

Martinez, Ruben

From: michael dodge
Sent: Friday, November 20, 2020 12:52 PM
To: Madison, Steve; PublicComment-AutoResponse
Subject: Lower Arroyo Habitat Restoration Program

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I'm writing in support of the Lower Arroyo Habitat Restoration Program as an important local example of how the transformation/ rehabilitation of the landscape can restore local flora and fauna to combat climate change and symbolically atone for past colonization.

I do, however, strongly object to keeping the invasive trees from the Canary Islands and Australia in the city's only designated nature preserve. By not removing these trees, it sets unfortunate precedence that sets the standard for restoration too low and symbolic message of remaining colonization. Future projects looking to previous examples need to be able to see a fully carried out project that doesn't stop short.

I sincerely hope the Council approves the program, but orders that the Eucalyptus and Canary Island pines should also be removed. Pasadena has a chance to be a leader as an example of both native plant restoration and making a symbolic gesture for colonial reparations.

Thank you for your time,

Michael Dodge

MICHAEL DODGE
6012 La Prada St.
Los Angeles, CA 90042
323.204.2977 MOBILE
dodge.michael@gmail.com

Martinez, Ruben

From: Candace Seu <candace.seu@pasadenacalifornia.gov>
Sent: Friday, November 20, 2020 2:20 PM
To: Madison, Steve; PublicComment-AutoResponse
Subject: Please fully restore the Lower Arroyo

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Dear Councilmembers,

Leaving the red gum eucalyptus and the canary island pines in the restoration of the Lower Arroyo is like changing your clothes to go for a hike in the Lower Arroyo, but leaving your feet in dress shoes.

Yes, your Allen Edmunds look *great* in the office with a suit -- but it's obvious that they're not appropriate for every environment and occasion. You'd wear out your soles and be likely to slip and fall. Also - while your pricey nylon pants also look good, the pants and shoes look *ridiculous* together.

This is the sartorial equivalent of an ecological mistake. The red gum and canary island pines are fine trees in the environment that they're originally from. **But they're not appropriate for the environment of the Arroyo.** They put our native trees at risk for disease and drought, and in turn shortchange the native shrubs, birds, and insects that rely on those trees. This is the complete opposite of everything we should be doing to steward and protect our endangered species -- some of which don't exist anywhere else on the planet -- in a crucial, fragile time.

I implore you to listen to the ecologists and respect their expertise, instead of going for a "compromise" that undermines the entire project.

Instead of keeping inappropriate trees where they don't belong and can do harm, let's focus on planting new (native and heat-adapted) trees in other parts of Pasadena, today.

Let's fully restore and strengthen the Lower Arroyo. **Please vote to remove the invasive trees when you approve this project.** Thank you.

Sincerely,

Candace Seu

District 6 (Madison)

11/23/2020
Item 5

**Comments to the Members of the Pasadena City Council
On the Proposed Lower Arroyo Habitat Restoration Plan
November 23, 2020**

Thomas Priestley, Ph.D, AICP/ASLA
reet, Pasadena, CA 91105

RECEIVED
2020 NOV 23 AM 7:59
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Introduction

As a resident of District 6, I want to express my strong support for the approval of the contracts for the Lower Arroyo Restoration Project, but with the proviso that all of the non-native trees that the plan identifies for removal be removed. I am aware that my opinion about the need to remove these non-native trees is different from the opinion of some of the other residents of District 6, but I ask you to give careful consideration to the reasons why the arguments expressed by many for the retention of the non-native trees are based on sentiment not science and how the retention of these large non-native trees will undermine the success of the restoration program, will be inconsistent with the City of Pasadena's adopted policies that designate the Lower Arroyo as a nature preserve, and will have undesirable aesthetic consequences.

A number of factors have led to my assessment that it is imperative that the non-native trees be removed as a part of the habitat restoration program. At the town hall Council Member Madison sponsored on the restoration project in September, I listened to Mark Bain the Psomas biologist responsible for preparing the restoration plan describe the restoration plan and the rationale for the removal of the non-native vegetation as a part of it. I also reviewed the tree removal plan drawing and the tree removal spreadsheets that were included in the agenda packet for the September 23 UFAC meeting. In addition, while reviewing the restoration plans, I made two visits to the Lower Arroyo to observe the larger trees included on list of vegetation to be removed. My opinion is informed by my recreational use of the Lower Arroyo, by my professional training as an environmental planner (I have a Masters Degree and a Ph.D. in environmental Planning from the University of California at Berkeley Department of Landscape Architecture) and by my professional experience as a specialist in the assessment of environmental aesthetics.

My plea to you as you prepare to vote on the contract for the habitat restoration project is that you stand up to the sentimental and short-sighted arguments of the vocal few who want to contravene the adopted City policies that designate the Lower Arroyo as a nature reserve by retaining the area's large non-native trees. Please explain to those who want to keep these trees that from a biological and a landscape aesthetics perspective, these trees constitute blights in an area that the City has democratically determined should be a natural area. Please vote in favor of proceeding with the contracts for the implementation of the restoration project, but in accordance with the original plans prepared by the biological professionals that call for removal of all of the area's non-native trees.

