

MOFD Joint Fire Prevention Ad Hoc Committee
Meeting 11/14/2023
Agenda Item D.1, community & wildfire prevention

To: Moraga Orinda Fire District Board
Cc: Moraga Town Council
Cc: Orinda City Council

Dear Board Members,

I share the community's concerns, as raised by Sandy Pearson, about the MOFD's Fuel Break Ordinance 23-08. This ordinance negatively impacts our native vegetation, wildlife habitats, hillside stability, and community character due to its focus on extensive vegetation removal and enforcement. Such practices overlook vital, science-based fire ecosystem management techniques, like careful, distance-limited thinning of vegetation, rather than wholesale clearing of most residential lots. It also misses the importance of understanding the natural hydration dynamics of native species, instead of making biased judgments based on oversimplified plant lists. Furthermore, this removal-centric approach risks creating spaces for invasive, highly flammable weeds, replacing native plants, and increases the risk of hillside erosion and landslides due to exposed soil. Therefore, a comprehensive revision of the ordinance is crucial to align it with effective, science-based fire management practices.

I recently became involved with the MOFD's Fuel Break Ordinance, 23-08, due to stressful interactions this year, including receiving a citation and a \$100 fine. While I have resolved part of my citation related to the 23-03 Hazardous Vegetation issue, this experience has been eye-opening about the potential challenges of the 23-08 ordinance enforcement.

A major issue with Ordinances 23-03 and 23-08 is the ambiguous and subjective definition of 'Hazardous Vegetation' detailed in Appendix A. This lack of clarity opens the door to arbitrary and possibly inconsistent enforcement by inspectors, an issue I've personally faced with my Coyote Bush. Moreover, this problem extends beyond my situation, potentially impacting a range of native plants such as shrubs, trees, perennial grasses, and small flowering plants.

Under Ordinance 23-03, I was fined for maintaining a hedge of Coyote Bush. Convincing the Fire Inspectors that this bush was not a fire hazard required several interactions. Initially, they expressed concerns about deadwood accumulation and the bush's potential flammability due to its oils. In response, I gathered academic and professional horticultural references (Appendices B through I) to demonstrate the Coyote Bush's benefits for wildlife habitat, erosion control, and its suitability for drought-tolerant residential landscaping, without any fire risk warnings. Notably, the U.S. Department of Agriculture recognized the fire-resistant properties of *Baccharis Pilularis* leaves, and the East Bay Municipal Utility District recommended it for water-wise landscapes.

Armed with this evidence, I successfully argued for the plant's safety and got the fine dismissed. However, the process was challenging, as I constantly had to defend the bush against the inspectors' authority and their insistence on legal mandates. This situation created unnecessary stress and made the discussions more difficult for everyone involved.

My experience with Ordinance 23-03 has led to worries about the impending reinstatement of 23-08. Although 23-08 marks an improvement over 23-04, particularly by permitting non-irrigated bushes that aid in habitat protection and erosion control, this progress is at risk. If inspectors continue to classify native plants as hazardous and insist on their complete removal—ignoring factors like their proximity to buildings, spacing, or irrigation status—these advancements might be effectively negated.

Two of my neighbors, who agreed to Fuel Break inspections, were directed to remove all Coyote Brush from their properties, extending beyond the required 100-foot Defensible Space zone. This action led to the displacement of a quail family and left a large hillside exposed, making it vulnerable to the upcoming winter rains. This situation prompts an important question: Will the non-irrigated clause in Ordinance 23-08 adequately protect Coyote Bush and other native plants on hillsides, or will similar removals persist?

While I understand the complexities faced by MOFD, I find it concerning when public objections and comments receive what seem like formulaic responses. It often gives the impression that environmental concerns, particularly regarding hillside erosion, might not be fully considered. For example, the idea of replacing native plants with invasive grass, despite the mitigation strategy of annual mowing, raises questions. I recognize the immense challenges MOFD faces in juggling fire risk management, erosion control, and habitat protection, alongside their commendable and primary duty of fighting fires. To support these efforts, a more comprehensive legal framework, coupled with community input, could prove invaluable in helping residents protect their properties effectively while considering environmental implications.

Sincerely,
Mike Fedorov
Moraga

Appendix A. Comparing the 'Hazardous Vegetation' sections in ordinances 23-03 and 23-08, both grant the Fire Inspector discretionary power to determine what constitutes hazardous vegetation. Under these terms, if a plant is classified as hazardous, it is subject to removal, irrespective of its irrigation status or spacing.

23-03 Defensible Space, Zone 2 Requirements	23-08 Fuel Break Requirements
<p>(3) Zone 2.</p> <p>(A) Remove all Hazardous Vegetation and Combustible Material capable of being ignited and endangering the Structure as determined by the Fire Code Official.</p> <p>(B) Annual grasses must be removed or cut to less than 3 inches no later than 1 June of each year.</p> <p>(C) Maintain trees to remove Ladder Fuels so that foliage, twigs, or branches are greater than 6 feet above the ground.</p> <p>(D) Non-irrigated brush is not permitted.</p> <p>(E) New trees shall be planted and maintained so that the tree's drip line at</p>	<p>(a) <u>Fuel Break Standards.</u></p> <p>(1) For the purpose of this Ordinance, a Fuel Break requires the removal or modification of fuel, maintained on an annual basis by June 1 of each year, or on a recurring basis as determined by the Fire Code Official, in a manner that will prevent the transmission of fire.</p> <p>Specifically:</p> <p>(A) Grasses cut to less than 3".</p> <p>(B) Removal of all Hazardous Vegetation.</p> <p>(C) Non-irrigated brush removed such that the minimum space between shrubs is as follows:</p> <ol style="list-style-type: none"> a. On flat or mild slopes (less than 20%): Two times the height of the shrub b. On mild to moderate slopes (20-40%): Four times the height of the shrub c. On moderate to steep slopes (greater than 40%): Six times the height
<p>HAZARDOUS VEGETATION. Vegetation that is combustible and endangers the public safety by creating a Fire Hazard, including but not limited to bark, mulch, seasonal and recurrent grasses, weeds, stubble, non-irrigated brush, dry leaves, dry needles, dead, dying, and diseased trees, or any other vegetation identified by the Fire Code Official.</p>	<p><u>Hazardous Vegetation.</u> Vegetation that is combustible and endangers the public safety by creating a Fire Hazard, including but not limited to bark, mulch, seasonal and recurrent grasses, weeds, stubble, dry leaves, dry needles, or any other vegetation identified by the Fire Code Official. Hazardous Vegetation shall not include healthy, mature, scenic, trees.</p>

Appendix B. Summary of References in support of Coyote Bush

- The U.S. Department of Agriculture plant guide on *Baccharis Pilularis* says that its “...leaves have fire resistant properties.” It then states that “Coyotebrush is an extremely important plant for pollinators, due to its abundant production of pollen and nectar and the bloom period, which occurs during the fall and winter. The plants maintain their green foliage year round providing excellent habitat for beneficial insects”. The plant is successfully used for hillside erosion control. See **Appendix C**.
- **Monarch Butterfly** Nectar Plant: many Monarch preservation sources emphasize critical value of *Baccharis* in providing flowers and nectar during winter months, when other Monarch food sources are absent. See **Appendix D**.
- “The California wildlife habitat garden” book says about Coyote Bush: Fall-blooming shrub attracts over 400 insects, highly valuable bird habitat plant for cover, nesting, and foraging... See **Appendix E**.
- The **Town of Moraga Design Guide** includes a dwarf variant of the Coyote Bush in the 'Oak Palette.' Maybe the critical issue is not a plant's placement on a hazard list, but rather factors like its location, hydration, separation, and maintenance? See **Appendix F**.
- Classic read on Coyote Bush from Judy Lowry, *Gardening with a wild heart*. See **Appendix G**.
- Coyote Bush in native garden. Bornstein, C., Fross, D., O'Brien, B. (2005). *California Native Plants for the Garden*. United States: Cachuma Press. See **Appendix H**.
- Coyote Bush for landscape. East Bay Municipal Utility District (EBMUD) book on water-wise gardening. I used this book to transition to native planting during the 2012-2016 drought. See **Appendix I**.

