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The meeting was called to order at 6:00pm by Planning Chairwoman Claire Durio

The secretary called the roll.

Commissioners Present: Nicholas Cressy, Claire Durio, Andrea Fulton, Karen Gautreaux, Mike Pierce, Scott Quillin, and Brian Rhinehart

Absent: None

Also Present: Cara Bartholomew, Director Planning Department; Rad Dickson, Planner; Elizabeth Sconzert, City Attorney; Alex Weiner, Secretary

<u>New Business</u>

R24-05-02 – Jordan Williams requests a variance to CLURO Section 5.2.3.4. Remainder of the City and Section 7.5.9.3. B-2 Site Development Regulations, Dalwill Drive, Section 33 Lot OP1-2-B, B-2 Highway Business District, 201 Dalwill Drive

Mr. Rhinehart asked if the buffer was not required at the time of construction. Ms. Bartholomew said that was correct.

Mr. Pierce asked why the buffer was a point of contention. Ms. Durio said it was mentioned at the last meeting.

Ms. Bartholomew said that the property line goes to the centerline of the street, and the regulations say it has to be outside of that.

Mr. Pierce wanted to confirm that the applicant was not asking for a variance. Ms. Bartholomew said they were not, there was just some questions about the other properties.

Mr. Rhinehart said he wanted to highlight the fact that this area was developed under different regulations. Ms. Bartholomew said the fill requirement especially. There are two competing regulations with the amount of fill and the requirement to be above the centerline of the street.

Mr. Rhinehart said the City Engineer highlighted that the fill would bring this area to the current height of the surrounding properties.

Mr. Pierce asked if the retention pond would remain. Ms. Bartholomew said there would be a servitude around it to allow both properties to maintain it. Ms. Durio asked if that is a condition the commission could place on it, Ms. Bartholomew said it was.

Mr. Quillin asked if it would be on one piece of property or split.

Alex Williams, 368 Jade Ct, Engineer for the Applicant: If they moved the property line to split the pond it would lead to a smaller lot. Mr. Quillin said they could move the pond and not the property line to split it across both properties. If it is on both properties then ownership would be to both properties.

Mr. Alex Williams said he still thinks a servitude is needed, as it is just good business. Mr. Quillin agreed, he just wanted to point out that if it was a part of both properties then both properties would have to maintain it.

Ms. Durio said that if parcel 1 was sold then parcel 2 would have to maintain the pond regardless of who owns it. Mr. Quillin said that is the reason for sharing the pond.

Ms. Durio said that if they require a servitude then the servitude can required a shared maintenance.

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Mr. Cressy moved to approve the request with the condition that there be a servitude and that both properties have to maintain it. Mr. Rhinehart seconded, and the motion passed unanimously.

With all new business for the Planning Commission completed, Ms. Durio moved to the Zoning Commission portion of the meeting.

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Alex Weiner, Secretary

Claire Durio, Chairwoman Planning Commission

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Brian Rhinehart commenced the Zoning Commission portion of the Meeting.

Announcement that written notice of decisions regarding zoning variances will be filed in the Commission's office the following day of this meeting at which time applicable appeal time will begin to run.

New Business

SUP24-05-04 – Charlie Rick requests Special Use Approval to allow Administrative and Business Offices per the Table of Permitted Uses, CLURO Section 7.8, Old Town of Mandeville, Square 44 Lot G, TC Town Center District, 2121 General Pershing Street

Ms. Gautreaux said that the commission recently heard a case for this property about a dog grooming business. Ms. Bartholomew said that fell through, and this was a second lease.

Mr. Cressy said this seemed cleaner. Ms. Bartholomew said she was surprised this use required special use approval.

Mr. Quillin asked if they could restrict outdoor storage and equipment. Ms. Bartholomew said that it was already not allowed, but they could state it. Mr. Quillin said he was fine if it was already not allowed, he just wanted to address it if it was not.

Ms. Fulton asked if storage of materials was allowed. Ms. Bartholomew said no outdoor storage was allowed.