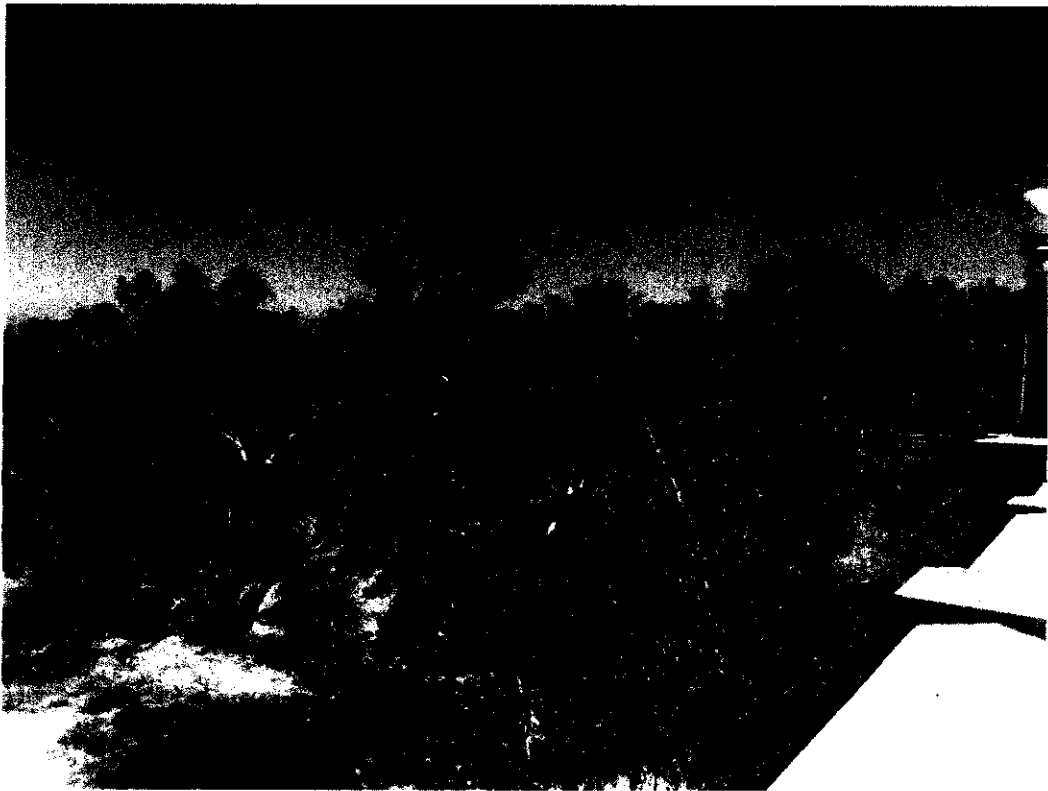
The paragraphs below summarize some of my observations about the non-native trees in the habitat restoration area and the very sound reasons for ensuring that they are removed as an integral part of the habitat restoration plan now before you for a vote.

Some Observations About the Non-Native Trees in the Lower Arroyo



When I take my walks in the Lower Arroyo, the places that I find most aesthetically satisfying are ones like this segment of the trail on the east side of the flood channel just south of the La Loma/Van De Kamp Bridge where the trail is framed by sycamores, oaks, and associated native species. The effect is to create shade, a sense of enclosure, fine-grained visual complexity, and a sense of place tied to the natural history of the Arroyo.

The sad reality is that many of the areas along the Arroyo were seriously disturbed by past activities and do not look like this natural appearing area south of the bridge. Instead, the landscapes in these disturbed areas, are dominated by non-native species that do not have the aesthetic qualities of the Arroyo's native forests and interfere with the functioning of the area's natural ecosystem.



The two photos on the preceding page are of the trail segment located just north of the La Loma/Van De Kamp Bridge. The ground level view is dominated by the large red gum (*Eucalyptus camaldulensis*) trees and the tall Canary Island pines seen in the middleground.

Aesthetically, these trees are problematic in this setting. In terms of scale, they are much taller than the native trees. In terms of form, they are distinctly different from the native trees that tend to be rounded in form and create a low canopy (the oaks especially). The tall, open, splayed form of the eucalyptus crowns contrast with the tight, dense canopies found in nearby stands of oaks. The tall, linearly horizontal forms of the Canary Island pines contrast with the more horizontal form of the oak and sycamore forest that is the natural condition in this area. As a result, in this area, the visitor does not get the sense of enclosure, shelter, fine-grained visual interest, and sense of ecological richness found in the more intact areas of native trees. In the views looking up the Arroyo from the La Loma/Van De Kamp Bridge seen in the bottom photo of the preceding page, the tall, sprawling, out of scale red gums block the views looking toward the ridgeline of the San Gabriels. Removal of these trees would open up the view, creating a view from this portion of the bridge that would have a much higher degree of vividness and visual interest than the view that is now seen.

In terms of ecological function, the large non-native trees like the Canary Island pines and red gums have a number of impacts. Because these species did not co-evolve in the local ecosystem, they do not support co-evolved plant species and local insects and fauna in the same way that plants that evolved in the area's natural ecosystem would. To the extent that these trees take up space that could otherwise be occupied by species like oaks that are well known for the richness and diversity of life they support, they impoverish the area's ecosystem. In addition, the red gums in particular have well documented allelopathic effects related to the buildup of leaves and litter around the trees that change the soil chemistry in a way that inhibits establishment of other plants around them, creating zones in which it is difficult for native plants to grow.



