BE PREPARED!

HOMEOWNERS GUIDE FOR FLOOD, DEBRIS FLOW, AND EROSION CONTROL

LOS ANGELES FIRE DEPARTMENT FOUNDED 1886

LOS ANGELES POLICE DEPARTMENT TO PROTECT AND TO SERVE

BUREAU OF STREET SERVICES DEPT OF PUBLIC WORKS CITY OF LOS ANGELES

CITY OF LOS ANGELES FOUNDED 1781

CITY LA DBS DEPARTMENT OF BUILDING AND SAFETY

CITY of LOS ANGELES EMERGENCY MANAGEMENT DEPARTMENT "IN OMNIA PARATUS"

HOW STORMS CAN EFFECT YOUR PROPERTY

UNPROTECTED HOMES

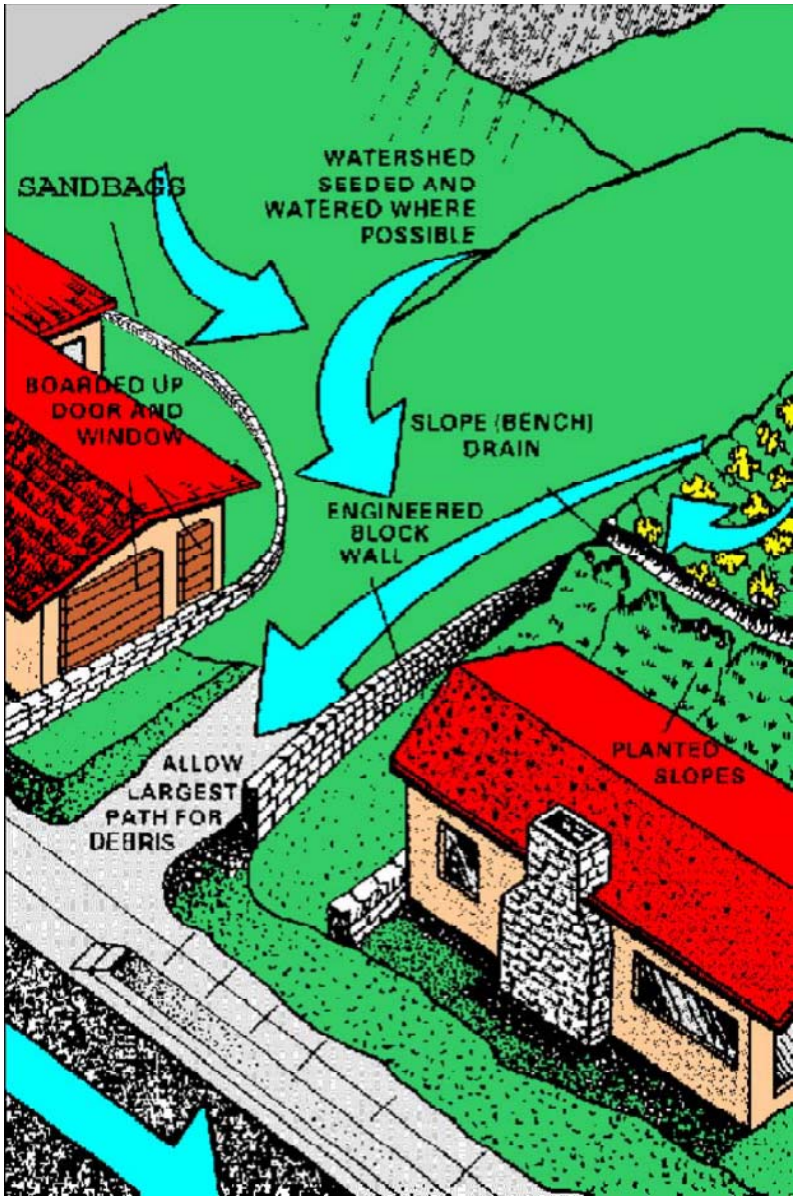
RAIN STORMS

Heavy and sustained rainfall from winter storms cause millions and, at times, billions of dollars in property damage annually. Planning and preparing against these disastrous effects, especially in hillside areas, can reduce or eliminate damage to homes and property.