Mr. Quillin moved to approve the request as submitted, Ms. Durio seconded, and the motion passed unanimously.

V24-05-16 – Lynn Mason requests a variance to CLURO Section 9.2.5.7. Live Oak Protection Requirements, Old Mandeville Woods, Square 254 Lot 2A, R-1 Single Family Residential District, 1620 Old Mandeville Lane

Ms. Gautreaux asked if the tree was leaning when the houses were constructed. Ms. Bartholomew said that is what the report says.

Ms. Durio said in the documents submitted by Mark Alexander there are two pines mentioned, and asked if those were also being requested for removal.

Mark Alexander, 1630 Old Mandeville Lane: Not at this time.

Ms. Durio asked why not, Mr. Alexander said they are not a risk to his home.

Ms. Gautreaux asked why the trenching was done. Ms. Bartholomew said it was to install a line for a drainage project.

Mr. Quillin said there are two arborists opinions along with an argument for severe damage. The onsite arborist said a $1 - 1 \frac{1}{2}$ in root was cut and the second said a sizeable root was cut. He said he would have to go with the guy that was onsite. He understands that pictures were submitted, but he is not an expert and cannot make out what is in the pictures.

Mr. Alexander said he did not think the onsite arborist was there the whole time, and that he is stretching the truth. The second arborist is a certified risk assessor and Mr. Alexander thinks he has more credibility.

Mr. Quillin asked if the first arborist was not present. Mr. Alexander said he was not present, as he was home during the trenching.

Ms. Gautreaux asked why not periodically check the tree. Mr. Alexander said it may be too

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late then.

Ms. Durio asked if the request was denied would there be a restriction on coming back if the situation changes. Ms. Sconzert said there would not be a restriction as it would be a substantial change of circumstance. Ms. Bartholomew said she agreed with that.

Mr. Alexander said that he thought if an arborist states that they recommend for it to be removed then it should be removed, and there is an arborist with more credentials than the previous one saying that. Ms. Durio said that they routinely have arborists tell them to remove trees, so while it is an essential consideration it is not the only consideration.

Ronald Marks, 1620 Old Mandeville Lane: The arborist was not present during the trenching. He came out while the trench was open and suggested to clean cut the roots.

Mr. Dickson said he recommended that it be root pruned.

Mr. Marks said after that he called their own arborist. He wants to do what is right by Mr. Alexander.

Ms. Fulton asked if Mr. Marks was aware of what kind of tree this was, Mr. Marks said he was. Ms. Fulton asked when the contractor was hired if any advice was sought when agreeing on when the trenching would occur. Mr. Marks said he was not sure what work would be needed, he just told the contractor what the job was.

Ms. Fulton said she was wondering about liability. Mr. Marks said that he did not know what the contractor was going to do. looking back he would say to not cut the roots. He checked and did not need a permit for an irrigation line.

Ms. Gautreaux asked if there was a requirement for this type. Ms. Bartholomew said if there was less than 4 cubic yards of fill then a permit was not needed. Section 9.2.5.7. does say that "It shall be unlawful for any person to place soil in such a way that would cause live oaks to become diseased or die. If filling with soil is necessary to properly drain the land, all efforts should be made to protect the area within the drip line of a live oak from the impact of such activity" but the City does not issue permits for French drains.

Mr. Pierce said this may be something to look at for the CLURO rewrite. Ms. Bartholomew said she would make a note. She added that Public Works is typically the department that people talk to about a project like this and they would not know to ask about if there was a live oak on the property.

Mr. Pierce asked if Mr. Dickson saw the tree and roots. Mr. Dickson said he visited the site after the fact and did not see the roots. He recommended an ISA certified arborist evaluate the tree but knew a root prune was needed.

Mr. Pierce asked if any distress was noted or if it was too early. Mr. Dickson said trees do things slowly, and that this would be the best time of year to see something.

Mr. Cressy asked if they had the option to table this and wait. He added that is sympathetic to the situation.