A further concern about the non-native trees in the Lower Arroyo is the fire hazards that they pose. As a survivor of the 1991 Oakland Hills Fire, I am well aware of these hazards. The Oakland hills Fire was to a large degree fueled by burning eucalyptus trees and spread by flaming strips of oily eucalyptus bark that flew long distances through the air, igniting fires on rooftops and other places they landed. For me, when I see shaggy eucalyptus trees like this red gum, which is one of the trees identified for removal in the Lower Arroyo, my first thought is of the extreme fire danger that they represent.

Given the totality of the evidence of the adverse impacts of the non-native trees on the aesthetics and ecosystem values of the Lower Arroyo and the aesthetic, ecological, and fire safety benefits of removing them and replacing them with native species, I urge you to include removal of all of the trees that have been identified for removal in the habitat restoration plan in the plans you approve. Retaining any of these trees would undermine the restoration effort and prevent it from achieving its objective of creating a healthier, safer, and more aesthetically satisfying landscape in the Lower Arroyo.

Martinez, Ruben

From: Bob Gutzman <[redacted]>
Sent: Friday, November 20, 2020 5:56 PM
To: PublicComment-AutoResponse
Subject: Lower Arroyo Restoration - Fire Safety Comment

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Hi.

Please distribute this note to the City Council. Thanks.

Thank you to the entire staff involved in the restoration plan. It seems like some sort of compromise is being worked out. Let's hope the final result is science-based and provides the benefits (and safety) the citizens of Pasadena need.

As a long-time resident of La Loma Road (about three houses from the bridge), I have one comment and request. It relates to the eucalyptus trees from a public safety angle.

First, a bit of background. The Van de Kamp (aka La Loma) bridge is often used by people to shoot off illegal fireworks. This happens all year, but especially from about Memorial Day through July 4th--so about six weeks. Also, a lot of fireworks are shot off around New Year's Eve and any time there is a big win by a home sports team (e.g., Lakers, Dodgers, etc.).

This has become increasingly common. It has also become increasingly dangerous since we are having hotter, drier summers with more wildfires.

I have stopped kids from shooting fireworks off the bridge--fireworks they were aiming right at the eucalyptus trees adjacent north of the bridge on the Arroyo Blvd. (i.e., eastern) side.

All the eucalyptus trees need to be removed, if only for fire safety reasons. If they are not removed, the City is on notice that it knew about the flammability of the trees, the history of fireworks being launched from the bridge, had a chance to remove the trees, yet did nothing.

For example, there is one eucalyptus tree that is only 20 feet north of the bridge, with several others just beyond it. There are also several eucalyptus trees to the south of the bridge.

These trees are a fire waiting to happen. Please please please remove the eucalyptus trees so that they do not get hit by a firework and start a major fire in the Arroyo or in our neighborhood.

Please reinstate the eucalyptus trees to the list of trees to be removed.

It would be win-win in that eucalyptus trees are an invasive species, and they are also extraordinarily flammable. Essentially, they are "matches" just waiting to be lit by a careless (dumb?) person launching a firework from the bridge.

Thanks very much.

Bob Gutzman

p.s. If you cannot remove all the eucalyptus trees now--which really should be done for fire safety reasons--then please remove the ones closest to the Van de Kamp (La Loma) bridge now and commit to a firm date--no exceptions--to remove all the eucalyptus trees in the restoration area.

My memory is that some people have proposed keeping them temporarily while the newly planted trees get established. But I could see five years down the road, the City not wanting to--or forgetting to--remove the eucalyptus trees.

So, as a back-up plan let's set a non-changeable date of five years from now to remove all the remaining eucalyptus trees in the Lower Arroyo Restoration area.

Martinez, Ruben

From: Steve Messer <>
Sent: Saturday, November 21, 2020 6:56 PM
To: PublicComment-AutoResponse; Madison, Steve
Subject: Invasives in the Arroyo Seco Nature Reserve

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Dear Councilmember Madison,

Australian eucalyptus and other non-native trees do not belong in the Arroyo Seco corridor. Restoration of native ecosystems is of far greater importance to the health of necessary habitat connectivity than aesthetics. We have precious little habitat and wildlife corridors remaining in Southern California and must take responsibility for our role in caring for our natural home.

The corridor provides open space and habitat connectivity, an increasingly limited resource in the area, and in dire need of proper management, restoration and ongoing support. In addition to habitat connectivity, a recreational trail paralleling the Arroyo Seco waterway, (managed appropriately to mitigate impacts to wildlife) would help in increasing public support for the corridor, including its habitat connectivity, recreation and open space access benefits for neighboring communities, including underserved communities in the Arroyo Seco corridor.

We support the removal of all invasives, and all efforts to restore the arroyo seco for both its wildlife and habitat connectivity efforts, and its potential recreational and community benefits.

Steve Messer
President
Concerned Off-Road Bicyclists Association (CORBA)

11/23/2020
Item 5

Martinez, Ruben

From: arnheim <
Sent: Saturday, November 21, 2020 7:08 PM
To: Madison, Steve; PublicComment-AutoResponse
Subject: Lower Arroyo "Habitat Restoration"

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Mickey Long's long experience with natural areas convinces me that the plan needs to be modified as he suggests. How could the staff report not discuss the problem of planting of INVASIVE trees? Unbelievable!