This pamphlet provides homeowners and residents some useful methods for controlling the damage possible from such storms.

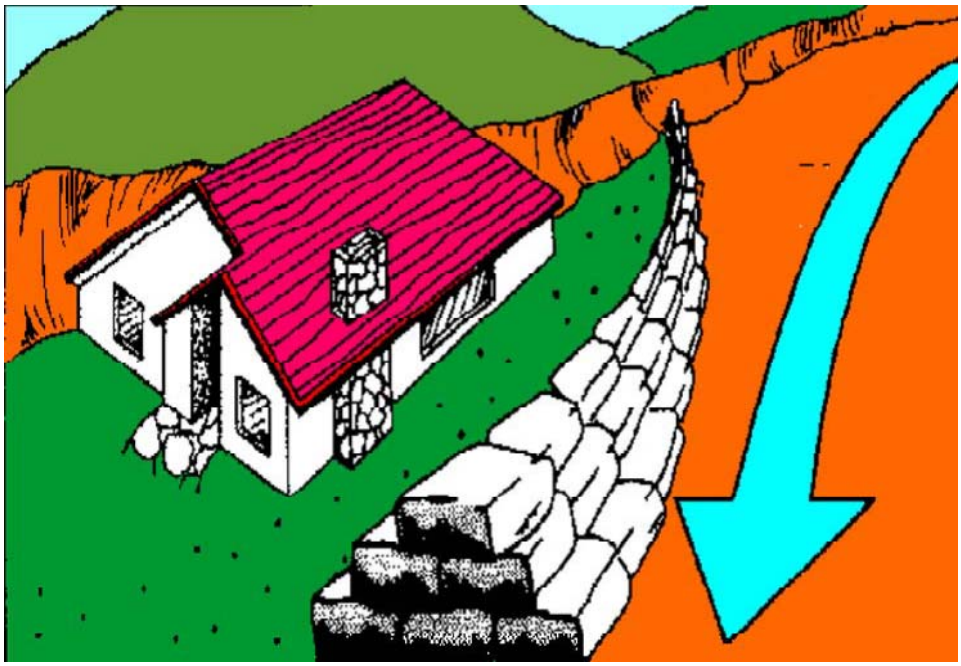
POTENTIAL FOR DESTRUCTION

Rain falling on barren or sparsely planted slopes has great destructive potential. When rain strikes a bare slope it washes and carries off the soil surface with the runoff. This erosive effect becomes destructive as the soil surface becomes saturated and the flow increases in volume and velocity. Generated mud and debris flows scour and gouge out the slope creating deep furrows in its surface. Under prolonged rainfall, the slope may even become saturated resulting in a slope failure or landslide.



HOMES PROTECTED FROM MAJOR DAMAGE

Mud and debris flows not only damage slopes, but also have sufficient momentum to damage structures in their path, at times resulting in severe injuries and fatalities to building occupants. Mud and debris flows consist of mud, brush, and trees that are moved by storm water. These flows may range in degree of severity from small mud slides to large landslides moving with destructive force down to the bottom of the slope. In either case this is of serious consequence to the property owner.

