



County of San Diego, Department of Planning and Land Use
FIRE, PLANTS, DEFENSIBLE SPACE AND YOU
BUILDING DIVISION

Providing enough fire protection for rural areas of San Diego County has become difficult. This is due to the large number of residents who are moving to the rural areas of the County and the increasing amounts of brush, weeds and other vegetation that provide fuel for wildfires and cause them to burn hotter. While it's important to protect the wild native vegetation in the County's rural areas it's also important to take steps for adequate fire protection for structures. Legally clearing vegetation protects the other wild native plants and at the same time eliminates the fire hazards.

During the October 2003 Firestorms, it was painfully evident that there was insufficient "Defensible Space" on many properties which led to destroyed homes and other structures. As a result, San Diego County has amended an ordinance to require residents to keep their property free of fire hazards that include certain vegetation, green waste and rubbish. Residents can comply with these ordinances by creating a "Defensible Space" and taking other preventative steps on their property.

WHAT IS DEFENSIBLE SPACE?

This is the area around a structure where combustible vegetation, that can cause fire, has been cleared, reduced or replaced. This space acts as a barrier between an advancing fire and a structure.

HOW DO I CLEAR LEGALLY?

Combustible vegetation can only be removed by mowing, cutting and grazing as long as the root structure is left intact. Any trees you remove shall have the stumps cut no higher than 8" above the ground. The only exception would be an orchard. Orchard trees may have their stumps completely removed.

CAN I CLEAR INTO AN OPEN SPACE EASEMENT?

If an open space easement is located on your property you may legally clear the 100' even if it takes you into that easement.

WHAT IS COMBUSTIBLE VEGETATION?

This is any material that in its natural state will readily ignite, burn and cause fire to move to any structure or other vegetation. This would include dry grass, brush, weeds, litter and waste. This would not include fire resistant landscaping some of which can be found in the "Suggested Plant List For Defensible Space" on page 4 of this handout.

HOW LARGE SHOULD THE DEFENSIBLE SPACE BE?

- You need to clear combustible vegetation in a 100' radius from any structure. Only the fire agency may authorize you to clear more. You are not required to

cross your property line in order to clear the 100'. The neighboring property owner may be required to clear the additional distance by the fire agency.

HOW DO I MAINTAIN THE DEFENSIBLE SPACE?

- You may plant fire-resistant, irrigated, landscaping in the first 50' of the 100' from your structure. These plants need to be maintained all year around.
- You need to keep natural vegetation in the remaining 50' of the 100' space. This would be the area furthest away from your structure. The plants need to be thinned and cut back to no more than 6" above the ground. You may need to do this several times a year since the plants grow back.
- Do not completely remove all vegetation which would leave the ground bare. Some vegetation is necessary to prevent erosion.
- Remove dead and dying vegetation.
- Trim trees that overhang or touch your structures.

WHAT TYPES OF FIRE-RESISTANT PLANTS SHOULD I CHOOSE FOR MY DEFENSIBLE SPACE?

You will find a list of suggested plants for Defensible Space on page 4 of this handout. Generally these plants:

- Grow close to the ground.
- Have a low sap or resin content
- Grow without accumulating dead branches, needles or leaves.
- Are easily maintained and pruned
- Are drought-tolerant

WHAT TYPES OF PLANTS SHOULD I NOT PLANT OR KEEP ON MY PROPERTY?

On page 16 of this handout you will find an extensive list of plants that you should avoid. These plants and trees burn easily since they have large amounts of oil, sap, rough bark and other material that is flammable.

WHAT OTHER THINGS SHOULD I DO TO PROTECT MY PROPERTY AGAINST FIRE?

- You should clear combustible vegetation on your property if it is within 30' of your property line.
- Vary the height of plants and adequately space them. Taller plants need to be spaced wider apart.
- Existing trees and large shrubs should be pruned by cutting off any branches up to 6' above the ground to prevent ground fires from spreading upwards into trees.
- For fire truck access, remove vegetation within 10' of each side of your driveway.
- Remove any tree limbs within 10' of your chimney
- Work with your neighbors to clear common areas between houses, and prune areas of heavy vegetation that are a fire threat to both properties.
- Avoid planting trees under or near electrical lines. They may grow into, or make contact with overhead lines under windy conditions, causing fire.

