Prior to pruning or removal of any public tree or any elm tree on private property, application for permit must be made by the property owner or private tree firm currently licensed by the City;
2. Whenever a tree on public rights-of-way is removed, the applicant shall replace the tree removed as a condition of issuance of a permit for removal, unless such requirement is waived by the City Forester for good

cause shown. Conditions may include a requirement for compensatory payments as set forth in 9-16-11.

09-16-10 DAMAGING, DESTROYING or MUTILATING PUBLIC TREES

It shall be unlawful for any person to:

- A. Damage, mutilate or destroy any public tree;
- B. Attach any device or structure (i.e. tree houses, lights) to or on public trees unless otherwise authorized by the City Forester;
- C. Store, spill or dump substances, whether liquid or solid, which may be harmful to trees, on any part of a public tree or within the critical root zone of a public tree;
- D. Damage public trees through construction activities in violation of the conditions of a permit issued under this Chapter. Such activities include, but are not limited to:
 - 1. Making excavations or cuts in the soil near roots of public trees unless otherwise approved by the City Forester;
 - 2. Damage roots of a public tree by compacting or placing fill within the critical root zone of a tree;
 - 3. Engage in any pruning activity on public trees not in accordance with ANSI A300, including, but not limited to: topping, heading, rounding or shearing unless otherwise approved by the City Forester.

09-16-11 COMPENSATORY PAYMENTS

In the event any person removes, destroys or damages any public tree except as otherwise required by law, that person shall be required to replace such tree with a tree(s) of equivalent dollar value on public property, unless otherwise determined by the City Forester. The value of a tree shall be determined by the City Forester in accordance with accepted plant appraisal methods as set forth in the 8th edition of The Guide for Plant Appraisal, published by the International Society of Arboriculture or the same as amended from time to time. If no suitable location exists in the vicinity of the tree removed or if the replacement tree(s) is of lesser value, the person causing the tree to be removed shall make a compensatory payment to the City of Boise equal to the difference in value between the tree removed and any replacement tree(s). Any public tree that is determined by the City Forester to be damaged, but not sufficiently to justify its removal, shall be considered to be devalued. The amount of devaluation shall be paid to the City by the person causing the damage. Compensatory payments shall be paid into a fund established for that purpose and restricted to use for community forestry programs. Nothing in this Ordinance shall prohibit Boise City from negotiating agreements with other governmental entities regarding penalties and compensatory payment for removal, damage or destruction of public trees.

09-16-12 PENALTIES FOR VIOLATION

- A. Any person who violates any provision of this Chapter or who fails to comply with a lawful order of the City Forester shall be guilty of a misdemeanor. Any person convicted of a misdemeanor under the provisions of this Chapter may be punished by a fine not to exceed \$300 or be imprisoned in the Ada County Jail for a period not to exceed 6 months or by both such fine and imprisonment.
- B. In addition to any criminal penalties that may be imposed, the City may pursue civil penalties and restitution for actual damages as set forth in 09-16-11.

09-16-13 PUBLIC NUISANCES

The following are hereby declared public nuisances under this Chapter:

- A. Any tree or part thereof (public or private) which, by reason of location or condition, constitutes a hazard to public safety as determined by the City Forester;
- B. Any tree or part thereof (on public or private property) which obstructs the free passage of pedestrian or vehicular traffic or which obstructs public street lighting;
- C. Any tree or alternate host plant or part thereof (on public or private property) which harbors pests which reasonably may be expected to injure or harm public trees. This includes any standing elm tree infected to any degree with Dutch Elm Disease or which harbors elm bark beetles, and any dead elm tree or part thereof, including logs, stumps, or other elm material from which the bark has not been removed;

09-16-14 ABATEMENT OF PUBLIC NUISANCES

The following are the prescribed means of abating public nuisances under this Chapter:

- A. Any tree or alternate host plant or part thereof (public or private) declared to be a public nuisance as set forth in 09-16-13 shall be pruned, removed or otherwise treated in accordance with the requirements of this Chapter. Except for removal of trees from public rights-of-way, all costs for nuisance abatement are the responsibility of the adjacent property owner;
- B. The City Forester may cause a written notice to be personally served or sent by mail to the owner of the particular property;
- C. In the event the nuisance is not abated by the date specified in the notice, the City Forester is authorized to cause the abatement of said nuisance. The reasonable cost of such abatement may be charged to the subject property owner. Monies which have not been recovered through the City bill-collection

procedures may result in a lien against the property or assessed on taxes as provided for in Idaho Code Title 50. In addition, the owner of the property upon which the nuisance is located may be subject to prosecution under this Chapter, or any other Chapter of the City Code or the Idaho Code for maintaining a public nuisance. Nothing in this provision shall be construed to exempt any person from the requirement of obtaining permits under 09-16-09.