11/23/2020
Item 5

Martinez, Ruben

From:
Sent: Saturday, November 21, 2020 9:23 PM
To: PublicComment-AutoResponse
Cc: 'Tim Brick'
Subject: LOWER ARROYO SECO HABITAT RESTORATION : Item 5, November 23 Council Agenda

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Dear Mayor and Pasadena City Council,

We enthusiastically support the restoration of the natural landscape in the Lower Arroyo. We look forward to wandering through the beautiful riparian woodland after it is restored with renewed native plants and trees.

While we look forward to this important public project to improve the Lower Arroyo Seco Habitat, we have concerns about an important omission that may mar the current plan before you.

As volunteers who have contributed many long hours in the native plant gardens that enrich Washington Park, we have struggled along with City Staff to control invasive, non-native trees.

We urge the City to include the removal of the Canary Island pine and eucalyptus trees and their replacement with appropriate native species in the contract before you for approval.

Sincerely,

Pepi and Joe Feinblatt

Pasadena 91104

11/23/2020
Item 5

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**WHITE PAPER:
CONSIDERATION OF THE EFFECTS OF EUCALYPTUS TREES ON LOCAL
ENVIRONMENTS**

2020 NOV 23 AM 8:00

CITY CLERK
CITY OF LASADENA

Christopher Nyerges

Nyerges works as an ethnobotanist, teaching Native American uses of plants, and the principles of "permaculture" as once practiced in the Americas. He holds a Bachelors degree in Journalism, and is the author of 16 books on ethnobotany and sustainability, such as "Guide to Wild Foods," "Foraging California," "How to Survive Anywhere," and other books. He can be reached at Box 41834, Eagle Rock, CA 90041, or www.SchoolofSelf-Reliance.com.

ABSTRACT

The Eucalyptus tree, native to Australia, is now the second most widely planted tree in the world. Its benefits include its rapid growth, its ability to be harvested multiple times, its ability to survive where nothing else will grow, and the usefulness of the wood and leaf. Its detrimental qualities include its high transpiration rate (which can lead to drying up of springs), the non-edibility of its leaf by wild and domestic animals, and its oils which make the nearby soil less suitable for agriculture.

**Are Eucalyptus a desirable species in the California landscape?
According to one researcher: "Eucalyptus ... creates the threat of desertification."**

PERSONAL OBSERVATIONS

When I was growing up, we had a neighbor with a few eucalyptus trees in their backyard. I remember that nothing else grew in the back, around and under the eucalyptus tree. We boys liked to climb that tree, but the owners glumly told us that the huge tree was there when they moved to that house, and they could not afford to remove it.

Later, in high school, a schoolmate took me to see his many worm farms that he'd constructed in his large back yard. He showed me the tiny earthworms that grew in the worm farm under the eucalyptus trees. The worms that were raised on the other side of the yard had large normal-looking earthworms. This friend, Scott, also showed me carrots he'd grow on each side of his yard. The carrots under the eucalyptus trees had lots of ferny tops, but very tiny carrots. The carrots on the far side of the yard, away from the eucalyptus, were large normal-looking carrots. "Don't grow things around eucalyptus," Scott told me.

On a property governed by a local non-profit, I was once asked to plant bamboo on the property line. The property line was also planted in eucalyptus trees. Nothing grew well under those trees in some 40 years. I planted the bamboo, and watered it. It died, whereas other bamboo beyond the influence of the eucalyptus thrived like weeds.

These are just personal observations, though I have heard dozens of stories like this. What is the "bottom line" about eucalyptus?

11/23/2020

Item 5

BACKGROUND

Eucalyptus is a tree with a mixed reputation. This stately tree is renowned for the “forest effect” due to the high transpiration rate of its leaves. According to one report, “In Sydney, a large gum tree [eucalyptus] transpires up to 200 litres of water a day. A well-maintained garden in Sydney will transpire nearly twice the volume of water as the total rainfall.”

The tree was included in my Guide to Wild Foods book since it was so useful in its native Australia by the Aborigines: the leaves for various medicines (mostly upper bronchial issues), the bark for infections and many other uses, and even the little psyllid bugs can be harvested and eaten like a backwoods sugar. And the honey produced from eucalyptus flowers is a dark almost-medicinal honey.

But is it good for the California environment to remove the eucalyptus trees and replace them with natives? In fact, is being non-native the only reason that UC Berkeley wants to remove the trees?

In order to fully grasp the effects of eucalypti on the environment, let's look at its effect in other parts of the world and the problems experienced there.

SOME CASE EXAMPLES

Eucalyptus is a fast-growing tree. When you cut them down, they will sprout right back up again. Because of this, there have been major plantations in various countries throughout the world from Europe to China to Africa in order to supply the wood for lumber, paper products, and firewood. If the eucalyptus trees are planted in non-agricultural areas where nothing else will grow, they survive quite well. A eucalyptus tree in a plantation can be cut as little as every four years.

Around the time that the U.S. was experiencing long gas lines during the 1970s “energy crisis,” many countries around the world discovered that the eucalyptus tree seemed like a miracle tree. It grew easily anywhere, and could be regularly harvested for fuel wood, building materials, and pulp for paper. It was also a financial boom to the public and private businesses in various countries who grew these plantations. Today, eucalyptus is one of the top trees planted in plantations around the world (pine is apparently the top tree). With so many undeniable benefits, what could go wrong?