- If you have a heavily wooded area on your property, remove some of the trees to which will lower the fire hazard. You will improve growing conditions for your trees if you remove dead, weak, or diseased trees. This will leave you with a healthy mixture of both new and older trees.
- Any removed trees may be chipped and left on your property if they don't present a fire hazard. Contact your local fire agency to find out how to do this.
- Don't forget to legally dispose of all your cut vegetation. You may contact your local landfill to inquire about green waste recycling. Open burning may not be allowed. Contact your fire agency for more information.
- Stack firewood and scrap wood piles at least 50' from any structure and clear away any combustible vegetation within 10' of the piles. Many homes have "survived" as a fire moved past it, only to burn later from a wood pile that caught fire after the firefighters had moved on to protect other homes.
- Check and clean your roofs and gutters on all structures several times during the spring, summer and fall to remove debris that can easily ignite from a spark.

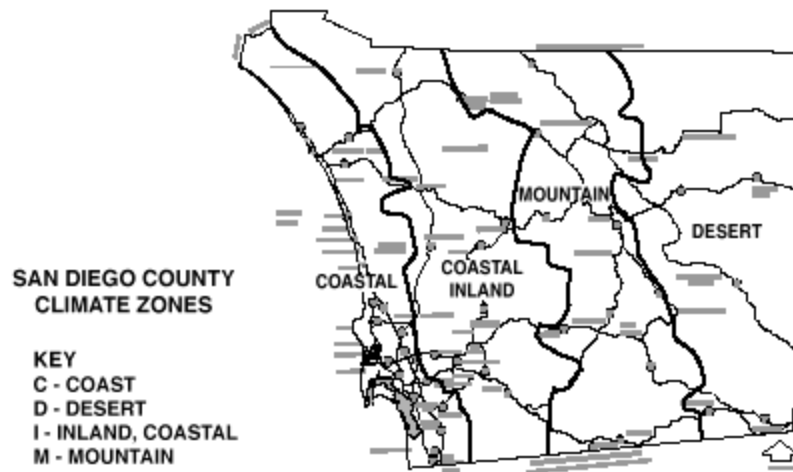
ACCEPTABLE PLANTS FOR A DEFENSIBLE SPACE IN FIRE PRONE AREAS

All plants on the following list are considered drought-tolerant in the climate zone indicated. Remember, however, that no plant is totally fire resistant. Drought-tolerant plants are trees, shrubs, groundcovers, and other vegetation that can grow and reproduce with only natural moisture such as rainfall. Occasional irrigation is necessary only in extreme drought situations.

Plants that are indicated by the "R" are the least drought-tolerant plants on the list. These plants grow best in riparian areas. Riparian areas can be described as areas where the water table is very near the surface of the ground. Although the ground may be dry, the plants growing there will be green and lush all year around.

When first planting drought-tolerant plants, you need to water deeply to encourage the roots to find natural moisture in the soil. This type of watering needs to continue for at least three years. More water should be provided in summer and less (if any) in the winter. After three years, you should be watering the plants less and depending more on the natural rainfall to provide moisture.

Plants on the list which are noted with ** are San Diego County native or naturalizing plant species. These are types of plants native to or brought into the San Diego County area. These plants are able to grow and reproduce in the local climate and the natural rainfall is enough moisture.



SUGGESTED PLANT LIST FOR A DEFENSIBLE SPACE

<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>Climate Zone</u>
TREES		
Acer		
platanoides	Norway Maple	M
rubrum	Red Maple	M
saccharinum	Silver Maple	M
saccarum	Sugar Maple	M
macrophyllum	Big Leaf Maple	C/ (R)
Alnus rhombifolia	White Alder	C/I/M (R)
Arbutus		
unedo	Strawberry Tree	All zones
Archontophoenix		
cunninghamiana	King Palm	C
** Arctostaphylos spp.	Manzanita	C/I/D
Brahea		
armata	Blue Hesper Palm	C/D