- D. The City Forester is empowered to cause the immediate abatement of any nuisance if it is determined by the City Forester to be an emergency or immediate hazard to public safety;
- E. If the City Forester determines that disposal of the wood, branches and soil from removal or pruning of a nuisance tree is required to complete abatement, such disposal shall be done as required by the City Forester. All costs associated with the disposal of material from private trees shall be the responsibility of the property owner.

09-16-15 LICENSING OF PRIVATE TREE SERVICES

It shall be unlawful for any person to engage in the trade or commercial business of pruning or removing trees located on public property, without first procuring a license from the City Forester.

- A. Each applicant for a license or renewal thereof shall make application to the City Forester on a form to be furnished by the City. The form shall be signed by the applicant and shall show such information as may be required by the City Forester. Information shall include, but is not limited to:
 - 1. In what name the business is to be conducted as well as the name, business address, home address and telephone number of the company president or owner(s);
 - 2. Proof of current arborist certification with the International Society of Arboriculture by at least one individual on staff of the business in a supervisory position and approved by the City Forester;
 - 3. Demonstration that arboricultural work is in accordance with ANSI A300 may be required prior to approval of license;
 - 4. A certificate of liability and property damage insurance executed by an insurer authorized to transact business within the State, such policy of insurance to provide not less than \$500,000 or the amount currently required by Idaho Code Title 6.
- B. The City Forester shall, after examining the applicant's qualifications, either approve or disapprove the application. If the application is approved, the applicant shall file the application with the City Clerk together with the annual license fee of fifty dollars (\$50.00). This license shall be issued by the Boise City Clerk for the calendar year, or balance of the calendar year only.

- C. The City Forester is authorized to suspend or revoke the tree care license of any person that performs work which does not comply with the provisions of this chapter. Failure to maintain arborist certification or required insurance shall also result in suspension or revocation.

09-16-16 APPEALS

- A. Any person affected by an order, grant, denial, or revocation of a license or permit by the City Forester may appeal such order, grant, denial or revocation to the Board of Parks & Recreation Commissioners.
- B. Such appeal shall be filed in writing with a twenty-five dollar (\$25.00) fee and submitted to the Director of the Boise Parks & Recreation Department within 10 days of the date of notification of the City Forester's ruling.
- C. The appeal shall be heard by the Board of Parks & Recreation Commissioners. Action by the City Forester and the appellant shall be delayed until the decision of the Board of Parks & Recreation Commissioners is rendered.
- D. The Board of Parks & Recreation Commissioners may in conformity with the provisions of this Chapter reverse or affirm or modify wholly or partly, the order, grant, denial or revocation of any license or permit.
- E. Any person affected by the decision of the Board of Parks & Recreation Commissioners may appeal the decision to the City Council.
- F. Such appeal shall be filed in writing with a fifty dollar (\$50.00) fee and submitted to the City Clerk within 10 days of the date of notification of the decision of the Board of Parks & Recreation Commissioners.
- G. The appeal shall be heard by the City Council. Action by the City Forester and the appellant shall be delayed until the decision of the City Council is rendered.
- H. The City Council may in conformity with the provisions of this Chapter reverse or affirm or modify wholly or partly, the order, grant, denial or revocation of any permit and the decision of the Park Board of Commissioners.
- I. The decision of the City Council shall be final.

09-16-17 SEVERABILITY

The provisions of this Chapter shall be deemed severable and a finding by a court of law that a provision of this Chapter is unlawful shall have no effect on the remaining provisions.

APPENDIX A

Trees for Downtown Boise

The tables on the next pages list several species of trees and many cultivated varieties of those species that the Tree Task Force considers to be the best for use in the downtown area of Boise. This list is not exclusive, many trees not listed here may well find use on streetscapes downtown. Any species/variety may be proposed, but if the trees are planted on public rights of way, final approval must come from Boise Community Forestry. Complete descriptions of these species and many others can be found in The Tree Selection Guide, available from Boise Parks & Recreation Department.