Appendix C. U.S. Department of Agriculture on benefits of the Coyote Bush.

Note that the U.S. Department of Agriculture's brochure on the Coyote Bush features a mature specimen in the wild, surrounded by dead, dry invasive annual grass. **This image does not reflect the maintenance practices necessary for a fire-safe residential landscape.**

https://plants.sc.egov.usda.gov/DocumentLibrary/plantguide/pdf/pg_bapi.pdf



Natural Resources Conservation Service

Plant Guide

COYOTE BRUSH

MF: Mature specimen in the wild, surrounded by invasive grass. This is not fire-safe residential landscape.

Baccharis pilularis DC.

Plant Symbol = BAPI

Common Names:

coyote brush, coyotebush, coyote bush, chaparral-broom, dwarf baccharis, dwarf chaparral false willow

Scientific Subspecies Names: *Baccharis pilularis* DC. ssp. *consanguinea* (DC.) C.B. Wolf, *Baccharis pilularis* DC. ssp. *pilularis* (DC.)

Description

General: Coyotebrush is a native, perennial, evergreen shrub in the Asteraceae family with either an erect, rounded or procumbent



Figure 1. Coyotebrush, *Baccharis pilularis* ssp. *consanguinea*, mature shrub. Lockeford Plant Materials Center, August 2016.

Uses

Erosion Control and Habitat Restoration: Coyotebrush has been successfully used for erosion control. For sloping areas, *B. pilularis* ssp. *pilularis*, is a good choice due to its low growing and spreading habit (Steinberg, 2002). In areas adjacent to established coyotebrush stands recruitment can be spontaneous from wind dispersed seeds. Coyotebrush habitat can act as a nurse crop for tree species and is useful for restoration of oak woodlands.

Wildlife habitat: Coyotebrush has low palatability and nutritional value for grazers and browsers, cattle will graze it if nothing else is available but will more likely trample the plants. It is great wildlife habitat providing cover for rabbits and other small mammals, who frequently graze out vegetation under the coyotebrush (Steinberg, 2002). Coyotebrush is an extremely important plant for pollinators, due to its abundant production of pollen and nectar and the bloom period, which occurs during the fall and winter. The plants maintain their green foliage year round providing excellent habitat for beneficial insects (Wilson, 2013). In addition to European honey bees, Steffan (1997) identified 54 insect species visiting male and female flowers in late September and early October, including several species of ants, bees and parasitic wasps

Ornamental: Coyotebrush is used as an ornamental plant in the Southwestern states due to several attributes. It is drought tolerant and maintains bright green foliage throughout the year, is unpalatable for deer, and the leaves have fire resistant properties. *B. pilularis* ssp. *consanguinea*, the upright coyotebrush, is a reliable choice for hedgerows as it is easy to establish from transplants and to manage by pruning. For erosion control on slopes and where low growing vegetation is required, cultivars of *B. pilularis* ssp. *pilularis*, the prostrate form are preferred. In the horticultural trade, these are all males and so will not form an expanding population (Wilson, 2013).

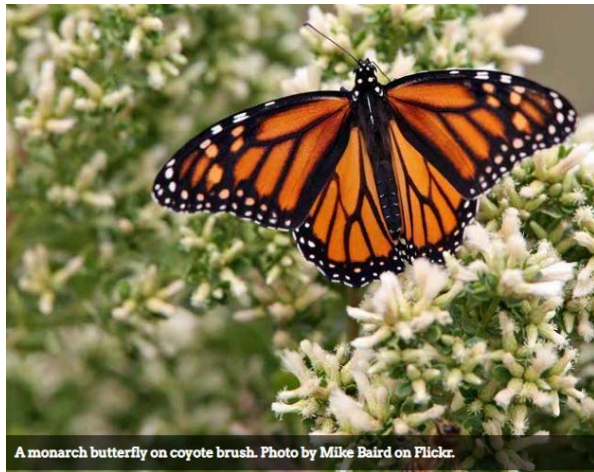
Appendix D. Nectar Plant for Monarch Butterfly which flowers during Fall and Winter months
https://www.xerces.org/sites/default/files/publications/18-003_02_Monarch-Nectar-Plant-Lists-FS_web%20-%20Jessa%20Kay%20Cruz.pdf

CALIFORNIA

MONARCH BUTTERFLY NECTAR PLANTS



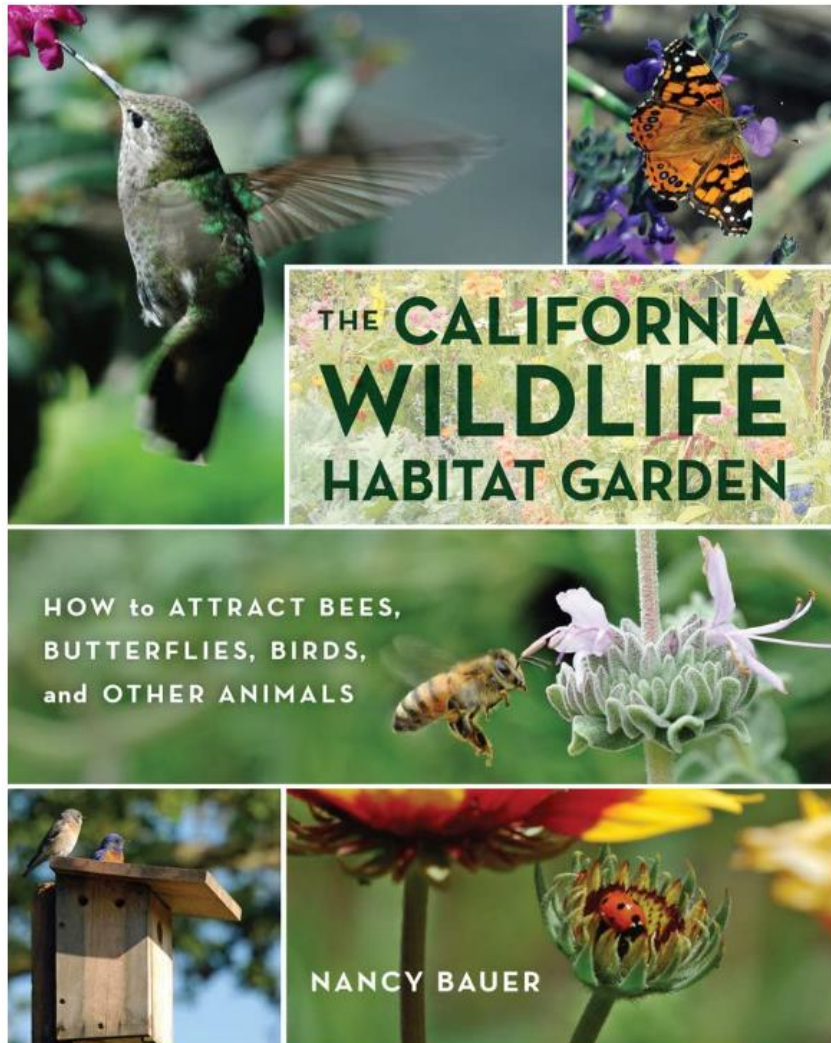
SCIENTIFIC NAME	COMMON NAME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	V	R	W	E	H	L	W	M	A	D
<i>Abronia latifolia</i>	Coastal sand verbena			☼	☼	☼	☼	☼	☼	☼	☼			H	P	Y	0.5'	L	☼	☼	5	A	
<i>Achillea millefolium</i>	Yarrow				☼	☼	☼	☼	☼	☼				H	P	W	3'	L	☼	☼	8	B	
<i>Agastache urticifolia</i>	Nettleleaf giant hyssop					☼	☼							H	P	Px/R	2'	L	☼	☼	3	B	
<i>Apocynum cannabinum</i>	Indian hemp						☼	☼	☼					H	P	W	6'	M-H	☼	☼	8	C	
<i>Arctostaphylos</i> 'Howard McMinn' 🦋	McMinn manzanita		☼	☼										S	P	Px/W	6'	L	☼	☼	4	A	
<i>Arctostaphylos glauca</i> 🦋	Bigberry manzanita		☼	☼										S	P	Px/W	30'	M	☼	☼	4		
<i>Arctostaphylos patula</i> 🦋	Greenleaf manzanita		☼											S	P	Px/W	7'	L	☼	☼	4		
<i>Asclepias californica</i> 🦋 🚫 🚫	California milkweed				☼	☼	☼	☼						H	P	Px	3'	L	☼	☼	1		
<i>Asclepias cordifolia</i> 🦋 🚫 🚫	Heartleaf milkweed				☼	☼	☼	☼						H	P	Px/Pr	3'	L	☼	☼	5		
<i>Asclepias fascicularis</i> 🦋 🚫 🚫	Narrow-leaved milkweed					☼	☼	☼						H	P	Px/W	3'	M	☼	☼	23	B	
<i>Asclepias speciosa</i> 🦋 🚫 🚫	Showy milkweed						☼	☼						H	P	Px/G/Pr	5'	M	☼	☼	221		
<i>Baccharis pilularis</i> 🦋	Coyotebrush		☼							☼	☼	☼	☼	S	P	W/Y	10'	L	☼	☼	4	A, D	
<i>Baccharis salicifolia</i> 🦋 📷	Mulefat		☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	☼	S	P	W	7'	M-H	☼	☼	3	E	
<i>Baccharis sarothroides</i> 🦋	Desertbroom		☼	☼										S	P	Px/W	10'	L	☼	☼	3	D	
<i>Bidens laevis</i>	Smooth beggartick							☼	☼					H	P	Y	3'	H	☼	☼	7	F	