<i>edulis</i>	Guadalupe Palm	C/D
<i>Ceratonia siliqua</i>	Carob	C/I/D
<i>Cercidium floridum</i>	Blue Palo Verde	D
** <i>Cercis occidentalis</i>	Western Redbud	C/I/M
<i>Cornus</i>		
<i>nuttallii</i>	Mountain Dogwood	I/M
<i>stolonifera</i>	Redtwig Dogwood	I/M
<i>Elaeagnus</i>		
<i>angustifolia</i>	Russian Olive	I/M
<i>Eriobotrya</i>		
<i>japonica</i>	Loquat	C/I/D
<i>Erythrina caffra</i>	Kaffirboom Coral Tree	C
<i>Ginkgo biloba</i> "Fairmount"	Fairmount Maidenhair Tree	I/M
<i>Gleditsia triacanthos</i>	Honey Locust	I/D/M
<i>Juglans</i>		
<i>californica</i>	California Walnut	I
<i>hindsii</i>	California Black Walnut	C/I
<i>Lagerstroemia indica</i>	Crape Myrtle	I/D/M
<i>Ligustrum lucidum</i>	Glossy Privet	I
<i>Liquidambar styraciflua</i>	Sweet Gum	C/I/M
<i>Liriodendron tulipifera</i>	Tulip Tree	I
<i>Lyonothamnus floribundus</i>		
ssp. <i>asplenifolius</i>	Fernleaf Catalina Ironwood	C
<i>Melaleuca</i> spp.	Melaleuca	C/I/D

Myoporum spp.	Myoporum	C/I
Nerium oleander	Oleander	C/I/D
Parkinsonia aculeata	Mexican Palo Verde	D
Pistacia		
chinensis	Chinese Pistache	C/I/D
vera	Pistachio Nut	I
Pittosporum		
phillyraeoides	Willow Pittosporum	C/I/D
viridiflorum	Cape Pittosporum	C/I
Platanus		
acerifolia	London Plane Tree	All zones
** racemosa	California Sycamore	C/I/M
Populus		
alba	White Poplar	D/M
** fremontii	Western Cottonwood	I
trichocarpa	Black Cottonwood	I/M
Prunus		
xblireiana	Flowering Plum	M
caroliniana	Carolina Laurel Cherry	C
cersifera 'Newport'	Newport Purple-Leaf Plum	M
** ilicifolia	Hollyleaf Cherry	C
** lyonii	Catalina Cherry	C
serrulata 'Kwanzan'	Flowering Cherry	M
yedoensis 'Akebono'	Akebono Flowering Cherry	M

<p>Quercus</p> <p> ** agrifolia</p> <p> ** engelmannii</p> <p> suber</p> <p>Rhus</p> <p> ** lancea</p> <p>** Salix spp.</p> <p>Tristania conferta</p> <p>Ulmus</p> <p> parvifolia</p> <p> pumila</p> <p>** Umbellularia californica</p>	<p>Coast Live Oak</p> <p>Engelmann Oak</p> <p>Cork Oak</p> <p>African Sumac</p> <p>Willow</p> <p>Brisbane Box</p> <p>Chinese Elm</p> <p>Siberian Elm</p> <p>California Bay Laurel</p>	<p>C/I</p> <p>I</p> <p>C/I/D</p> <p>C/I/D</p> <p>All zones (R)</p> <p>C/I</p> <p>I/D</p> <p>C/M</p> <p>C/I</p>
<p>SHRUBS</p> <p>Agave</p> <p> americana</p> <p> deserti</p> <p> ** shawii</p> <p>** Amorpha fruticosa</p> <p>Arbutus</p> <p> ** menziesii</p> <p>** Arctostaphylos spp.</p> <p>** Atriplex</p> <p> canescens</p> <p> lentiformis</p>	<p>Century Plant</p> <p>Desert Century Plant</p> <p>Shaw's Century Plant</p> <p>False Indigobush</p> <p>Madrone</p> <p>Manzanita</p> <p>Hoary Saltbush</p> <p>Quail Saltbush</p>	<p>D</p> <p>D</p> <p>D</p> <p>I</p> <p>C/I</p> <p>C/I/D</p> <p>I</p> <p>D</p>

** Baccharis		
glutinosa	Mule Fat	C/I
pilularis	Coyote Bush	C/I/D
Carissa grandiflora	Natal Plum	C/I
** Ceanothus spp.	California Lilac	C/I/M
Cistus spp.	Rockrose	C/I/D
** Cneoridium dumosum	Bushrue	C
** Comarostaphylis		
diversifolia	Summer Holly	C
Convolvulus cneorum	Bush Morning Glory	C/I/M
Dalea		
orcuttii	Orcutt's Delea	D
** spinosa	Smoke Tree	I/D
Elaeagnus		
pungens	Silverberry	C/I/M
** Encelia		
californica	Coast Sunflower	C/I
farinosa	White Brittlebush	D/I
Eriobotrya		
deflexa	Bronze Loquat	C/I
Eriophyllum		
** confertiflorum	Golden Yarrow	C/I
staechadifolium	Lizard Tail	C
Escallonia spp.	Escallonia	C/I