Over the last 30 to 40 years, countless business, governmental, and academic studies have been done to weigh the pros and cons of the largescale plantings of the eucalyptus tree. I've spent time over the last year reading these studies, and compiling hard data on the eucalyptus tree.

There were very real worries about deforestation and desertification that intensified in the 1980s. Eucalyptus trees, with its obvious economic benefits, were planted in ever-greater numbers. Today we can analyze the ecological effects of over 30 years of eucalyptus plantations.

A RIOT OVER EUCALYPTUS?

For starters, there have actually been riots in protest of new eucalyptus plantings. Really, riots? In Northeast Thailand, most of the native forests had been completely logged by private companies, which affected the water, and forced local people to relocate. The Thai government, along with the World Bank, planted eucalyptus trees both as a cash crop, and so that local villagers would have fuel wood for their daily needs. However, it was noted that some results of the thousands of eucalyptus trees planted included lowering the water table for villages, drying up local wells, and making the farmable land less valuable due to the allelopathic effects of the eucalyptus leaves. When the Thai government began to grow even more eucalyptus plantations, villagers in the Tung Kula Ronghai section of Thailand, held meetings, marches, rallies, and they also blocked roads, burned eucalyptus nurseries, ripped out eucalyptus seedlings, and chopped down eucalyptus trees, and planted fruit trees.

WATER USE

Because the eucalyptus tree is such a great transpirer, it follows that it generally consumes far more water than other native or non-native trees. In fact, one of the stated reasons that eucalyptus is planted in certain countries is to dry up swamps and wet areas, either for development or because the wet area was believed to be a source of malaria. The deep roots of eucalyptus, and their extensive network of small surface roots, has been noted to extend deep to the water table.

Although a eucalyptus plantation does very well in dry areas where nothing else is growing, in areas as diverse as China, Ethiopia, Vietnam, etc, local villagers of these diverse places have noted that their water wells run dry. In fact, this seems to be one of the main objections to eucalyptus plantations: it dries up the local sources since it generally consumes more water than is received by rain in any given area, which then means there is far less water for agricultural crops and orchards. In the various studies about eucalyptus, it is always pointed out that the effects of eucalyptus on the water table can be minimized by carefully choosing the locations of the eucalyptus plantations, and by interspersing other forest trees with the eucalyptus. However, in practice, this has not been the case because it is also widely acknowledged that to get the greatest economic advantage from the eucalyptus trees, the eucalyptus are grown tightly in huge acreages, like a crop of corn.

CHEMICALS IN EUCALYPTUS RESTRICT GROWTH OF OTHER PLANTS

In studies done to determine if the leaf drop from eucalyptus is "allelopathic" (exuding soil toxins), various plants grown in a mixture of eucalyptus mulch and soil have exhibited a germination rate as low as 3%, compared to normal rates of germination (typically above 60%) with an oak mulch. This means there is typically little or no undergrowth in the eucalyptus groves, and therefore there is a lack of food for grazing animals in the eucalyptus groves. Formerly, villages would be able to graze their animals in the forest and let them feed on the undergrowth, and even the leaves of the forest trees. But the eucalyptus leaves themselves are not eaten by grazing animals, which is good if you are growing the trees, but not good if you raise animals.

NUTRIENT USE

Another argument against the eucalyptus plantations is that there is a great depletion of soil nutrients. In general, eucalyptus take up more nutrients (and water) from the soil than other native or non-native trees because they are fast-growing. And, in theory, if all the leafy matter was left on the ground (as opposed to cleaning it up), those nutrients would degrade and enrich the soil. But unfortunately, eucalyptus mulch takes a very long time to be degraded by bacteria and fungus due to its oils, and so in actual practice, the soils around eucalyptus tend to be very desert-like due to the unavailability of nutrients.

[Source: The Effect of Eucalyptus and Oak Leaf Extract on California Native Plants, Kam Watson, UC Berkley]

This effect results in the lack of biodiversity and understory that is commonly observed under and around eucalyptus trees, in stark contrast to native forests.

WATER ABSORPTION OF SOIL

One study was also done with soil under the eucalyptus trees, along with a soil sample not influenced by eucalyptus. Soil samples from under eucalyptus trees proved to be less able to absorb water. This meant that though eucalyptus trees have been planted in areas to reduce runoff and flooding, this result is not usually successful because of the effect of the tree's oil on the soil.

These same results have been documented in eucalyptus plantations in China, Kenya, Ethiopia, Vietnam, and other sites.

GUIDELINE FOR PLANTING

Kenya Forest Service has published guidelines, basically aimed at promoting eucalyptus plantations in the country, called "A Guide to On-Farm Eucalyptus Growing in Kenya", December 2009.

They advise not growing eucalyptus in wetlands and marshy areas, and riparian areas. They advise no to grow eucalyptus closer than 30 meters from rivers, and ideally 50 meters, so that the trees do not adversely interfere with the water source.

They add that other areas where eucalyptus should not be planted include around lakes, ponds, swamps, estuary and any other body of standing water. They advice that eucalyptus not be planted closer than 50 meters to (about 55 feet) farm lands, and other measures. In other words, even those who are pro-eucalyptus recognize the adverse effects of eucalyptus on the environment, and offer ways to minimize those effects.