Ms. Durio added that there is no ability to prune the branch as this is a main branch.

Ms. Bartholomew said they had the option to table this.

Mr. Rhinehart said he has been in his house for 20 years and has lost 30 trees in that time frame. Some of the trees that were lost were oaks and were upright. The front of the house has a nice canopy, and the reason for the removal is not for a shed or driveway. He has seen healthy oaks topple.

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Mr. Cressy asked if there was any liability on the City. Ms. Durio said it would be the same as any case. Mr. Cressy said this time they were aware of the situation.

Ms. Durio said that if the pines are removed then some of the buffer is lost.

Mr. Rhinehart said the issue here is safety.

Mr. Cressy said it is more complex as one party did not do anything, and there are mixed reports.

Ms. Gautreaux said she is worried about waiting a month. She added that she is conflicted as she does not want to endanger anyone, but that is how the tree grew.

Ms. Durio said a huge portion of the trees in the City did not grow straight. The issue is the trenching, not how the tree grew.

Mr. Alexander said he is not asking to remove everything, just the live oak due to the way it leans.

Ms. Fulton asked if they were making any CLURO recommendations. Ms. Bartholomew said that none were on the table, but she is keeping a running list of amendments. Ms. Gautreaux said she would like to see that.

Mr. Cressy moved to approve the request as submitted, Ms. Fulton seconded, and the motion failed with a vote of 3-4 with Commissioners Durio, Gautreaux, Pierce, and Quillin voting against.

Ms. Bartholomew said the motion failed. If there was substantial change, then the applicant could reapply. She said to call the City and they will help.

Mr. Alexander asked if there was an escalation process. Ms. Sconzert said the applicant could appeal the decision to the 22nd Judicial Court and it would go through the court process.

Mr. Alexander asked for the reasons for voting against. Ms. Bartholomew said they were in the public discussion.

Ms. Sconzert said that the conversation is for or against. There is not a written decision for the process. When a case is decided 3-4 you would have to go back to see.

Mr. Rhinehart said to watch the thoughts in the videos.

Ms. Bartholomew said the decision letter summarizes it.

Mr. Pierce said the default position is not to cut the tree. The request is asking to step away from that and there was not enough evidence to step around it.

Ms. Fulton said to be careful when trying to examine the votes as even with her vote of "for" she believes that it should be avoided at all costs. Her vote of "for" was for compassion and fear for Mr. Alexander and their own liability.

Mr. Alexander said it is imperative that the safety of people be placed first.

Ms. Bartholomew said there has been a vote.

Ms. Sconzert said they are not supposed to talk about the details of what happened.

Ms. Durio said there has been some discussion about the different tree violations, like the

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situation across the street, and asked if there was anything that could be done with the contractor. Ms. Bartholomew said there has been some discussion about drafting a letter to the tree contractors detailing the regulations and fines. She said it would be easier to send just to the tree contractors as there were so many general contractors.

Ms. Durio said she would like to see something for the specific violations they know of. Ms. Sconzert said they have provisions and will get a letter and citation. There is an opportunity from that to potentially revoke their business from City Limits.

Ms. Durio said that the owners rely on the contractors to follow the rules so there should be a penalty on them.

Mr. Rhinehart said there were many ways to do it.

V24-05-17 – Jordan Williams requests a variance to CLURO Section 5.2.3.4. Remainder of the City and Section 7.5.9.3. B-2 Site Development Regulations, Dalwill Drive, Section 33 Lot OP1-2-B, B-2 Highway Business District, 201 Dalwill Drive

This case was heard along with case R24-05-02

Public Comment

Mr. Rhinehart asked if there was an Emeris update. Mr. Dickson said that he has spoken with the owner who wanted some edits to the replanting and Mr. Dickson said no. The owner will have to plant what is shown on the landscape plan plus 8 additional trees. He has not done an official inspection yet but has passed by the site.