A monarch butterfly on coyote brush. Photo by Mike Baird on Flickr.



Appendix E. Quote about Coyote Bush from: Bauer, Nancy. The California wildlife habitat garden: How to attract bees, butterflies, birds, and other animals. Univ of California Press, 2012.



THE CALIFORNIA WILDLIFE HABITAT GARDEN / 185

sun or part shade, drought tolerant. 'Mound San Bruno' has a rounded compact shape (4 feet), *R.* 'Eve Case' (5 feet).

Coyote bush (*Baccharis pilularis*). Fall-blooming shrub attracts over 400 insects, highly valuable bird habitat plant for cover, nesting, and foraging. Grow in sun, drought tolerant. For hedgerows, use *B. pilularis consanguinea* (to 8 feet). For groundcover, use dwarf coyote bush, such as *B. pilularis* 'Pigeon Point' or *B. pilularis* 'Twin Peaks', which grow 3-4 feet tall. The female plant is the most useful; the flowers attract insects and the seeds feed many bird species.

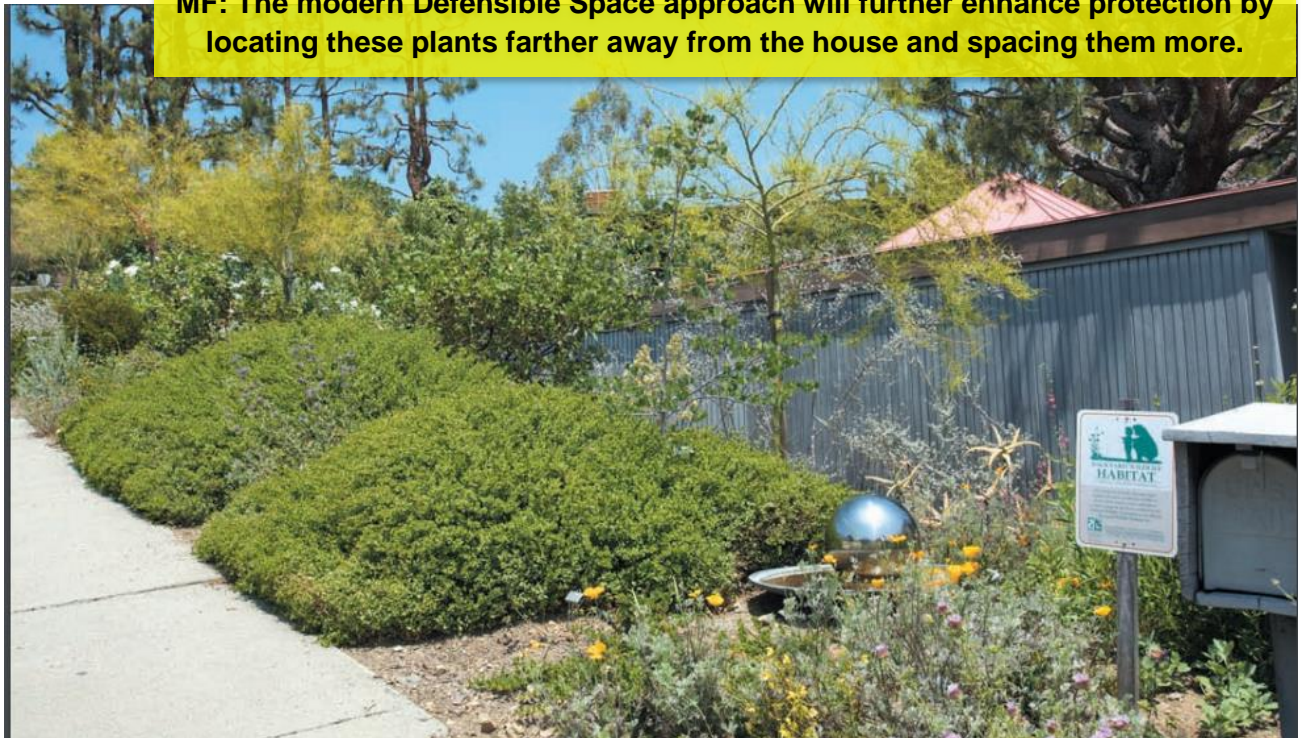
Note: See hedgerow combination of California lilac, coffeeberry, and coyote bush on pages 36-37.

Hollyleaf cherry (*Prunus ilicifolia*). Shiny, sharp-edged foliage resembles holly,

Habitat for Beneficial Insects

Insects, the foundation of the food web, must be present if the beneficial insects—and birds, amphibians, and other insect predators—are to survive. Because aphids show up early in the year and because they reproduce so abundantly, aphid predators need early-blooming native trees and shrubs—ceanothus, hollyleaf cherry and other *Prunus* species, coffeeberry, elderberry, willow, manzanita—for shelter and food sources. Fall-blooming coyote bush is a magnet for insects and the predators that feed on them. Beneficial insects may supplement their diet with pollen, using many of the same plants that bees favor. Tiny pollinating flies and parasitic wasps are attracted to tiny flower clusters, such as thyme and mint flowers, or the commonly planted sweet alyssum. Native buckwheat species (*Eriogonum*) draw hoverflies, minute pirate bugs, lacewings, and many others. The umbels of carrot family members (Apiaceae) are especially appealing to beneficial insects and tiny polli-

MF: The modern Defensible Space approach will further enhance protection by locating these plants farther away from the house and spacing them more.