The study done of the eucalyptus effect in the Tung Kula Ronghai project in Thailand is somewhat typical of the relationship between local villagers and the various entities who run the eucalyptus "farms" (though, admittedly, every

situation is unique). For example, in theory, the eucalyptus plantings are ideally done “where nothing else will grow,” though this is simply not always the case. In this project in Thailand, many of the “public lands” were occupied by poor people, who were evicted from the lands so that eucalyptus could be planted.

ECONOMIC AND SOCIAL ISSUES

Remember, World Bank and other funds were provided with the stated intent of providing a cash crop, as well as providing daily fuel for the poorest of the poor. Though the former has materialized, the latter has not. Protests occurred when it became clear that eucalyptus forests did not solve villagers problems, and created new ones. It turned out that firewood from eucalyptus was not “free,” and it burned too fast compared to former forest woods. There was no benefit from the forest for grazing animals, areas for growing rice disappeared, and the benefits that were supposedly going to assist villagers went to the Thai government and to multi-national wood pulp industries.

By the way, according to Midgley and Pinyopu, “The Role of Eucalyptus in Local Development in the Emerging Economies of China, Vietnam, and Thailand,” there are nearly 10 million acres of eucalyptus under cultivation in the Asia region, which includes Bangladesh, China, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Pakistan, Phillipines, Sri Lanka, Thailand, and Vietnam.

CAN A TREE CONTRIBUTE TO DESERTIFICATION?

Because of the kneejerk reaction to “plant trees” to help offset drought and desertification, some believe that *any* tree is acceptable to plant. Yet according to Shiva and Bandyopadhyay, “Ecological Audit of Eucalyptus Cultivation” (1987), the “complex multi-dimensional impacts on soil moisture and ground water, on the soil fertility; on other plant life and on soil fauna undermine potential of land for biological productivity. *Eucalyptus cultivation therefore creates the threat of desertification.*”

Obviously, the disputed eucalyptus trees in the Bay area were not planted to provide firewood for local San Francisco “villagers.” And they serve no purpose for a third world’s needed cash economy. They, in fact, serve no purpose at all, except their ease of care and growth, and their very subjective value of beauty. With so many negatives, and so few positives, why does anyone insist on keeping those trees?

U.C. Berkeley should proceed with the removal of eucalyptus trees on the lands under their control, and begin the long process of re-introducing natives, and the many benefits that will come therefrom.

CONCLUSIONS/ RECOMMENDATIONS

If you have a single eucalyptus in your backyard, you will not likely experience any of the negative effects mentioned here. However, if you have 3 or more, close together, it is likely that you have noted that not much grows under these trees, and other plants struggle. What should you do?

You could remove the tree, use the wood for firewood, and plant something more suitable. Yes, large tree removal is expensive, and some local communities make funds available to help homeowners pay the cost. You could also try drying and selling the eucalyptus leaves to people who do not have them growing nearby. And you could make and sell walking sticks, and other carvings from this hard wood.

[The facts stated in this article come from over a dozen research papers; sources provided upon request]

Martinez, Ruben

From: Alton Cullen <alton.cullen@cityofalton.com>
Sent: Sunday, November 22, 2020 10:29 AM
To: PublicComment-AutoResponse
Subject: Arroyo Restoration

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Mayor and City Council Members,

Pine trees are not drought tolerant and will be dying shortly with climate change. Eucalyptus were imported for wind breakers in agricultural areas and are subject to wind damage with limbs breaking creating a danger to anyone nearby.

Neither of these species add anything to the arroyo nor to any critters. Native trees are compatible with the area and are beneficial to all.

DO NOT approve the plan leaving these two species untouched and present.

Thanks for making the proper decision.

Al & Yvonne Cullen

;

11/23/2020
Item 5

Martinez, Ruben

From: Rebecca Seman <[redacted]>
Sent: Sunday, November 22, 2020 12:59 PM
To: PublicComment-AutoResponse
Subject: REMOVE ALL INVASIVES

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Hello,

The city of Pasadena should honor the voices of over 800 constituents who believe that ALL of the invasive species in the lower arroyo should be removed during the upcoming restoration project - including the Eucalyptus and Canary Island pines. It is appalling that the privilege of some Pasadena residents has distracted from the research and science in this situation. Habitat restoration programs are supposed to be based on science and nature - NOT on nostalgia and preference. Please listen to your informed constituents and remove the invasive species that hold high propensity to spread fire and disease.

Thank you,

Rebecca Seman

University of Southern California, Class of 2017
USC Suzanne Dworak-Peck School of Social Work, Master of Social Work
seman@usc.edu

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Claire W. Bogaard
Pasadena, California 91105

21 November 2020

Mayor Terry Tornek and Members of the City Council
City of Pasadena
100 North Garfield Avenue
Pasadena, California 91101

RECEIVED
2020 NOV 23 AM 8:00
CITY CLERK
CITY OF PASADENA

RE: Agenda Item 5
Contract Award to G Team Landscape Construction, Inc. for Lower Arroyo Seco Habitat
Restoration

Dear Mayor Tornek and Members of the City Council:

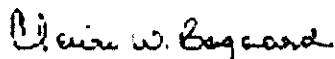
I am writing in support of Agenda Item 5 regarding the contract to be awarded to the G Team Landscape Construction Co. for the Lower Arroyo. For almost fifty years, I have lived near the Lower Arroyo and consider it one of our City's greatest historic and natural resources.