Ms. Bartholomew said that the June meetings were moved to June 4th and Juhe 18th so there would be a meeting next week. Ms. Durio wondered if people would be able to attend the June 4th meeting.

Ms. Bartholomew said the internal kickoff meeting for the Comp Plan was held earlier that day, and to look out for updates.

Ms. Gautreaux asked who was chosen. Ms. Bartholomew said that it was mainly staff, along with a representative from the Historic District Commission and the Planning and Zoning Commission. A representative from the Parks and Parkways Commission was not able to make it. There will be a steering committee and there will be discussions on how that will be structured. There will be the internal group, and the steering committee meetings will be open to the public, along with possibly some public workshops and events.

Ms. Gautreaux moved to adjourn the meeting, Ms. Durio seconded, and all were in favor. The meeting was adjourned at 6:45pm.

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Alex Weiner, Secretary

Brian Rhinehart, Chairman Zoning Commission

Alex Weiner

From: Sent: To: Subject:

Tuesday, May 21, 2024 2:57 PM Alex Weiner Variance request CLURO Section 9.2.5.7 Live Oak Protection requirements

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Good afternoon:

My name is Carol Bernos. My husband Gordon and I have resided at 1665 Old Mandeville Lane since 2008.

We moved here because this one block subdivision is called Old Mandeville Woods. The original intent was to drive down the street and not see any houses because of the woods that were meant to be PRESERVED and PROTECTED!

That said, we are opposed to ANY request to remove live and thriving trees, especially oak trees. It appears that the owner Lynn Mason of 1620 Old Mandeville Lane is requesting a variance to presumably remove the beautiful oak tree in front of the house.

Why move into a neighborhood that is wooded only to request tree removals?

We were unable to attend the 5/14 hearing to formally oppose such a removal.

Please record our opposition to this variance request.

Also, can you reply with any notes from the 5/14 meeting relative to this matter. Thank you. Carol U. Bernos

Gordon H. Bernos

Email: 🗨

Alex Weiner

From: Sent: To: Subject: Attachments:

Thursday, May 16, 2024 6:59 PM Alex Weiner

Planning and Zoning Info for Lynn Mason Request to Remove Oak Tree Assessment of trees at 1630 Old Mandeville Lane 2.pdf; Heavy Trenching of Oak Roots.jpg; severed oak roots 1.jpg; severed oak roots zoom.jpg; Tree #3.JPG; CareOfCAsNativeOaks.pdf

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Alex,

As requested by the council during the working session discussing a permit to remove an oak tree, I have attached additional information to consider during the decision process, that I hope better frames the risk.

Attached

- An assessment of the oak tree and other trees by a certified arborist who is also tree risk assessment qualified. In summary mechanical trenching near the oaks root collar has removed a substantial amount of roots with a major impact to the living root mass. Also noted is as the tree continues to increase in diameter and height, the weight and wind load will compound that the limited root mass must support. Recommendation is the Live Oak be removed.
- 2. Picture of heavy trenching. This will give a better idea of the severe damage done to the oak tree not previously presented.
- 3. Two pictures of sizable root severed near the trunk. The pipe in the picture is 2 to 2.5 inches in diameter, and the root is clearly larger.
- 4. A pdf on Care of Cas Native Oaks. Important points, and often noted in other publications, are:
 - a. The horizontal root system is the primary supporter of the tree for the rest of its life.
 - b. Most of the root system occurs within the top three feet of soil.
 - c. As an oak matures it is less tolerant of change.
 - d. Avoid fill on top of natural soil level.
 - e. Trenching is an often overlooked cause of tree death, and should be avoided in the root protection zone, but if necessary bore at least 3ft below the surface.
- 5. 2024 hurricane season Forecast may be most active on record, see link <u>The 2024 Hurricane Season</u> <u>Outlook Is Released | Weather.com</u>
- 6. A quote of how often wind-related tree failures have led to fatalities.