Appendix F. Town of Moraga Design Guidelines

<https://www.moraga.ca.us/DocumentCenter/View/5789/Moraga-Design-Guidelines-PDF>

Oak Palette

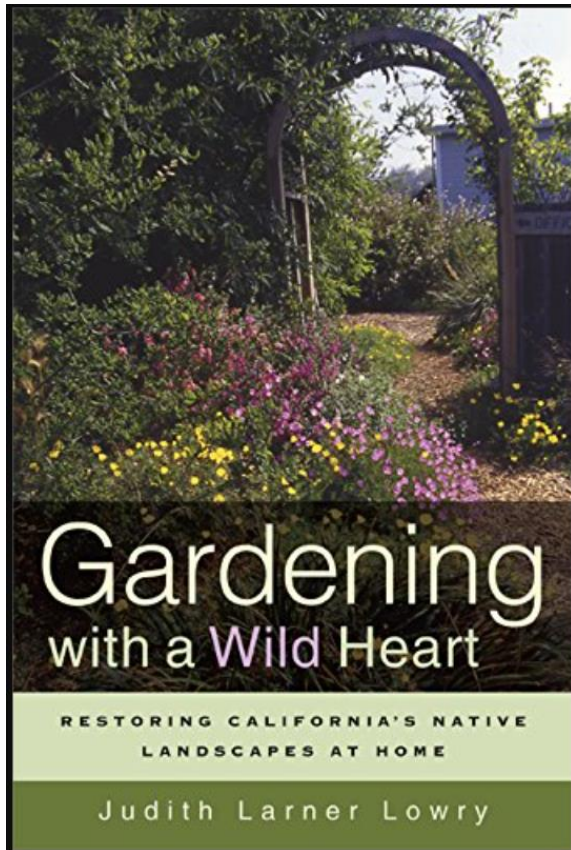
The oak palette is the predominant plant grouping which occurs naturally in the Moraga area. Plants from this group are appropriate on hillside locations, sunny open areas, and along the tops of stream banks. Excessive water during the normally dry summer periods may cause root fungus in oaks, so they should not be planted adjacent to lawns or other areas that will be watered regularly during summer months.

OAK PALETTE

Scientific Name	Common Name	Deer Resistant	Native Plant	Low Water	Maintenance
Tree					
<i>Aesculus californica</i>	California Buckeye	*	*	*	L*
<i>Cercis occidentalis</i>	Western redbud	*	*	*	L*
<i>Quercus agrifolia</i>	Coast Live Oak	*	*	*	L*
<i>Quercus ilex</i>	Holly Oak	*		*	L*
<i>Quercus suber</i>	Cork Oak	*		*	L*
Shrubs					
<i>Arbutus unedo</i> 'Compacta'	Strawberry Tree	*		*	L
<i>Arctostaphylos</i> spp.	Manzanita	*	*	*	L
<i>Arctostaphylos</i>	Vine Hill Manzanita		*	*	L
<i>Berberis</i> spp.		*	*	*	L
<i>Carpenteria californica</i>	Bush Anemone		*	*	L
<i>Ceanothus</i> spp.	Wild Lilac	*	*	*	L
<i>Cistus</i> sp.	Rockrose	*		*	L
<i>Correa</i> sp.	Australian Fuchsia	*		*	L
<i>Cotoneaster</i> 'Low Fast'	Bearberry Cotoneaster	*		*	L
<i>Dendromecon harfordii</i>	Island Bush Poppy		*	*	L
<i>Eriogonum</i> species	Wild Buckwheat	*	*	*	L
<i>Fragaria</i> spp.	Ornamental Strawberry	*	*	*	L
<i>Fremontodendron</i> cvs	Flannel Bush	*	*	*	L
<i>Garrya elliptica</i>	Coast Silktassel	*	*	*	L
<i>Heteromeles arbutifolia</i>	California Holly	*	*	*	L
<i>Myrica californica</i> 'Compacta'	Pacific Wax Myrtle	*	*	*	L
<i>Prunus ilicifolia</i>	Hollyleaf Cherry		*	*	L
<i>Prunus lyonii</i>	Catalina Cherry		*	*	L
<i>Rhamnus californica</i> 'Eve Care'	Coffeeberry	*	*	*	L
<i>Rhamnus crocea</i>	Redberry	*	*	*	L
<i>Rhus integrifolia</i>	Lemonade Berry	*	*	*	L
<i>Rhus ovata</i>	Sugar Bush	*	*	*	L
<i>Ribes indecorum</i>	White Flowering Currant	*	*	*	L
<i>Ribes malvaceum</i>	Chaparral Currant	*	*	*	L
<i>Ribes</i> spp.	Currant, Gooseberry	*	*	*	L
<i>Sarcococca ruscifolia</i>		*		*	L
<i>Salvia clevelandii</i>	California Blue Sage	*	*	*	L
Low Shrubs					
<i>Arctostaphylos edmundsii</i> & cvs	Little Sur Manzanita	*	*	*	L
<i>Arctostaphylos hookeri</i> & cvs	Monterey Manzanita	*	*	*	L
<i>Baccharis pilularis</i> cvs	Dwarf Coyote Brush	*	*	*	L
<i>Ceanothus griseus horizontalis</i>	Carmel Creeper	*	*	*	L
<i>Ceanothus</i>		*	*	*	L

Low Shrubs	
<i>Arctostaphylos edmundsii</i> & cvs	Little Sur Manzanita
<i>Arctostaphylos hookeri</i> & cvs	Monterey Manzanita
<i>Baccharis pilularis</i> cvs	Dwarf Coyote Brush
<i>Ceanothus griseus horizontalis</i>	Carmel Creeper
<i>Ceanothus</i>	

Appendix G. From: Lowry, Judith Larner. *Gardening with a Wild Heart: Restoring California's Native Landscapes at Home*. Univ of California Press, 2007.



Coyote Bush

I began my own garden, juggling its creation with trips into the nearby wildlands for seed and idea collecting. Without quite knowing what I was doing, I began to try to work myself into my new home through gardening on my one-acre homesite with these plants. I never drew up a plan but depended on visions gained through explorations of the surrounding wildlands. I haven't been tied to these visions but have kept open to surprises; indeed, I have come to see surprises as the highest kind of gardening experience. Gardening with our local flora has allowed me to study and live with plants in such a way that I have discovered qualities of which I was previously unaware.

Take coyote bush ("coyote brush" to some).

On my flat, once heavily grazed, piece of land, the only species repre-

senting the northern coastal scrub plant community was coyote bush, *Baccharis pilularis consanguinea*, an undervalued species often removed when a garden is made. When we began the removal of weedy grasses, brambles, and French broom, we left islands of coyote bush, good places for mysterious rustlings in the early morning. I began to think about and appreciate coyote bush, and slowly I found others who had thoughts about this plant. As I talked to people about coyote bush, information began to emerge. What had begun as a solitary conversation expanded to include many talkers, and eventually a loose association formed, dedicated to protecting and restoring habitat in our town. At first jokingly and then as a matter of course, we called ourselves Friends of the Coyote Bush.

SAGE LA PENA *I asked Sage La Pena, an indigenous Californian of the Wintu tribe, how she learned about native plants, and how she began growing them. Sage is the manager of the native plant nursery at Ya-Ka-Ama Indian University in Forestville, California.*

“It started when I was born,” said Sage. “I don’t know why I know how or when to collect seeds. I just absorbed it growing up.”

She told of trips down the Russian River with relatives, where conversation about the plants they were passing was the background of the trip.

“I didn’t think I really knew anything until I applied for a job as a naturalist; then I realized how much I had absorbed.”

“So,” I said, “you learned about native plants from your family.”

“That was one way.” she said, “But there’s a second way. Like my brother wakes up with a new song, I wake up knowing something about plants that I didn’t know before. I dream it.”