During the summer of 2020, a concept plan for significant changes to the Lower Arroyo was made public. During the following months, there were a number of public meetings and several walking tours with City staff and the consultant, Psomas, to explain the plan and to answer questions. I - along with many neighbors and/or walkers who use the Lower Arroyo - was very concerned about the number of large and healthy trees which were to be removed because they were non-native.

I attended several of the walks sponsored by the City staff and am particularly grateful for their time and expertise. By the end of the City's outreach to the community, I became supportive of the compromise tree-removal plan created by the City staff.

I support the Contract Award to G Team Landscape Construction firm for the Lower Arroyo Seco.

Sincerely,



Claire W. Bogaard

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Martinez, Ruben

From: marcie chan <r >
Sent: Sunday, November 22, 2020 4:15 PM
To: PublicComment-AutoResponse
Subject: Lower Arroyo Restoration Comment

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Hello.

Please distribute this comment for the upcoming City Council meeting.

Having lived a few doors away from the Arroyo for nearly 25 years, I am very concerned that the compromise being considered has essentially wiped out the reason for the Lower Arroyo restoration, namely the removal of two major invasive species.

Yes, some non-native plants will be removed--hopefully with more than just a weed whacker, otherwise they will just grow back in a year.

But what I and hundreds of others are primarily concerned about is that the invasive Canary Island pine trees and especially the eucalyptus trees will be retained under this compromise.

Both of these types of trees are *very* fire-prone and should be removed. There is no reason to keep them. We have seen the devastation of massive wild fires in California the past two years and do not want to experience something like this in the Arroyo area--or any area--of Pasadena.

As a side note, Australia also experienced some of its worst wildfires in history last year. What were, by far, the most flammable trees that caused the most fire damage? Eucalyptus trees.

The City Council knows the science. It should have the will to follow the science and vote for removing all the non-natives and replacing them with native species, which by the way are much less flammable.

An additional benefit of having only natives is that they are much better for the local animals and the habitat in general.

Please don't cave in to a small group of loud voices that appear not to know (or care) about the science behind this issue. Listen to the scientists and the roughly 1,000(!) people who are in favor of restoring this part of the Arroyo to how it was and should be again.

A final note: As a matter of public record, the City is knowledgeable about the flammability of these trees, and knows about fireworks that are illegally shot off of La Loma bridge. Many of the eucalyptus trees are within 100 feet of the La Loma bridge. This is a very bad combination. Please don't pass on this chance to remove these trees, and then have massive regrets when a fire rips through this part of the Arroyo due to the eucalyptus and pines catching fire and spreading flaming embers to the neighborhood houses.

Thanks in advance for doing the right thing and following the science!

Marcie Chan

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Martinez, Ruben

From: Benjamin R. Brown < >
Sent: Sunday, November 22, 2020 6:58 PM
To: PublicComment-AutoResponse
Subject: Arroyo Seco Restoration Project comments

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Dear Pasadena City Council,

My name is Benjamin Brown. My credentials include associate's degrees in ornamental horticulture and integrated pest management, a bachelor's degree in environmental biology, and a master's degree in regenerative studies. I am the founder of the Regenerative School Garden Project, a member of the nonprofit Grow Monrovia and a new adjunct professor at Mt. San Antonio College. I am writing in reference to the Arroyo Seco Restoration Project and the decision to keep the canary island pines and eucalyptus trees in the project area. Keeping these trees in the project area is foolish, but it can also be detrimental to the health of the ecosystem and the people's health utilizing the area. To make my case, I will speak specifically to the canary island pines.

I visited the aforementioned canary island pine trees on October 6th, 2020, to examine them and document any potential hazards, along with my father, Jonathan Brown, who is an arborist who works for Armstrong's Nursery in Monrovia, CA. We both immediately noticed the incredible fire danger posed by these trees. While the canary island pine itself is highly resistant to fire while alive and healthy, the cones and needles are extremely flammable kindling. Not only are there six-plus inches of dry needles and cones surround the trees (figures 1-4), there are several cases of dead branches in a few specimens (figure 5) that increase the risk of the entire tree catching on fire, should there be an event in which the needles and cones catch on fire. These trees are from much higher altitudes where the temperature is cooler, and there is a larger volume of available water. These specimen in the arroyo are not getting enough water and will not have the same tolerance against fire as their cousins in the mountains. For this reason alone, these trees should not be in this area. However, fire is not the only environmental hazard posed by these trees.

As this is not their native range, these trees' poor health makes them more susceptible to being killed and playing host to detrimental insects and fungus. While I was unable to climb the tree to determine the source, one of the specimens exhibited the signs of either a boring insect infestation or damage caused by a fungus, as seen by the large quantities of sap dripping down from the upper canopy (figure 6). Canary Island Pines are prone to the invasive red-haired pine bark beetle, which has been a problem in New York and Los Angeles for the past two decades. (<http://ipm.ucanr.edu/NEWS/pinetrees-news.html>) These pines can also host Phytophthora, a water-mold that is dangerous for the local environment and poses a risk to the plants in the nearby residential landscapes (<https://www.csustan.edu/campus-tree-story-map/canary-island-pine-pinus-canariensis#:~:text=Pests%20%26%20Disease%20Information,Sooty%20Mold%20and%20Pitch%20Canker>). Again, I must stress that these trees are not acclimated to this area. The lack of water makes them all the

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more prone to these pests. They are also prone to *Cryptococcus gattii*, a potentially deadly hazard to human life.