The trees are listed by size “Class”; specifics of each Class are listed below:

Class I species

This class contains the smallest growing trees. Most Class I trees mature to a maximum height of 20-30 feet, with a similar crown spread. Their small stature makes them ideal trees for use in areas that cannot support the larger crowns of Class II and Class III species. Their size also limits the environmental benefits they provide in the form of shade, air cleaning capabilities and rainfall interception.

Their low crowns often create clearance issues for vehicles and pedestrians. For this reason, wider planting strips or planters are required to support the crown spread of these trees without affecting traffic and visibility. If a Class I species is needed in a narrow planting strip (less than ten (10) feet wide), look to the columnar flowering pear or columnar flowering crabapple varieties.

Due to the limited environmental benefits and the clearance issues, Community Forestry typically limits their use to areas where a larger (Class II or Class III) species will not fit.

Class II species

This class is the “workhorse” of the urban forest. Most planting locations have too little rooting space for larger Class III trees, but are ideal for Class II species. Community Forestry will plant a Class II tree in planting strips as narrow as six (6) feet. Class II trees are also the best species to use in downtown planting wells, which are often only four (4) feet square in size. Care must still be taken in making a selection based on the environmental tolerances of the individual species or varieties. For example, a sugar maple can perform very well if the soil and irrigation conditions are right, but may not succeed in exposed, poorly drained sites. Some species may be undesirable in particular locations due to rooting habits, branching habits or fruiting tendencies.

Regular maintenance is required as these trees grow to maturity. Clearance pruning is necessary once they become established after planting, typically after about five (5) years. A minimum of seven (7) years pruning cycle is best to maintain health and limit potential

hazards from broken or dead branches. Minor pest control may also be necessary depending on the species and the presence of pests during a particular growing season.

Class II trees typically grow to a maximum height of 40-60 feet, again with similar crown spread. They are very good street trees and parking lot trees as they are easily cleared for traffic, and provide excellent environmental benefits. Several species have columnar varieties that may work best in tight planting situations. These are noted in the tables.

Class III species

These are some of the largest trees growing in Boise. They reach heights of 60-90 feet in maturity with a crown spread of 40-60 feet. Trunks of these trees often reach three (3) feet or more in diameter! For this reason, Community Forestry restricts their use to the largest planting areas. Planting strips must be a minimum of ten (10) feet in width, preferably with additional soil volume on the other side of the sidewalk. Roots and trunks of Class III trees planted many years ago have damaged sidewalks and curbs in strips that are not wide enough to contain their growth. Subsequent repair of sidewalks and curbs can in turn, damage the trees.

Again, regular maintenance is required as the trees grow to maturity. Clearance pruning is necessary once they become established after planting, typically after about five (5) years. A minimum of seven (7) years pruning cycle is best to maintain health and limit potential hazards from broken or dead branches. Minor pest control may also be necessary depending on the species and the presence of pests during a particular growing season.

APPENDIX 1

Class I Species

Species (Latin) 'cultivar'	Urban	Narrow Urban	Plaza	Parkway	Neighbor- hood
Crabapple, Flowering (<i>Malus</i> spp) ¹			•	•	•
Goldenraintree (<i>Koelreuteria paniculata</i>)			•	•	•
Hawthorn, Lavalley (<i>Crataegus</i> x <i>lavalleyi</i>)			•	•	•
Japanese Tree Lilac (<i>Syringa reticulata</i>)			•	•	•
' <i>Ivory Silk</i> '					
Maple, Amur (<i>Acer ginnala</i>) ³			•	•	•
Maple, Pacific Sunset (<i>Acer truncatum</i>)			•	•	•
Maple, Sugar (<i>Acer saccharum</i>)			•	•	•
' <i>Apollo</i> ' ⁴					
Pear, Flowering (<i>Pyrus calleryana</i>)	•	•	•	•	•
' <i>Aristocrat</i> '					
' <i>Chanticleer</i> ' ⁴	•				
' <i>Capital</i> ' ⁴	•				
' <i>Redspire</i> '					
' <i>Cambridge</i> ' ⁴	•				
Plum, Flowering (<i>Prunus cerasifera</i>)			•	•	•
' <i>Newport</i> '					
' <i>Mt St Helens</i> '					
Redbud, Eastern (<i>Cercis canadensis</i>)			•	•	•
Serviceberry (<i>Amelanchier arborea</i>) ³			•	•	•
' <i>Autumn Brilliance</i> '					
' <i>Robin Hill</i> '					

¹ Use varieties that retain fruit on the tree or are fruitless. 'Bechtel' should be avoided as it does produce large fruit as it matures.