We learned that coyote bush, with its late bloom, is an indispensable source of nectar in the autumn, when hundreds of insects take advantage of its nectar, including *Paradejeania rutillioides*, the Tachina fly, whose larvae

are parasitic on numerous insect pests harmful to important agricultural crops. An electrician working on my house opened some buried electrical boxes to find soft deer mouse nests made of the fluffy pappus of coyote bush seeds. A local hiker, caught in a tight spot on a steep cliff, grabbed onto coyote bush, sturdily rooted into the cliff, and pulled himself to safety.

The soil under coyote bush is rich, good for growing vegetables or for sheltering native herbaceous plants like checkerbloom or brodiaea, native bunchgrasses like the blue fescue and coastal hairgrass. Its flowers when gone to seed cover the bush like white snow, gleaming in the winter sun.

Some birds, like wrentits and white-crowned sparrows, live their whole lives in coyote bush, finding there all they need for perching, nesting, breeding, eating, and resting. Creatures like the rare mountain beaver find homes and food where coyote bush is. Coyote bush is enough for them.

We pondered the mysteries of its many forms, from the graceful shrub-sized mounds, like clouds on a hillside, to the low-growing, ground-hugging form, to those individuals that unaccountably shoot up to tree size. As we learned more, one of us said, “It’s hard to remember that once I thought coyote bush was just . . . coyote bush.”

Some call it “tick bush” and hold it in low regard, considering it a mere interloper where there could be grasses and colorful wildflowers, but here on the coast, bunchgrasses and perennial wildflowers thrive in its gracious company. When the exotic grasses are dry and dormant in late summer, look near the skirts of *Baccharis pilularis* to find soft tufts of native grasses, still partly green, interspersed with late-blooming wildflowers like the tarweeds, both madias and hemizonias.

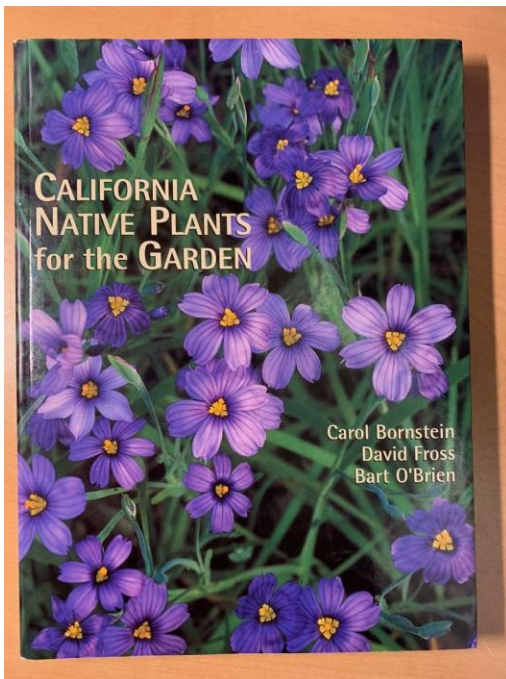
In the garden, its rich green foliage and neat mounding habit make a satisfying background plant for other, showier species. One gardener discovered that cutting coyote bush seedlings to the ground when they are small will cause them to sprout back shapely and round. In other situations, where competition causes it to grow in a distorted fashion, it can be pruned to enhance its sculptural qualities. After fires, we watch the new green shoots sprout from the crowns, under a burned hoopskirt of blackened branches. Galls form on its leaves; some of us think it is helpful to remove them, but we don’t know for sure. It is to coyote bush that I turn when dis-

couraged or in need of a reminder of all that is available to learn in my own back yard.

Visions

I began to see the dim outlines of a vision of my home, nestled into the intricate earth, surrounded by those trees, shrubs, grasses, and wildflowers that at one time graced this land, and surrounded also by those birds, insects, rodents, and mammals that have slept in, eaten off, hidden in, bred in, and otherwise hung out in these plants for the past ten thousand years. Home was becoming more particularly defined, more specific, more tied to the details of smell, color, and form, as we searched out the clues and looked at the pieces. The white-crowned sparrow, famous for its different dialects, has a clear, sweet whistle, called the Palomarin, or clear dialect, heard only in the area reaching from my town to a lake three miles away. Along our coast, the California poppy occurs in a lemon yellow rather than crayon orange variety.

Appendix H. Bornstein, C., Fross, D., O'Brien, B. (2005). *California Native Plants for the Garden*. United States: Cachuma Press.



Atriplex—Baccharis

Open with Photo Editor

A more aggressive pruning every 5 to 7 years will remove old wood, rejuvenate the plant, and ensure continued fire resistance. Quail bush can be sheared into a formal hedge if desired. This requires more frequent pruning and results in fewer flowers. Monthly summer irrigation benefits coastal plantings and is essential to plants in hotter inland areas. Pests and diseases are insignificant.

Baccharis pilularis
COYOTE BRUSH
Sunflower Family (Asteraceae)

Plant Type: Evergreen shrub.
Geographic Zones: All except high mountains and deserts.
Light: Sun.
Soil: Adaptable.
Water: Drought tolerant to occasional.
Natural Habitat and Range: Dunes and bluffs, dry slopes, and open woods in chaparral and coastal scrub communities below 2500 feet; northwestern Baja California to the Oregon coast.

Coyote brush can evoke a curious range of responses from gardeners. Many recognize its merits in the landscape and praise coyote brush (also known as

coyote bush) for its hardiness and reliability. Some, like Judith Lowry, author of *Gardening with a Wild Heart*, find in this humble shrub a deeper connection to the California landscape; these admirers even belong to a playful and loose affiliation called Friends of the Coyote Bush. Still others regard this “coyote” as a weed and cannot imagine using it in their gardens.

Like many wide-ranging species, coyote brush’s growth habit varies considerably. On windswept headlands it is commonly a prostrate shrub with a dense, congested habit, while in open fields it typically has a more spreading, erect form and can reach 8 feet in height. Its thick, resinous, green or olive green leaves measure up to ¾ inch long and have coarsely serrated teeth. Fall-blooming male or female flowers are borne on separate plants and cover the stems with an abundance of cream-colored rayless flowers. The male flowers are quickly shed, but debris from the female plants’ fluffy fruits can be a nuisance. Most horticultural selections are male for this reason.

Even though it is well known as a tough and drought-tolerant species, coyote brush’s garden performance will improve greatly with moderate summer watering and occasional pruning. Prune coyote brush into a tight hedge, leave it in a natural condition as an informal screen, or even shear it as topiary. Coppicing will freshen both upright and groundcover forms.

Pruning is best accomplished in late winter before the flush of spring growth begins.

Coyote brush adds significant value in the habitat garden. It is frequently used in restoration projects because it spreads rapidly and quickly provides food and cover for a variety of birds, mammals, and insects. Some birds, like wrentits and white-crowned sparrows, may spend their entire lives among stands of coyote brush.

Coyote brush is prone to attacks by mites, leafhoppers, lace bugs, white fly, and occasionally flathead borers. Each requires treatment and can compromise the aesthetics of the planting. Coppicing will effectively break the cycle of heavy infestations, but in some cases removing infected plants is required. Vigorous, healthy plants suffer fewer infestations, and regular maintenance can help keep insects to a manageable level.

Cultivars: Two male selections of coyote brush are commonly grown in the nursery trade and are sometimes incorrectly labeled. 'Twin Peaks #2' is a spreading cultivar to 3 feet tall and 8 feet wide. Its bright green leaves are held tightly along the stems. It grows as a dense, mounding form that eventually becomes a sizeable shrub with age. 'Pigeon Point' is a smaller shrub with larger, bright green leaves. It has a lax, undulating habit and grows to 2 feet tall and 8 feet wide. Both selections can be sheared or even mowed as a lawn alternative. Some local agencies include them on lists for use in fire-prone regions because they demonstrate fire resistance as long as they are watered and pruned consistently to remove bulk and maintain a low form.