Feijoa sellowiana	Pineapple Guava	C/I/D
Fouquieria splendens	Ocotillo	D
** Fremontodendron		
californicum	Flannelbush	I/M
mexicanum	Southern Flannelbush	I
Galvezia		
juncea	Baja Bush-Snapdragon	C
speciosa	Island Bush-Snapdragon	C
Garrya		
elliptica	Coast Silktassel	C/I
** flavescens	Ashy Silktassel	I/M
** Heteromeles arbutifolia	Toyon	C/I/M
Lantana spp.	Lantana	C/I/D
Lotus scoparius	Deerweed	C/I
Mahonia spp.	Barberry	C/I/M
Malacothamnus		
clementinus	San Clemente Island Bush Mallow	C
** fasciculatus	Mesa Bushmallow	C/I
Melaleuca spp.	Melaleuca	C/I/D
** Mimulus spp.	Monkeyflower	C/I (R)
Nolina		
parryi	Parry's Nolina	I
parryi ssp. wolfii	Wolf's Bear Grass	D
Photinia spp.	Photinia	All zones

Pittosporum		
crassifolium		C/I
rhombifolium	Queensland Pittosporum	C/I
tobira 'Wheeleri'	Wheeler's Dwarf	C/I/D
undulatum	Victorian Box	C/I
viridiflorum	Cape Pittosporum	C/I
Plumbago auriculata	Cape Plumbago	C/I/D
Prunus		
caroliniana	Carolina Laurel Cherry	C
** ilicifolia	Hollyleaf Cherry	C
** yonii	Catalina Cherry	C
Puncia granatum	Pomegranate	C/I/D
Pyracantha spp.	Firethorn	All zones
Quercus		
** dumosa	Scrub Oak	C/I
Rhamus		
alaternus	Italian Blackthorn	C/I
** californica	Coffeeberry	C/I/M
Rhaphiolepis spp.	Rhaphiolepis	C/I/D
Rhus		
continus	Smoke Tree	M
** integrifolia	Lemonade Berry	C/I
laurina	Laurel Sumac	C/I
lentii	Pink-Flowering Sumac	C/D

** ovata	Sugarbush	I/M
** trilobata	Squawbush	I
Ribes		
viburnifolium	Evergreen Currant	C/I
** speciosum	Fuschia-Flowering Gooseberry	C/I/D
Romneya coulteri	Matilija Poppy	I
Rosa		
** californica	California Wild Rose	C/I
minutifolia	Baja California Wild Rose	C/I
** Salvia spp.	Sage	All zones
** Sambucus spp.	Elderberry	C/I/M
** Symphoricarpos mollis	Creeping Snowberry	C/I
Syringa vulgaris	Lilac	M
Tecomaria capensis	Cape Honeysuckle	C/I/D
Teucrium fruticans	Bush Germander	C/I
** Toxicodendron		
diversilobum	Poison Oak	I/M
Verbena		
lilacina	Lilac Verbena	C
Xylosma congestum	Shiny Xylosma	C/I
** Yucca		
schidigera	Mojave Yucca	D
whipplei	Foothill Yucca	I
GROUNDCOVERS		

** Achillea	Yarrow	All zones
Aptenia cordifolia	Aptenia	C
** Arctostaphylos spp.	Manzanita	C/I/D
** Baccharis		
pilularis	Coyote Bush	C/I/D
** Ceanothus spp.	California Lilac	C/I/M
Cerastium tomentosum	Snow-in-Summer	All zones
Coprosma kirkii	Creeping Coprosma	C/I/D
Cotoneaster spp.	Redberry	All zones
Drosanthemum hispidum	Rosea Ice Plant	C/I
Dudleya		
brittonii	Britton's Chalk Dudleya	C
** pulverulenta	Chalk Dudleya	C/I
virens	Island Live-Forever	C
** Eschscholzia californica	California Poppy	All zones
Euonymus fortunei		
'Carrierei'	Glossy Winter Creeper	M
'Coloratus'	Purple-Leaf Winter Creeper	M
** Ferocactus viridescens	Coast Barrel Cactus	C
Gaillardia grandiflora	Blanket Flower	All zones
Gazania spp.	Gazania	C/I
** Helianthemum spp.	Sunrose	All zones
Lantana spp.	Lantana	C/I/D