Quoted from <u>Falling Trees: An Underreported, Deadly Danger During Severe Weather | Weather.com</u> "A study published in 2008 found that 407 people were killed by "wind-related tree failures" in the U.S. between 1995 and 2007"

Regards,



Mark Alexander, Jr., P.E. Lifting & Hoisting Discipline Lead – Deepwater Shell Exploration & Production Co. Ms. Ashley A. Ally 1630 Old Mandeville Lane Mandeville, LA. 70448

Basic Tree Risk Assessment of three trees located adjacent to the property line dividing 1630 and 1620 Old Mandeville Lane. Subsurface drainage, including pump, was installed by the property owner of 1620 Old Mandeville Lane.

Ms. Ally,

On March 1, 2024, at 10:45 A.M.; I performed a basic tree risk assessment of (3) trees located adjacent to the property line dividing your address from your neighbor per your request. Because all the work; trench excavation, root pruning, pump installation and gravel surface dressing; had taken place within your neighbor's fenced side yard I was not able to expose the root damage on any of the trees for myself. However, you provided me with photos and a video clip taken of the work as it was being performed that I believe along with my following assessment justifies your concern for the stability of the effected trees.

I found that **tree #1**, a 24 in. Loblolly pine (Pinus taeda), located in your side yard was in fair condition with a broken, hanging limb. I observed that the trench for the drainage line had been excavated approximately 1.5 ft. adjacent to the root collar of the pine to an approximate depth of 1 to 2 ft. below the soil surface. A substantial portion of the tree's root mass would have been impacted by the work. I also noted that the tree's trunk exhibited varying degrees of lean in different directions stemming from growth corrections overtime due to competition and land development. Thus, the root damage that the tree sustained will only aggravate its' battle to maintain stability.

I found **tree #2**, an approximate 22 in. Loblolly pine (Pinus taeda), located in your neighbor's rear yard was also in fair condition. I observed that the trench excavation had stopped within 2 to 3 ft. of the tree's root collar at the base of the trunk. It was also in this location that the pump was installed. Given that the trenching did not bypass the trunk but rather stopped a couple of feet short of it; the extent of the damage to the root mass should be smaller and have far less of a potential impact on the tree's stability. However, this tree also exhibits varying degrees of lean in different directions stemming from growth corrections overtime due to competition and land development. Thus again, any root damage sustained by the tree will have an impact on its' ability to remain stable.

I found **tree #3**, an approximate 26 in. Live oak (Quercus virginianus), located in your neighbor's side yard was in fair condition as well. It appeared that the trenching passed within approximately 1.5 ft. adjacent to the tree's root collar at an approximate depth of 1 to 2 ft.

below the soil surface. It was obvious from photos that you had taken substantial roots had been removed in that process thus having a major impact on the amount of living root mass now supporting the oak. As with the pines, the oak is also growing at a lean which puts your home under the dripline of the tree's canopy.



As all three of these trees continue to increase in diameter and height; they will also continue to compound the weight and wind load that their limited root masses must support. Therefore, based on the reported observations, it is my recommendation that the (2) Loblolly pines and Live oak be removed.

Bernard Wisnowski

ISA Certified Arborist SO-1211A – 2025

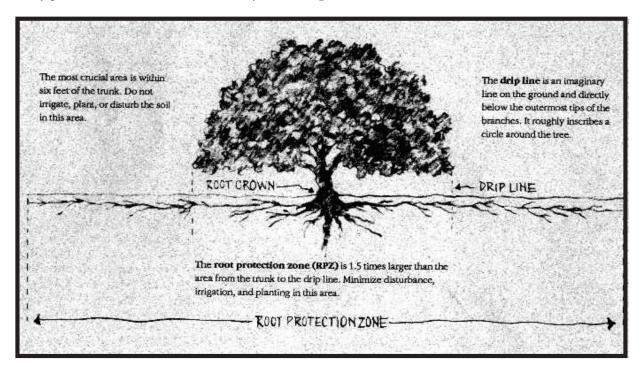
ISA Tree Risk Assessment Qualified - 2025

Care of California's Native Oaks Bulletin of the California Oak Foundation

Native oaks, when young trees, are very tolerant of their environment and make excellent and adaptable landscape assets. The mature native oak is an invaluable part of our environment but does not tolerate many changes once established.