Cryptococcus gattii is a fungus that poses a significant public health hazard to individuals with HIV, AIDS, and compromised immune systems.

(<https://journals.plos.org/plospathogens/article?id=10.1371/journal.ppat.1004285>) Inhalation of the microscopic spores from this fungus can cause life-threatening infections. Treatment for these infections involves prescription antifungals, and therapy can take well over six months. For this single reason alone, these trees should be removed.

As lovely as these trees are, the risk posed by the fire danger, danger to the native habitat by way of hosting non-native insects and diseases, and the immediate human health risk posed by *C. gattii* outweigh any public sentiment. These trees should be included among the invasive species to be removed from the project area.

While I have not examined the eucalyptus trees with the same scrutiny, I can say without any doubt that these trees should also be removed from the area. At the very least, they are host to pathogens and insects that will cause detriment to the efforts to restore the native habitat. At the worst, eucalyptus trees very commonly fall victim to sudden limb drop - while the odds of an individual standing under one of these trees at the time of a limb drop is not very high unless you plan on monitoring these trees monthly, they should **not** remain in the project area.

It is my recommendation that you remove the canary island pines and the eucalyptus trees from the project area. Thank you for your time.



Figure 1. Dry needles surrounding canary island pine at a distance.



Figure 2. Dry needles beneath canary island pines.



Figure 3. Dry needles beneath canary island pines.

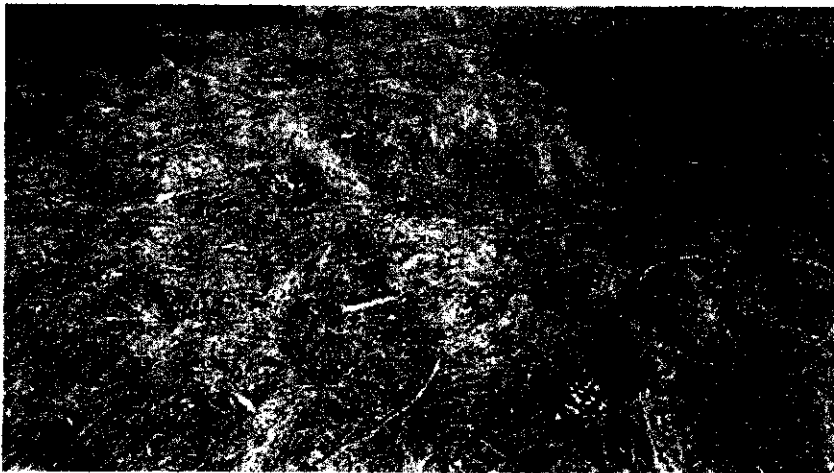


Figure 4. Close up, showing dry cones dispersed within dry needles beneath canary island pines.

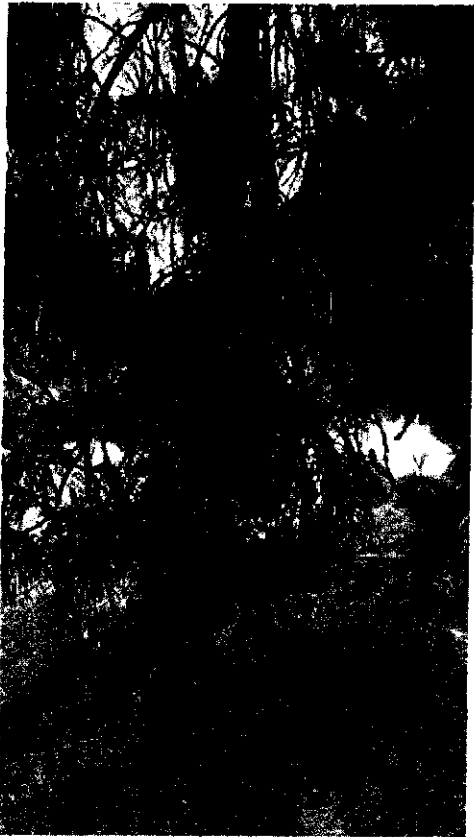


Figure 5. Dead tag branch in canary island pine hanging dangerously close to dry kindling.



Figure 6. Large amounts of pine sap dripping from the upper tree have crystallized here, indicating that the tree is infested with either a boring insect, fungus, or both.

Sincerely,
Benjamin Reed Brown
MSRS 2020
Lyle Center for Regenerative Studies
California Polytechnic University, Pomona
Founder, Regenerative School Garden Project

jm

Martinez, Ruben

From: mary smith <>
Sent: Sunday, November 22, 2020 10:39 PM
To: PublicComment-AutoResponse
Subject: Trees in the Arroyo

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I am happy the Council is taking comments on a plan that would give a reprieve to two large trees in the Arroyo. The fact that the trees are pathogen or fire "prone" is not enough reason to cut them down, and our air needs all the ozone-eaters we can get. Let them live until they are ill or dying.
Sincerely,
Mary Smith

Sent from my iPad

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