Lasthenia		
** californica	Common Goldfields	I
glabrata	Coastal Goldfields	C
** Lupinus spp.	Lupine	C/I/M
Myoporum spp.	Myoporum	C/I
Pyracantha spp.	Firethorn	All zones
Rosmarinus officinalis	Rosemary	C/I/D
Santolina		
chamaecyparissus	Lavender Cotton	All zones
virens	Santolina	All zones
Trifolium frageriferum	O'Connor's Legume	C/I
Verbena		
rigida	Verbena	All zones
** Viguiera laciniata	San Diego Sunflower	C/I
Vinca		
major	Periwinkle	C/I
minor	Dwarf Periwinkle	M
VINES		
Antigonon leptopus	San Miguel Coral Vine	C/I
Distictis buccinatoria	Blood-Red Trumpet Vine	C/I/D
** Keckiella cordifolia	Heart-Leaved Penstemon	C/I
Lonicera		
japonica 'Halliana'	Hall's Honeysuckle	All zones
** subspicata	Chaparral Honeysuckle	C/I

Solanum		
jasminoides	Potato Vine	C/I/D
PERENNIALS		
Coreopsis		
gigantea	Giant Coreopsis	C
grandiflora	Coreopsis	All zones
** maritima	Sea Dahlia	C
verticillata	Coreopsis	C/I
Heuchera maxima	Island Coral Bells	C/I
** Iris douglasiana	Douglas Iris	C/M
** Iva hayesiana	Poverty Weed	C/I
Kniphofia uvaria	Red-Hot Poker	C/I/M
Lavandula spp.	Lavender	All zones
Limonium californicum		
var. mexicanum	Coastal Statice	C
perezii	Sea Lavender	C/I
Oenothera spp.	Primrose	C/I/M
** Penstemon spp.	Penstemon	C/I/D
Satureja douglasii	Yerba Buena	C/I
Sisyrinchium		
bellum	Blue-Eyed Grass	C/I
californicum	Golden-Eyed Grass	C
Solanum		
xantii	Purple Nightshade	C/I

<p>** Zauschneria</p> <p>californica</p> <p>cana</p> <p>'Catalina'</p>	<p>California Fuschia</p> <p>Hoary California Fuschia</p> <p>Catalina Fuschia</p>	<p>C/I</p> <p>C/I</p> <p>C/I</p>
<p>ANNUALS</p> <p>** Lupinus spp.</p>	<p>Lupine</p>	<p>C/I/M</p>

UNDESIRABLE PLANT LIST

The following species are highly flammable and should be avoided when planting within the first 50 feet adjacent to a structure. The plants listed below are more susceptible to burning, due to rough or peeling bark, production of large amounts of litter, vegetation that contains oils, resin, wax, or pitch, large amounts of dead material in the plant, or plantings with a high dead to live fuel ratio.

<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>
<u>Abies species</u>	Fir Trees
<u>Acacia species</u> groundcovers)	Acacia (trees, shrubs,
<u>Adenostoma sparsifolium</u> **	Red Shanks
<u>Adenostoma fasciculatum</u> **	Chamise
<u>Agonis juniperina</u>	Juniper Myrtle
<u>Anthemis cotula</u> ***	Mayweed, Stinking Chamolile
<u>Araucaria species</u>	Monkey Puzzle, Norfolk Island Pine
<u>Arctostaphylos species</u> **	Manzanita
<u>Artemesia californica</u> **	California Sagebrush
<u>Arundo donax</u>	Giant Cane
<u>Bambusa species</u>	Bamboo
<u>Brassica species</u> ***	Mustard
<u>Callistemon species</u>	Bottlebrush
<u>Calocedrus decurrens</u>	Incense Cedar
<u>Cardaria draba</u> *** Peppergrass	Hoary Cress, Perennial
<u>Ceanothus species</u>	Ceanothus
<u>Cedrus species</u>	Cedar
<u>Chamaecyparis species</u>	False Cypress
<u>Cinnamomum species</u>	Camphor Tree
<u>Cirsium vulgare</u> ***	Wild Artichoke
<u>Conyza Canadensis</u> ***	Horseweed
<u>Coprosma pumila</u>	Prostrate Coprosma
<u>Cortaderia selloana</u>	Pampas Grass
<u>Cotoneaster lacteus</u>	Cotoneaster
<u>Cryptomeria japonica</u>	Japanese Cryptomeria
<u>Cupressocyparis leylandii</u>	Leylandii Cypress
<u>Cupressus forbesii</u>	Tecate Cypress
<u>Cupressus glabra</u>	Arizona Cypress
<u>Cupressus macrocarpa</u>	Monterey Cypress
<u>Cupressus sempervirens</u>	Italian Cypress
<u>Cynara cardunculus</u> ***	Artichoke Thistle
<u>Cytisus species</u> Broom, etc.	Scotch Broom, French
<u>Dodonea viscosa</u>	Hopseed Bush