Architects, builders, homeowners, and others should be very careful in fitting their plans with these magnificent giants. Any substantial change in the mature oak's environment can weaken or kill an oak, even a healthy specimen.

A good rule of thumb is to leave the tree's **root protection zone (RPZ)** undisturbed. This area, which is half again as large as the area from the trunk to the dripline, is the most critical to the oak. Many problems for oaks are initiated by disturbing the roots within this zone.



A Word About Roots

Our native oaks have developed survival adaptations to the long, dry summers of most of California. Primary to this survival is the development and characteristics of its root system. When an acorn first sprouts, there is rapid root development and very little growth above ground.

This initial root is a tap root extending deep underground for dependable moisture. In fact, the tree's first few years are focused on establishing a deep sustaining root system. Once this has happened, greater foliage and above-ground growth takes place.

As the oak grows, the tap root is outgrown by an extensive lateral root system that spreads horizontally out from the trunk to and well beyond the dripline, sometimes as much as 90 feet. For

a mature oak, this horizontal root system is the primary supporter of the tree for the rest of its life. It includes the important fine roots, which absorb moisture and nutrients. Most of the root system occurs within the top three feet of soil. In shallower soil the root system is concentrated in an even shallower zone, typically one to two feet below the surface.

As the oak matures, particularly in areas naturally dry in summer, deep-growing vertical roots form off the laterals, usually within ten feet of the trunk. These sinker roots exploit deeper soil moisture and add stability to an increasingly massive tree.

By the time a mature oak has established its elaborate root system – so well designed for its environment and particular site conditions – it has lost the vigor of youth. It is less tolerant of change and can less easily recover to support a fully developed living structure.

To protect a mature oak, pay particular attention to drainage, and avoid filling, trenching, or paving near its root zone.

Fill Around Oaks

Soil and other materials placed on top of the natural soil level, called fill, are usually compacted. They make the soil less permeable, thereby restricting or prohibiting the exchange of gases and movement of water. Excessive moisture trapped by fill can also cause root and crown rot. Because there is no guarantee that fill can be safely added around an oak tree, it is best to avoid tampering with the natural grade, or to leave the natural grade within the root zone alone and use retaining walls.

Drainage

Poor drainage is a common cause of oak tree deaths, since adequate drainage is critical to ensure a proper balance of moisture, air, and nutrient to grow and survive. Too much moisture, particularly in the warm months when natural conditions are dry, can smother the roots and encourage the proliferation of crown and root rot fungi.

Another moisture threat to oak roots is presented by barriers such as concrete foundations and footings, streets, and swimming pools downhill of oaks. These structures can dam underground water, causing water to back up into a tree's root zone and drown it.

Trenching

Trenching is an often-overlooked cause of tree death. Trenching usually occurs when underground utilities are installed. Digging a trench for utilities within the RPZ of an oak can sever a significant portion of a tree's roots. Often, several trenches are opened by separate utilities. This multi-trenching is particularly destructive since it impacts a greater portion of the root system.

If utilities must impinge on the root protection zone of a native oak, the trench should be dug by hand, avoiding roots, or utilities bored through the ground at least three feet below the surface.

Paving

Paving can cause the same problems associated with soil compaction. Paving, such as asphalt and concrete, prevents water from soaking into the soil and impedes the exchange of gases between roots, soil, and the atmosphere. In addition, paving usually requires excavation to create a stable base and to allow for depth of paving material. This process compacts the soil and damages roots.

Decking placed on piers is much more compatible with mature oaks than paving.

Care of Established Oaks on Home Grounds

Oaks on home grounds require certain conditions to survive and prosper. Activities of concern to the homeowner are planting near oaks, irrigation and feeding, pruning, installation of home improvements, and disease and insect infestations.