³ Single stem only in Parkway or Neighborhood streetscape applications.

⁴ Columnar varieties.

Class II Species

Species (Latin) 'cultivar'	Urban	Narrow Urban	Plaza	Parkway	Neigh- borhood
Ash, Green (<i>Fraxinus pennsylvanica</i>) ^{1,8}	•			•	•
'Cimmaron'					
'Patmore'					
'Summit'					
'Urbanite'					
Ash, Raywood (<i>Fraxinus oxycarpa</i>) ¹	•		•	•	•
Ash, White (<i>Fraxinus americana</i>) ^{1,8}	•		•	•	•
'Autumn Applause'					
'Autumn Purple'					
'Rosehill'					
'Skyline'					
Birch, River (<i>Betula nigra</i>) ²			•	•	•
'Dura Heat'					
'Heritage'					
Elm, American (<i>Ulmus americana</i>) ^{3,5,8}				•	•
'New Harmony'					
'Princeton'					
'Valley Forge'					
Elm, Chinese (<i>Ulmus parvifolia</i>) ^{3,5,8}				•	•
Ginkgo (<i>Ginkgo biloba</i>) ^{4,8}	•	•	•	•	•
'Autumn Gold'					
'Magyar'					
'Princeton Sentry' ⁶		•			
'The President'					
'Saratoga'					
Hackberry (<i>Celtis occidentalis</i>) ⁸	•		•	•	•
Hardy Rubber Tree (<i>Eucommia ulmoides</i>) ⁵	•			•	•
Honeylocust (<i>Gleditsia triacanthos</i>) ⁸	•		•	•	•
'Moraine'					
'Shademaster'					
'Skyline'					

Class II species – continued

Species (Latin) 'cultivar'	Urban	Narrow Urban	Plaza	Parkway	Neigh- borhood
Japanese Pagodatree (<i>Sophora japonica</i>) ⁵			•	•	•
Littleleaf Linden (<i>Tilia cordata</i>)	•		•	•	•
' <i>Corinthian</i> ' ⁶		•			
' <i>Glenleven</i> '					
' <i>Greenspire</i> '					
Linden, Silver (<i>Tilia tomentosa</i>) ⁵			•	•	•
' <i>Green Mountain</i> '					
' <i>Princeton</i> '					
Norway Maple (<i>Acer platanoides</i>) ⁷	•		•	•	•
' <i>Deborah</i> '					
' <i>Cleveland</i> '					
' <i>Columnare</i> ' ⁶		•			
' <i>Crimson King</i> '					
' <i>Crimson Sentry</i> ' ⁶		•			
' <i>Emerald Queen</i> '					
' <i>Fairview</i> '					
' <i>Parkway</i> '					
' <i>Royal Red</i> '					
Maple, Pacific Sunset (<i>Acer truncatum</i>)			•	•	•
Maple, Sugar (<i>Acer saccharum</i>)			•	•	•
' <i>Commemoration</i> '					
' <i>Legacy</i> '					
' <i>Green Mountain</i> '					
Sweetgum (<i>Liquidambar styraciflua</i>)			•	•	•
' <i>Cherokee</i> '					
' <i>Moraine</i> '					
Turkish Hazel (<i>Corylus colurna</i>) ⁵			•	•	•
Yellowwood (<i>Cladrastis kentuckea</i>) ⁵			•	•	•

- ¹ Borers have become a problem on these species in recent years.
- ² Single stem only in Parkway or Neighborhood streetscapes.
- ³ These elm cultivars have Dutch Elm Disease and elm leaf beetle resistance.
- ⁴ All Ginkgo cultivars are male (seedless).
- ⁵ May be difficult to find in commerce.
- ⁶ Columnar cultivars.
- ⁷ Use of Norway Maple in the Urban streetscape settings may result in leaf scorch and stem scald.
- ⁸ These Class II species may approach Class III size in parkway or neighborhood streetscape settings.