<u><i>Elaeagnus angustifolia</i></u>	Russian Olive
<u><i>Elaeagnus pungens</i></u>	Silverberry
<u><i>Eriogonum fasciculatum</i></u> **	Common Buckwheat
<u><i>Eucalyptus species</i></u>	Eucalyptus
<u><i>Gensita species</i></u> ***	Broom
<u><i>Heterotheca grandiflora</i></u> **	Telegraph Plant
<u><i>Jubaea chilensis</i></u>	Chilean Wine Palm
<u><i>Juniperus species</i></u>	Junipers
<u><i>Lactuca serriola</i></u> ***	Prickly Lettuce
<u><i>Larix species</i></u>	Larch
<u><i>Lonicera japonica</i></u>	Japanese Honeysuckle
<u><i>Miscanthus species</i></u>	Eulalia Grass
<u><i>Muehlenbergia species</i></u> **	Deer Grass
<u><i>Nicotiana species</i></u>	Tree Tobacco
<u><i>Palmae species</i></u>	Palms
<u><i>Pennisetum setaceum</i></u>	Fountain Grass
<u><i>Picea species</i></u>	Spruce Trees
<u><i>Pickeringia Montana</i></u> **	Chaparral Pea
<u><i>Pinus species</i></u>	Pines
<u><i>Podocarpus species</i></u>	Fern Pine
<u><i>Pseudotsuga menziesii</i></u>	Douglas Fir
<u><i>Ricinus communis</i></u>	Castor Bean
<u><i>Rosmarinus species</i></u>	Rosemary
<u><i>Salsola australis</i></u> ***	Russian Thistle, Tumbleweed
<u><i>Salvia species</i></u> **	Sage
<u><i>Schinus molle</i></u>	California Pepper
<u><i>Schinus terebinthifolius</i></u>	Brazilian Pepper
<u><i>Silybum marianum</i></u> ***	Milk Thistle
<u><i>Spartium junceum</i></u>	Spanish Broom
<u><i>Tamarix species</i></u>	Tamarisk
<u><i>Taxodium species</i></u>	Cypress
<u><i>Taxus species</i></u>	Yew
<u><i>Thuja species</i></u>	Arborvitae
<u><i>Trachycarpus fortunei</i></u>	Windmill Palm
<u><i>Tsuga species</i></u>	Hemlock
<u><i>Ulex europea</i></u> ***	Gorse
<u><i>Urtica urens</i></u> **	Burning Nettle
<u><i>Washingtonia species</i></u>	California/Mexican Fan
Palm	

** San Diego County native species
*** Introduced weeds to San Diego County

California Department of Forestry and Fire Protection (619) 590-3100
United States Forest Service (619) 674-2901
County Fire Service Coordinator (858) 495-5092
County Farm and Home Advisor (858) 694-2845
Insurance Information Network of California -- Brochures

(www.iinc.org <<http://www.iinc.org>>) or call (800) 397-1679

REFERENCES

- Combustible Vegetation and Other Flammable Materials Ordinance. Sections 68.401 thru 86.406 of the County of San Diego's Zoning Ordinance.
- California Department of Fish and Game (858) 467-4201
- U.S. Fish and Wildlife Service (760) 431-9440
- Protecting Your Property From Soil Erosion
(www.sdcounty.ca.gov/dpw/docs/fire/homeerosion.pdf
<<http://www.sdcounty.ca.gov/dpw/docs/fire/homeerosion.pdf>>)
- Homeowner's Guide for Flood, Debris, and Erosion Control After Fires
(www.sdcounty.ca.gov/dpw/docs/fire/AfterFire.pdf
<<http://www.sdcounty.ca.gov/dpw/docs/fire/AfterFire.pdf>>)
- Burn Institute (www.burninstitute.org)