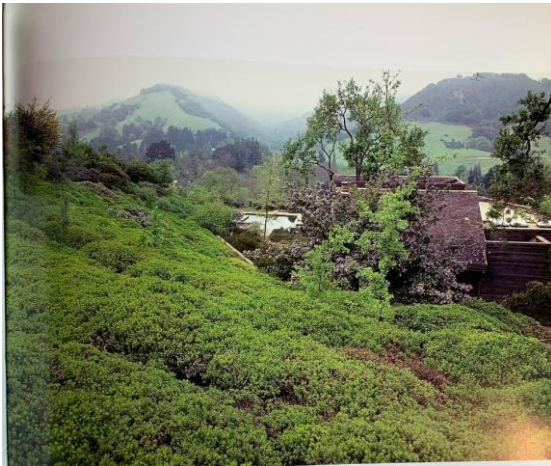
MF: The modern Defensible Space approach will further enhance protection by locating these plants farther away from the house and spacing them more.



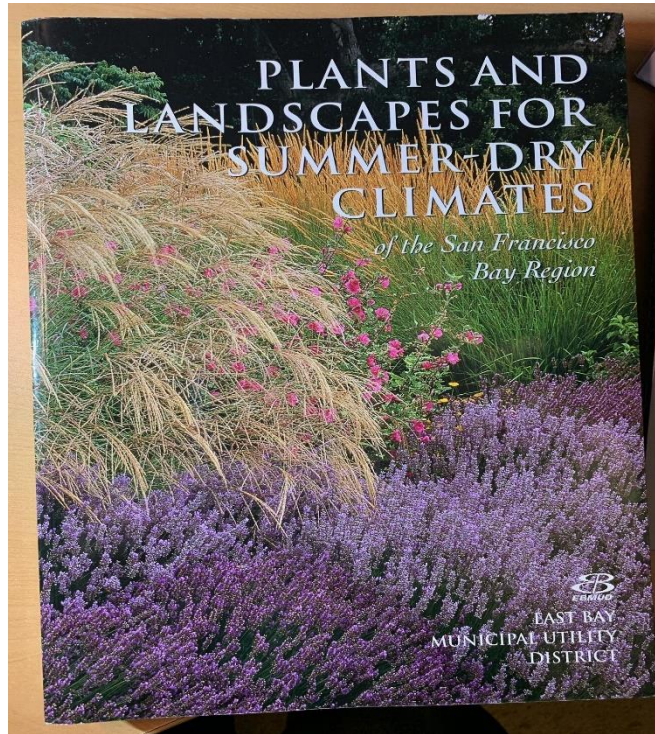
Twin Peaks #2 coyote brush (both sides of path) and Pigeon Point coyote brush (bright green, low-spreading plant in lower right foreground), private garden, La Honda. STEPHEN INGRAM




Appendix I. The EBMUD book. Harlow, N. (2004). Plants and Landscapes for Summer-dry Climates of the San Francisco Bay Region. United States: East Bay Municipal Utility District.





MF: The modern Defensible Space approach will further enhance protection by locating these plants farther away from the house and spacing them more.



Baccharis pilularis (coyote brush)

 ZONES 5-11, 14-24. EVERGREEN SHRUBS. SIZE VARIES.

 Adaptable shrub or groundcover for dry-summer climates. Small, shiny green leaves kept fresh and green with periodic cutting back in late winter. Upright forms are 3-5' x 4-5'; groundcover forms are 1-2' x 6'. Full sun, little or no water near coast; may benefit from monthly summer watering in hot interior gardens. Tolerant of drought, salt spray, alkaline soils. Native to coastal California and Oregon. Attractive to butterflies; good habitat plant. 'Pigeon Point' is a fast-spreading groundcover to 1' x 10-15'. 'Twin Peaks' has smaller, dark green leaves and grows more slowly.



To the Joint Fire Prevention Ad Hoc 2x2 Committee:

Orinda City Councilmembers Latika Malkani and Darlene Gee

MOFD Boardmembers Craig Jorgens and Mike Roemer

November 14, 2023

Dear Committee Members,

Much has transpired since your last meeting in August. I offer this brief summary for your convenience.

To re-cap: in September, residents dismayed about the harsh direction of MOFD's vegetation management program turned to the Orinda City Council for help. The Council responded quickly with an eloquent letter to MOFD (dated Sept 6) which included these points:

- The existing Ordinance and the proposed Ordinance are confusing and lack easy-to-understand guidance for those wishing to comply, and both lack objective criteria that concerns the Council as it has led to the perception of unequal application of the Ordinance.
- We understand a threat of litigation may have initiated the need to bolster what was set forth in Ordinance 23-04, and that has created a sense of urgency, hence proposed Ordinance 23-08. However, given the concerns that we heard and share, in order to avoid the continuation of the current legal challenges, or a new lawsuit, it is advisable for the District to slow down and engage in a community consultation to ensure a shared understanding of alternatives which were considered, including how other communities have approached the matter and how to best communicate to property owners how they can comply with the District's requirements.
- It is unclear if the rationale from which the new requirements were drawn contemplated application to already developed and established communities. If not, these requirements may be more onerous than understood and have the unintended consequences of not being accompanied by landscape plans, geological hazard abatement district considerations, and habitat protection plans that would be designed to mitigate the environmental effects of the Ordinance.
- The lack of templates and/or models that illustrate what is being required and how to meet the objectives of the Fuel Break requirements and the sometimes-competing obligations to protect sensitive areas and other environmental considerations, is contributing to the community concerns and lack of understanding. Providing templates and/or models is essential.
- Such templates are also necessary to illustrate to a homeowner how to apply for Modification.
- The lack of clear and objective criteria raises concerns about how the Ordinance can be applied evenly and equally to all property owners. The Fire District should ensure consistency in how these Ordinance provisions are implemented.
- On-the-ground experience shows that compliance in and of itself is not necessarily bringing the totality of considerations into play. For example, one property owner takes the level of

clearance to such a degree as to impact creek banks potentially causing landslides and water quality issues whereas a measured approach would have met the goals of the Ordinance without causing environmental harm had the homeowner known the rules were different for a creek area.

- Providing more resources to assist residents to understand and meet their obligations is necessary, as in many situations, property owners are unable to do so without such assistance. As there is a cost to comply, and some view this as an unfunded mandate, the District providing access to a biologist, Geotech resources, or other services, when a property owner seeks a modification, for example, could mitigate these concerns. This would also contribute to an increased level of consistency in implementation.

In closing, the City offers:

“It is clear from what we heard and from our own understanding that additional investment of time and public engagement is necessary. The City stands ready to assist the District in whatever ways we can to navigate this important issue. We would be happy to co-host with the District and engage in possible forums or town halls to foster that community consultation. In addition, while we could use the existing Fire Board/City Council 2 x 2 Committee as a sounding board as well, given the fact that the fuel break requirements impact Moraga as well, a joint meeting of the Orinda City Council, Moraga Town Council, and Fire Board may be desirable. “

I know of no written response from MOFD to the City of Orinda’s letter. However, in response, at the MOFD meeting the following day, Chief Winnacker proposed to MOFD’s board the following steps, to be brought forward in advance of the next meeting (Sept 20). For accuracy, I will use the Chief’s own words, drawn from the meeting audio recordings, with the understanding that they are not as precise or polished as if they had been written.