Benefits of Trees in Urban Areas

Trees are major capital assets in cities across the United States. Just as streets, sidewalks, public buildings and recreational facilities are a part of a community's infrastructure, so are publicly owned trees. Trees, and collectively the urban forest, are important assets that require care and maintenance the same as other public property. Trees are on the job 24 hours every day working for all of us to improve our environment and quality of life.

Boise's urban forest provides many environmental benefits to our community. Aside from the obvious aesthetic benefits, trees within our urban forest improve our air, protect our water, save energy, and improve economic sustainability.

Carbon Sequestration:

Heat from the earth is trapped in the atmosphere due to high levels of carbon dioxide (CO₂) and other heat-trapping gases that prohibit it from releasing heat into space, creating a phenomenon known as the "greenhouse effect". Trees remove (sequester) CO₂ from the atmosphere during photosynthesis to form carbohydrates that are used in plant structure / function and return oxygen back to the atmosphere as a byproduct. Trees therefore act as a carbon sink by removing the carbon and storing it as cellulose in their trunk, branches, leaves and roots while releasing oxygen back into the air.

Trees also reduce the greenhouse effect by shading our homes and office buildings. This reduces air conditioning needs by up to 30%, thereby reducing the amount of fossil fuels burned to produce electricity. This combination of CO₂ removal from the atmosphere, carbon storage in wood, and the cooling effect makes trees a very efficient tool in fighting the greenhouse effect.

Planting trees remains one of the cheapest, most effective means of drawing excess CO₂ from the atmosphere. A single mature tree can absorb carbon dioxide at a rate of 48 pounds per year and release enough oxygen back into the atmosphere to support two (2) human beings.

Other Air Pollutants:

Trees also remove other gaseous pollutants by absorbing them with normal air components through the stomates in the leaf surface.

Some of the other major air pollutants are:

- Sulfur Dioxide
- Ozone
- Nitrogen oxides (car exhaust)

There is up to a 60% reduction in street level particulates with trees.

Water Quality Protection:

Trees reduce topsoil erosion, prevent harmful land pollutants contained in the soil from getting into our waterways, slow down water run-off and ensure that our groundwater

supplies are continually being replenished. For every 5% of tree cover added to a community, storm water run-off is reduced by approximately 2%.

Along with breaking the fall of rainwater, tree roots remove nutrients harmful to water ecology and quality.

Trees act as natural pollution filters. Their canopies, trunks, roots and associated soil and other natural elements of the landscape filter polluted particulate matter out of the flow toward the storm drains.

Energy Savings:

Trees lower local air temperature by transpiring water and shading surfaces. Because they lower air temperatures, shade buildings in summer, and block winter winds, they can reduce building energy use and cooling costs.

Paved Surfaces:

The asphalt paving on streets contain stone aggregate in an oil binder. Without tree shade, the oil heats up and volatilizes, leaving the aggregate unprotected. Vehicles then loosen the aggregate and much like sandpaper, the loose aggregate grinds down the pavement. Because the oil does not dry out as fast on a shaded street as it does on a street with no shade trees, street maintenance can be deferred for a longer period of time.

Traffic Safety:

Trees can also enhance traffic calming measures, such as narrower streets, extended curbs, roundabouts, etc. Tall trees give the perception of speed slowing people down. A treeless street enhances the perception of a street being wide and free of hazards, thereby increasing speeds.

Trees serve as a buffer between moving vehicles and pedestrians, creating a safer area for pedestrians.

Economic Sustainability

The scope and condition of a community's trees and, collectively, its urban forest, is usually the first impression a community projects to its visitors. A community's urban forest is an extension of its pride and community spirit.

Studies have shown that trees enhance community economic stability by attracting businesses and tourist. People linger and shop longer along tree-lined streets. Apartments and offices in wooded areas rent more quickly and have higher occupancy rates. Businesses leasing office spaces in developments with trees find their workers are more productive and absenteeism is reduced.

Real Estate Values:

Property values increase 5 – 15% when compared to properties without trees (depends on species, maturity, quantity and location).

Sociological Benefits:

Trees have the potential to reduce social services budgets, decrease police calls for domestic violence, strengthen urban communities, and decrease the incidence of child abuse according to studies.

Residents who live near trees have significantly better relations with and stronger ties to their neighbors.

Studies have shown that hospital patients with a view of trees out their windows recover much faster and with fewer complications than similar patients without such views.

Trees help create relaxation and well being.