Most native oaks in California evolved and prospered in an environment typified by a cool, moist winter and a hot, dry summer. Under natural conditions, surface soils are wet during the cooler months and become dry by summer. Natural vegetation growing beneath oaks flourishes during the winter and spring and dies by early summer, creating the well-known golden-brown landscape of California's valleys and foothills.

Native oaks, however, remain green because their thick, leathery leaves and other adaptive features reduce their water use. The homeowner should attempt to approximate the natural environment in which these magnificent trees are originally found.

Planting Near Oaks

Only drought-tolerant plants that require no summer water should be planted around old established oaks, and they should be planted no closer than six feet from the base of the tree. Do not plant exotic grasses, ivy, azaleas, rhododendrons, or any other vegetation that needs summer irrigation. Such plants develop thick mats of roots and thus inhibit the exchange of air and water the established oak has grown used to.

There are a number of plants, some of which are native to California, that can be grown beneath oaks. For an extensive listing of compatible plants useful for landscaping around oaks, contact the California Oak Foundation.

In place of plants, other types of ground cover can be used to landscape beneath oaks. When installed properly, cobbles, gravel, and wood chips are good examples of ground covers that do not interfere with the roots' ability to obtain oxygen and appropriate moisture.

Irrigating and Fertilizing

Native oaks usually do not require irrigation as they are well adapted to dry summer conditions. Healthy oaks are even able to survive the excessively dry summers sometimes brought on by California's variable climate. But if an oak has been compromised, as when impervious surfaces have been placed in the RPZ, occasional water may be helpful if done properly.

Oaks should be irrigated only outside of the RPZ. Under no circumstances should the ground near the base of a native oak be allowed to become moist during warm weather periods. Moist, warm soil near the base of a mature oak promotes crown and root rot.

Irrigation, if done, should be by the "deep watering method," which consists of a slow, all-day soaking only once or twice during the summer dry period. Frequent, shallow watering not only encourages crown and root rot, it also results in the growth of ineffective shallow roots near the surface, a needless waste of the tree's energy.

If oaks need supplemental watering, it is best to apply the water at times that lengthen the normal rainy season, so the normal dry period in the middle to the end of summer is preserved. For example, additional irrigation would be appropriate in May and September, while leaving the area under the tree dry in July and August.

Mature oaks usually need little or no supplemental fertilization. Light fertilization may be appropriate in landscaped situations to replace nutrients supplied by leaves and other litter that normally accumulates under an oak in its native environment. If leaves are allowed to remain under trees, they eventually break down and supply nutrients.

Fertilization should only be done if growth is poor. Fertilizers should be applied to the entire RPZ, ideally in late winter or early spring. Trees that have recently undergone severe pruning or root damage should not be fertilized for at least six months.

Often, when an oak tree shows yellowing leaves, one thinks it lacks nutrients. Generally, this is not the case. More likely, the tree is suffering from root or crown rot. When an oak appears unhealthy, consult a certified arborist to determine the cause.

Pruning

Excessive pruning or thinning of limbs may expose interior branches to sun damage, may stimulate the tree to produce succulent new growth that is subject to mildew, and, in some cases, may cause a decline in vigor or may kill a tree. *Only dead, weakened, diseased, or dangerous branches should be removed.* Necessary pruning should be done during the winter dormant period for deciduous species and during July and August for evergreen species. Recent research has shown that tree paint, wound dressings, and sealing compounds do more harm than good.

Pruning should be performed by a certified arborist according to the pruning standards of the Western Chapter of the International Society of Arboriculture.

Home Improvement

The installation of home improvements should be done with caution when oaks are located nearby. Trenching severs roots, and impervious surfaces placed over roots may result in the death of the oak. A swimming pool placed downhill of oaks can act as a dam and cause an oak to drown in saturated soil.

Great caution should be taken and a certified arborist consulted before proceeding with improvements that impact on the root protection zone of any valued native oak.