Chief Winnacker’s suggestions:

- Work with the environmental consultants used on the Shaded Fuel Breaks, to provide a list of recommendations based on fuel type or a template that residents can use to guide their work
- Provide access to resources with regard to Best Practices in consideration of the Dusky Footed Woodrat, Alameda Whipsnake, and other special status species that are present in the District or whose habitat might be present on a resident’s property.
- Propose adding to our fee schedule the opportunity for residents to utilize a District contractor, both biologist or geologist, in the same manner that we use for building plan review, We also can provide a list of ecological or environmental review companies who have done work in this area.
- In response to concerns raised by the City and residents, we are producing a modification guide or template, in a similar manner that we have done for obstruction of a fire apparatus or traffic calming measures, laying out the steps ... basically as an FAQ along with some guidelines on laying out a modification. ... the proposed guide or template would lay out the ways in which we have seen requests and how they were formatted and the sort of things that ought to be provided and the alternatives that should be included.
- We will bring those forward in advance of the next meeting so that both members of the public and the board have a better sense both of what the requirements are, and how residents can

meet the fire safety requirements while minimizing impact to the environment and not making this a voyage of discovery for each parcel, being able to capture the lessons learned and the best practices we've seen put into place on other parcels

- As far as the technical template, if there's interest from the board in creating a flyer that illustrates what right and wrong looks like, with more sophistication than what we've got on our website, we certainly could do that.
- On September 19, at 7 o'clock in the Founder's Room at the Community Center, which is the night before the Regular (MOFD) Board Meeting, Dennis Rain, Jeff Isaacs and I will be holding a public meeting where we will present the fire science and the modeling that went into the development of our modifications, local amendments to the Fire Code, as well as the proposed ordinance for updating our fuelbreak requirements as well as our existing defensible space ordinance. So that will be a presentation, followed by an opportunity for questions and answers.
- I'd like to somehow, and maybe we can talk about it further in a meeting, maybe thru one of our committees that Director Jorgens and Roemer are on, but maybe an education component for landscapers, something we can give landscapers, something we can bring to the nurseries in the area, that explains what are requirements are, and what they DON'T have to do. I'm not saying it correctly, but I just see sometimes that they just go in and cut and denude an area because it's a lot easier.

And finally, the Chief offers, " We recognize and acknowledge that for a resident who is not aware of the background, hasn't done this before, it can be overwhelming, perhaps even opaque. ...So we'll put together some products we believe will help make that process better understood and increase awareness of what the requirements are for the fuelbreak, and how residents can comply with those in an environmentally sensitive or minimizing disruption of the natural space. "

CONCLUSION:

My take: kudos to the Chief for his can-do attitude and his ambitious plans, even if his timeline is wildly optimistic. Too bad the public presentation hasn't happened. As Mayor Miller writes in the City of Orinda's follow-up letter of Sept 20:

"... the Fire Chief indicated a number of steps the District will be taking to inform and educate our residents about the requirements of the Ordinance. We look forward to having the opportunity to continue to engage with the District in a collaborative manner in the development, evolution, and dissemination of this information as we all work towards a more fire-safe Orinda.

So do I. I want to help. I am offering to help. The winter gives us a short break before the whole de-vegetation process revs up again. I hope we take advantage of this time so we can move into spring with a deeper understanding of the consequences and a greater sense of common purpose.

Sandy Pearson

MOFD Joint Fire Prevention 2x2 Committee
Councilmembers Malkani and Gee
Boardmembers Jorgens and Roemer

From Sandy Pearson

Nov. 14, 2023

A Review of MOFD's Modification FAQ

Lots of good ideas were floated in September – how are those ideas being implemented? I thought it would be helpful to review the improvements to MOFD's website made in response to the Orinda City Council's requests for clarification. If there are other new resources available, I haven't heard about them. The new FAQ's are included here in their entirety, along with my comments.

FAQ: Wildfire Safety Modifications – from MOFD website- Nov 14, 2023

comments by Sandy Pearson

There is no heading in any of the main menus for "Modifications". You have to look under FAQ's. It is easier to find information about Surrendering Newborns, which has its own heading.

I used the magnifying-glass "search" icon and typed in "Modifications", which took me straight to the Modification Request form itself, without mentioning the FAQ's. The Request Form cannot be previewed in its entirety; you can't get to page 2 without filling in page 1. This makes it hard to assess how long it is, what information it calls for, and whether it's worth doing.

If you do make it to the FAQ section, subheading "Wildfire Safety Modifications" you will find the following. (Although almost none of them are technically Questions.)

I don't think the violations you identified are fire hazards.

MOFD Ordinance 23-03 and 23-08 identify the requirements for all parcels within the fire district. These ordinances were written to reduce the risk of destructive wildfires in our community. While it may be hard to visualize how a single item contributes to the spread of wildfire, fire is dynamic and opportunistic and will spread where combustible items are present. It must be addressed if the item in question is covered by the requirements defined in the ordinances listed above.

Sandy comments:

This really happened to me. I got a pre-citation notice with a mystifying photo of some oleander bushes along the side of the driveway. They were not under a tree, they were next to the asphalt, keeping a steep slope in place and posing no hazard that I could imagine. I didn't know what to do. Finally, I sent in a photo of them taken from a different angle. It was approved.

It seems likely the violation identified by a rookie inspector was, in fact, NOT a hazard. The appropriate action in this case would have been to contact a supervisor for explanation or re-consideration. Sometimes mistakes are made. Unfortunately, this FAQ makes MOFD out to be unapproachable and unbending. “Fire will spread where combustible items are present” – end of story. Are your items combustible? Cut them down!

Referring residents to Ordinance 23-03 Ordinance 23-08 – 12 and 20 pages of complex and mostly irrelevant detail – will certainly not provide the information they need. Is this really the best we can do to make the rules transparent and accessible?

I think I should be exempt from these requirements.

MOFD Ordinance 23-03 and 23-08 apply to all parcels in our community. Due to the network effect of wildfire spread, it is of the utmost importance all parcels and meet the standards defined in the ordinance.

Sandy comments: Are any of my neighbors really that entitled? Surely there is usually some justification offered! A somewhat jaundiced portrayal of District residents, I hope it is not accurate.

It will cost too much money.

The State Fire Code and the wildfire safety requirements included in Ordinance 23-03 and 23-08 apply to all parcels in the community. Wildfire safety and preparedness are relatively inexpensive compared to losing your home or the loss of human life. Treating and removing wildfire fuels accumulated over many years is costly, but once the property has been made safer, annual maintenance is much more efficient. Some properties will need to develop a multi-year plan to reduce wildfire risk and reach compliance. In these cases, the landowner should contact the Fire District for guidance in developing a realistic and sustainable wildfire Fuels Management Plan. The online Modification Request form is available here: {under construction}.

Sandy comments: Some of my neighbors sincerely cannot afford the large and recurring expense that is being demanded of them. The heading of this section is entirely unsympathetic to their situation, and will certainly not inspire them to confide in, or seek help from, the Fire District. What if I can’t afford it? That’s an actual question, maybe even a frequent one.

I just spent thousands of dollars on landscaping. If you had only told me sooner, I would comply.

The requirements included in MOFD Ordinance 23-03 and 23-08 have been published and available for several years. You or your landscaper can find the requirements here- <https://www.mofd.org/our-district/fuels-mitigation-fire-prevention/annual-abatement-requirements> You can also request a free home wildfire safety assessment from one of the Fire Districts Fire Adapted Community Ambassadors here: <https://www.mofd.org/community/outreach-programs/fire-adapted-community-ambassador-program>

Sandy comments: As Chief Winnacker wryly observed at the Sept 20 MOFD meeting, “... folks who were not aware of the requirement, because we had not been actively enforcing an area (that is once again a blind spot for those of us who were very close to it), our assumption at

this point was that everyone had heard about this and were aware, and based on the feedback that we've been getting... that hypothesis did not stand the first contact."

I am elderly to do this on my own.

Based on the conditions present on a specific parcel, the homeowner may need to hire a professional to perform the required mitigation. The Fire District keeps a list of local fire mitigation contractors here: <https://www.mofd.org/our-district/fuels-mitigation-fire-prevention/weed-abatement-contractor-list>

Sandy Comments: Grammar, people!

What right does the Fire District have to inspect my property?