Trees reduce pollution by acting as a buffer and absorbing 50% of urban noise.

TTF References – Downtown Section

2025 Downtown Boise Redevelopment Plan, Capitol City Development District, 2005.

River/Myrtle Street Urban Design Plan, Capitol City Development District, 2005.

Boise Tree Selection Guide, Boise Community Forestry, 1995.

Tree Statistics Report, Boise Community Forestry, 2003.

Boise Tree Ordinance, (Title 9, Chapter 16 of Boise City Code), 2000.

Boise Zoning Ordinance, (Title 11, Boise City Code), 2005.

Many thanks to Don Belts of Jensen/Belts Architects, Debbie Cook of the Idaho Department of Lands, Mike Hall of CCDC, and Geoff Hundt of Downtown Boise Association for their invaluable knowledge and assistance in writing the Downtown Trees section of the Tree Task Force Report.

RESOLUTION NO. _____

BY THE COUNCIL:

BISTERFELDT, CLEGG, EBERLE, JORDAN,
MAPP AND SHEALY

A RESOLUTION ADOPTING THE 2005 LES BOIS TREE TASK FORCE COMMUNITY FORESTRY MANAGEMENT PLAN; ADOPTING, RATIFYING AND APPROVING THE COMMUNITY FORESTRY POLICIES CONTAINED IN THE FORESTRY MANAGEMENT PLAN, CONSISTING OF A TREE PRUNING POLICY; THE HAZARDOUS, DISEASED AND INFESTED TREE ABATEMENT POLICY, THE TREE REMOVAL POLICY; THE INSECT AND DISEASE CONTROL PLANT HEALTH CARE POLICY, AND THE TREE PLANTING POLICY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, in 1995 the City established the Tree Task Force to make recommendations and to evaluate the Community Forestry Unit of the Parks and Recreation Department, and,

WHEREAS, the 1995 Tree Task Force formulated a report which was approved by the Board of Park and Recreation Commissioners, and,

WHEREAS, since 1995 most recommendations of the Tree Task Force have been updated and implemented, and,

WHEREAS, in 2005 the City established the Les Bois Tree Task Force Committee consisting of a broad range of citizens, including professional landscape architects, arborists and others from the public and private sectors, representatives of local and state governmental entities, representatives of neighborhood associations and members of the Department of Parks and Recreation staff, and,

WHEREAS, the 2005 Les Bois Tree Task Force has prepared a Community Forestry Management Plan consisting of four major elements, including Administration and Education, Maintenance and Operations, Tree Planting and Downtown Trees, and has compiled a list of twenty priority recommendations, and,

WHEREAS, on December 15, 2005, the Board of Park and Recreation Commissioners approved the Les Bois Community Forestry Management Plan and recommended its adoption by the City Council,

NOW THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF BOISE CITY, IDAHO:

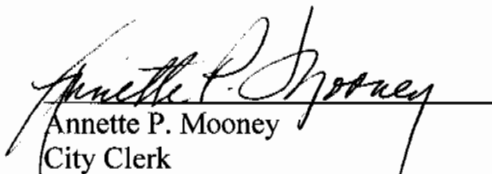
Section 1. That the Les Bois Tree Task Force Community Forestry Management Plan dated December 2005, a copy of which is attached hereto as Exhibit "A" and incorporated herein by reference, be, and the same is hereby, approved as to both form and content.

Section 2. That the Community Forestry Policies contained in the Forestry Management Plan, consisting of a Tree Pruning Policy; the Hazardous, Diseased and Infested Tree Abatement Policy, the Tree Removal Policy; the Insect and Disease Control Plant Health Care Policy, and the Tree Planting Policy are hereby adopted, ratified and approved as policies of the Department of Parks and Recreation and shall be accorded the force and effect of rules and regulations of the Department of Parks and Recreation, provided, however, that the Department of Parks and Recreation's Community Forestry Unit, in conjunction with the Board of Park and Recreation Commissioners, shall annually review the Community Forestry Policies and make recommendations the City Council to amend such policies as it deems appropriate.

Section 3. That this resolution shall be in full force and effect immediately upon its adoption and approval

APPROVED by the Mayor of the City of Boise, Idaho this 9TH day of ~~JANUARY~~ **MAY**, 2006.

ATTEST:


Annette P. Mooney
City Clerk

APPROVED:



David H. Bieter
Mayor