Diseases

When growing under natural conditions, native California oaks are relatively tolerant of most diseases. However, they are subject to several problems when disturbed or hampered by frequent summer watering.

The two oak diseases most often encountered in irrigating settings are crown rot and oak root fungus. Both attack trees weakened by disturbance or improper care.

Crown Rot

This is one of the most common and serious diseases of oaks in home plantings. Infected trees decline slowly over a period of years. The disease, caused by a microscopic fungus, is made worse by saturated soil and poor soil aeration.

Symptoms of this disease are a general decrease in tree vigor, twig die-back and wilting, abnormally yellow leaves, and formation of lesions on the bark accompanied by oozing of dark-colored fluid.

In most cases people notice crown rot too late for successful treatment. However, if the disease is caught in the early stages a tree can be saved. Comprehensive treatment is best left to a qualified expert. The following measures usually benefit the tree:

- 1) Remove lawn and other plants that require summer irrigation from within the RPZ.
- 2) Remove soil and all other debris that has accumulated against the trunk.
- 3) Do not water within the RPZ during the summer except under unusual conditions when advised by a certified arborist.
- 4) Improve drainage around the tree, and make sure all water drains away from the trunk.

Oak Root Fungus

This oak fungus, also known as *Armillaria* root rot, is found in the root systems of most oaks in California. Our oaks experience little damage from this fungus under natural, dry summer conditions. However, when oaks are watered in the summer or weakened by other impacts, the tree can suffer damage from the fungus.

Symptoms shown by an infected oak include die-back of branches and yellowing and thinning of foliage. The fungus itself may appear as a white, fan-like growth with rhizomorphs and mushrooms.

Prevention of damaging conditions is the only sure action that can be taken against this disease. Avoid summer irrigation near oaks. Prevent mechanical damage to major roots or root crown. As with crown rot and other tree diseases, it is recommended that a certified arborist be consulted.

Mistletoe

This parasitic plant grows on the branches of many oaks and can cause structural weaknesses that make branches more vulnerable to breakage. Its sticky seeds are spread from one tree to another by birds. The seeds germinate under favorable conditions, and rootlike structures find their way through the bark, ultimately becoming attached to the oak and tapping into the water-and-mineral-conducting tissues of the tree.

Small infestations can be controlled by removing the mistletoe and cutting back the oak's bark around the spot where the mistletoe stem entered the oak branch. Major infestations are difficult to control, however, and an arborist specializing in oaks should be consulted.

Other diseases

The health and vigor of oaks can also be compromised by a number of other afflictions that are not discussed here. Since 1980, for example, die-back and decline, particularly among the coast live oak (*Quercus agrifolia*), has been observed in widespread areas of California. Several fungi may be involved in this condition, and treatments are still experimental. Seek professional advice whenever you notice serious, unexplained decline in your oaks.

INSECTS

Innumerable insects find their livelihoods in the branches and leaves of oaks, usually without much consequence to the healthy tree. The oak gall, for example, is a harmless swelling of leaves and twigs in reaction to enzymes released where a wasp lays its eggs. Some galls are large and round, others resemble small wads of fuzz, stars, or tops; one, which looks like a tiny seed, falls from leaves in the late summer and occasionally jumps into the air like a Mexican jumping bean.

Some infestations, however, can cause serious damage. Insects such as pit scales (which appear as pinhead-sized scales on the bark of twigs), oak moth and other leaf-eaters can weaken oaks, making them susceptible to disease.

Whenever an insect infestation causes substantial leaf loss, changes in leaf color, twig die-back, sticky or sooty foliage and branches, or other significant changes in appearance, intervention may be required. Consult a certified arborist for assistance.



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The California Oak Foundation is dedicated to the conservation and perpetuation of California's native oak woodlands. The California Oak Foundation educates the general public and decision-makers about the importance of oak woodlands to California's wildlife habitat, watersheds, and quality of life through its newsletters, website, bulletins, books, symposia, and workshops.

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