Through the legislative process, the California legislature has created laws and regulations for defensible space and weed abatement. These laws and regulations can be found in Public Resource Codes 4290 and 4291, Government Code 51182, and Health and Safety Codes 14875 & 14876. The state legislature has also granted Fire Districts the ability to create more restrictive regulations.

Sandy comments: The Fire Chief has said that the Fire District actually does NOT have the right to come onto your property without your invitation. I believe this entire paragraph is incorrect and perhaps even intentionally misleading.

My property is a habitat for wild animals.

State and federal laws guide the type of fuel mitigation work that may be performed in and around recognized habitats for rare, threatened, endangered, or special status species. If you feel your parcel qualifies, you can submit documentation identifying portions of your parcel as recognized habitat. You will also need to provide an approved Habitat Management Plan and the documentation describing Best Management Practices for vegetation management. If you have a question regarding the presence of protected habitat, please contact the Department of Fish and Wildlife by email at AskBDR@wildlife.ca.gov and/or by phone (707) 428-2002.

Sandy comments:

A Habitat Management Plan costs around \$10,000. Presenting this as a requirement does not at all respond to the concerns of the many residents who want to care for the wildlife they enjoy in their backyards. These are not endangered species, which most people will never see. These are the everyday animals struggling to survive in our neighborhoods, and we are now making it much harder for them. This dismissive response suggests wildlife is viewed as trivially unimportant not worthy of official consideration. In fact, it is a big concern for many residents, with good reason.

Trying to contact CDFW is likely to prove fruitless at best; impossible is more likely. Don't we have a local Fire District so we can get answers to our local concerns? Why would we try to call a state agency in Sacramento to ask about the quail in our backyard?

There are many things local residents can do to preserve habitat for wildlife while still complying with the requirements. Taking full advantage of the new provisions allowing spaced bushes is an important one. Cutting grass to 3 inches is also very different than cutting it to the ground; leaving evergreen ground covers like ferns and sedges provides some cover, and helps hold the dirt on steep slopes. In practice, the Fire District approves a wide variety of treatments; bare dirt is just one option. Many of the regulations are ambiguous, or depend on case-by-case decisions from the Fire Chief as to what constitutes “hazardous vegetation”.

We badly need a coherent and detailed set of rules defining what is and is not hazardous. No one knows exactly what’s acceptable, and this uncertainty leads to harsher results. Landowners don’t know they have choices and don’t want to get in trouble. Contractors don’t want to have to come back, or fail reinspection, so they err on the side of “too much”. Cutting carefully takes longer and costs extra.

Our landscape is more than “combustible items”; nature is not dangerous “fuel”. Our plants feed and shelter our wildlife, make our hills and valleys beautiful, hold our soil in place, protect our waterways and retain moisture in the ground. Most importantly, they delight us, and we all need more joy in our lives.

Other communities have found a balance between fire safety and the needs of nature. We should find out what they have done, discuss it, and decide together what makes sense for Orinda.

I have a creek on my property.

State and local regulations generally prohibit vegetation management in creek and stream beds (riparian areas). While the exact definition of a riparian area may require a geologist, as a general rule, this is interpreted to mean no work may be performed beyond the edge of the bank leading to a watercourse. In these cases, fuel breaks can be required on other portions of the parcel outside of the riparian area. If this applies to your property, please indicate where the riparian area is located and what alternative locations, outside of the riparian area, you propose for an alternative fuel break using the Modifications Request form available here <https://www.mofd.org/our-district/fuels-mitigation-fire-prevention/annual-abatement-requirements>

About your creek - Lucky you! Riparian areas should be protected – although this paragraph immediately suggests a geologist may be required in order to do so. Alternative locations sounds promising, but if the riparian area occupies a wide portion of the lot, there may not be much room for a fuel break. Will I have to take out all my landscaping instead?

Orinda’s tree ordinance refers to riparian plants, those that are not found on adjoining upland areas. It would be so helpful if there was information about the plants normally associated with riparian areas, many of which stay green in summer and are less flammable. Could we have pictures? Examples of alternative fuelbreaks that have been approved?

My property is too large.

Fuel breaks are only required within 100' of the property line, regardless of the total size of the parcel. This requirement is of particular importance on large parcels as the potential for fire is

increased due to additional opportunities for ember cast and fewer access points. Large parcels with limited access make it more difficult for firefighters to extinguish wildfires.

Sandy comments: My property is too large! I don't think anyone has actually said that! Ever! Certainly not a Question you hear Asked Frequently! Using the word "only" to describe a 100 foot fuelbreak on a 2 acre parcel is like saying the interest on your car loan is "only" 38% a month! As for additional opportunities for ember cast –houses probably throw off a lot of embers. Vacant land surely has a much lower fuel load than a 4,000 square foot wood-frame structure next door.

Why am I the only one being cited for these violations? What are you doing about the City and Town parks, the East Bay Regional Park District, and the East Bay Municipal Utility District?

The Fire District continues to work with other public agencies to bring their lands into compliance and protect District residents from wildfire. These agencies have long term Fuel Management Plans and are carrying out projects that, over time, will bring them into compliance with the fire safety goals of the ordinance.

Sandy comments:

I am puzzled by MOFD's apparent need to assert alpha-male dominance over EBRPD and EBMUD. These agencies have Watershed Master Management Plans, Ranger Resource Management Plans, Fire Management Plans and Habitat Conservation Plans, all developed at great (taxpayer) expense with input from citizen groups, as well as large numbers of experts in a variety of disciplines. They are required by law to implement these plans, for the protection of watershed and recreation lands that the public needs and wants.

MOFD would serve its constituents better by copying some of the policies of these better educated agencies, instead of seeking to drag them down to our base level of ignorant and careless destruction.

In fact, when MOFD congratulates itself on its environmental sensitivity, it inevitably cites the Shaded Fuel Breaks, miles of which cross EBMUD or EBRPD lands and were designed to their higher standards, not the draconian ones applied to us defenseless residents.

Why am I responsible for trimming low-hanging branches on roadside trees and bushes that are within the city/town right-of-way?

Clearing encroaching vegetation along local roads will increase our ability to evacuate residents and allow fire apparatus better access to the fire. Both communities have reviewed the regulations and stated that property owners are responsible for maintaining the vegetation in the right-of-way.

Finally a question! Too bad the answer is, because we said so.

IN CONCLUSION:

As a writer, it pains me to see declarations used as questions. As a resident, I regret that there is still no convenient resource to help me make complex decisions regarding vegetation management on my property. As a lover of nature, I am saddened that our local Fire District continues to advocate for the destruction of as much nature as the law allows. People who want to protect wildlife on their property are not thinking about hypothetical yet legally protected whipsnakes. They want to continue to enjoy birds coming to their feeders, and rabbits cautiously emerging from the bushes. The future of these simple and formerly ubiquitous creatures is seriously threatened by MOFD's draconian program. Yet they continue to bluff and deny and avoid engagement or collaboration.

Their recalcitrance is hurting their own cause. Protecting our community from fire requires everyone to work together. People can see the Fire District is not taking their concerns seriously and intends to continue business as usual. MOFD prides themselves on pushing the envelope, on having the most aggressive vegetation management policies around. **EVEN THEIR OWN CEQA LAWYERS ADVISED THEM THEIR RULES WERE INDEFENSIBLE UNDER THE STATE LAW**; that's the only reason the regulations about bushes were changed in Ordinance 23-08.

Meanwhile, other jurisdictions are finding ways to strike a balance, and bring more people into the fire prevention tent.

Maybe our local Fire Wise Councils can be more inclusive, and blunt some of the political damage MOFD continues generating.

How has MOFD responded to the Orinda City Council's letters of September 6 and 20? The requests for public meetings, for templates, for resident access to expert advice? This page of FAQ's is the only result I know of. It's not nothing, but it's pretty close. Hopefully something better lies ahead.

Sandy Pearson

Orinda