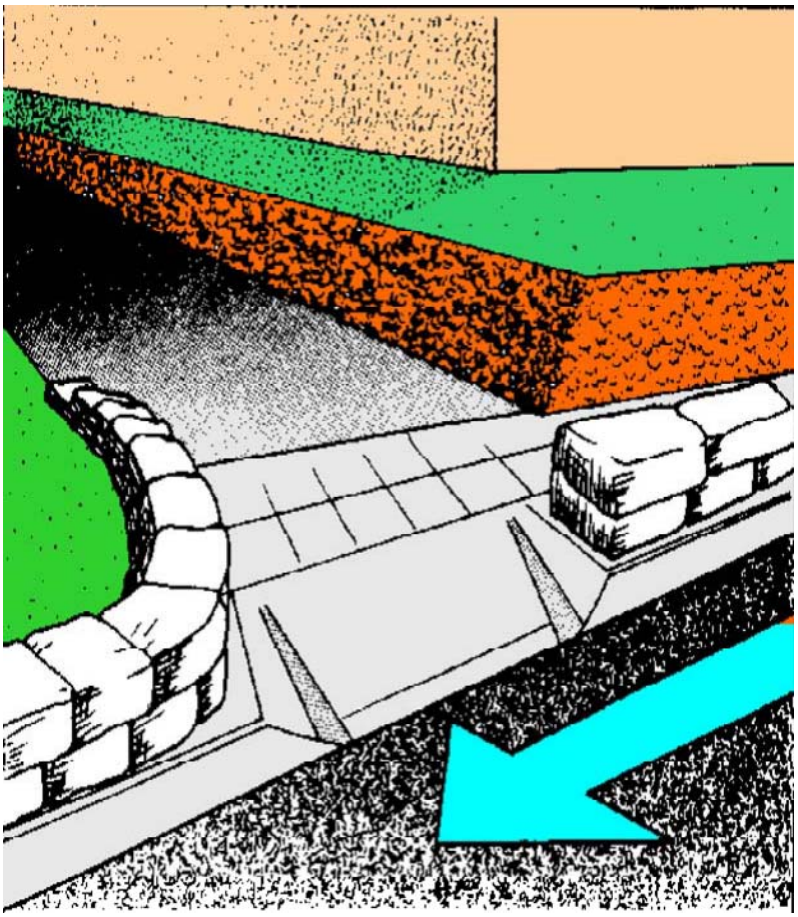


MUD AND DEBRIS FLOW DIVERTED BY SANDBAGS

HOW TO PREPARE

Early planning and continued maintenance reduce the damaging effects of storms. As the rainy season approaches, serious consideration should be given to determining what problems might arise and what procedures will be required to meet them. Once the mud and debris flows start it's too late to plan for protection; put your plans into action when weather reports predict storms.

Adequate tools such as shovels, picks, sledge hammers, and ordinary garden and carpentry tools should be handy to get to. Construction materials consisting of plastic sheeting, burlap bags (locations where sand and sandbags can be obtained are listed on pages 13-16), sand, lumber, plywood need to be stored, and flashlights, lanterns, work clothes and rain gear should be readily available. While preparation can be as simple as a few well placed sandbags and some plastic sheeting, having these supplies available now means less time in getting ready and more time for installing temporary protection devices.



USE SANDBAGS TO DIVERT FLOWS BUT DO NOT USE THEM TO ACT AS A DAM

Sandbags can effectively and inexpensively control mud-flow. They are made of materials readily available from your local building materials supply yard, and are easily installed using household or garden tools. Properly placed sandbags re-direct storm and debris flow away from improvements. Sandbagging is most effective in diverting flows and should not be used as a dam to contain mud-flows. Large slope areas are especially prone to failure during and after prolonged rainfalls. The use of plastic sheeting provides an excellent method of temporarily protecting these and other problem slopes from saturation during storms.

Both sandbags and plastic sheeting are, as they imply, temporary devices. These materials, inexpensive and easy to work with, are not durable and will quickly deteriorate over time. In areas where erosion or mud slides are a re-occurring problem, permanent structures or devices need to be considered. Consulting with a design professional and your local nursery can result in effective and attractive long term debris and erosion control. Be sure to check with your local Building and Safety office for any permit and code requirements, especially when earth retaining structures are planned.

WHEN THE STORM IS UPON YOU

The following recommendations can greatly help reduce the damaging effects of an imminent storm. Please review these carefully now, as you may not have time when the storm is approaching.

PLASTIC SHEETING

Spread plastic sheeting across the slope and use stakes at the corners to secure it to the slope. Drive stakes along the edge at 10 to 12 foot intervals (steeper slopes may require closer spacing). Tie ropes to the stakes across the slope face and attach sandbags or old tires to the ropes to hold the plastic in place (see figure 5). On very steep slopes the plastic should be anchored at the top and secured at the bottom by placing weights on the corners. Make sure the plastic is not punctured or torn.

Make sure that water running off the plastic sheeting is directed to the street or other non-erosive device such as a paved terrace drain, driveway, or walkway. Avoid any concentration of flow onto the slopes that would cause erosion.

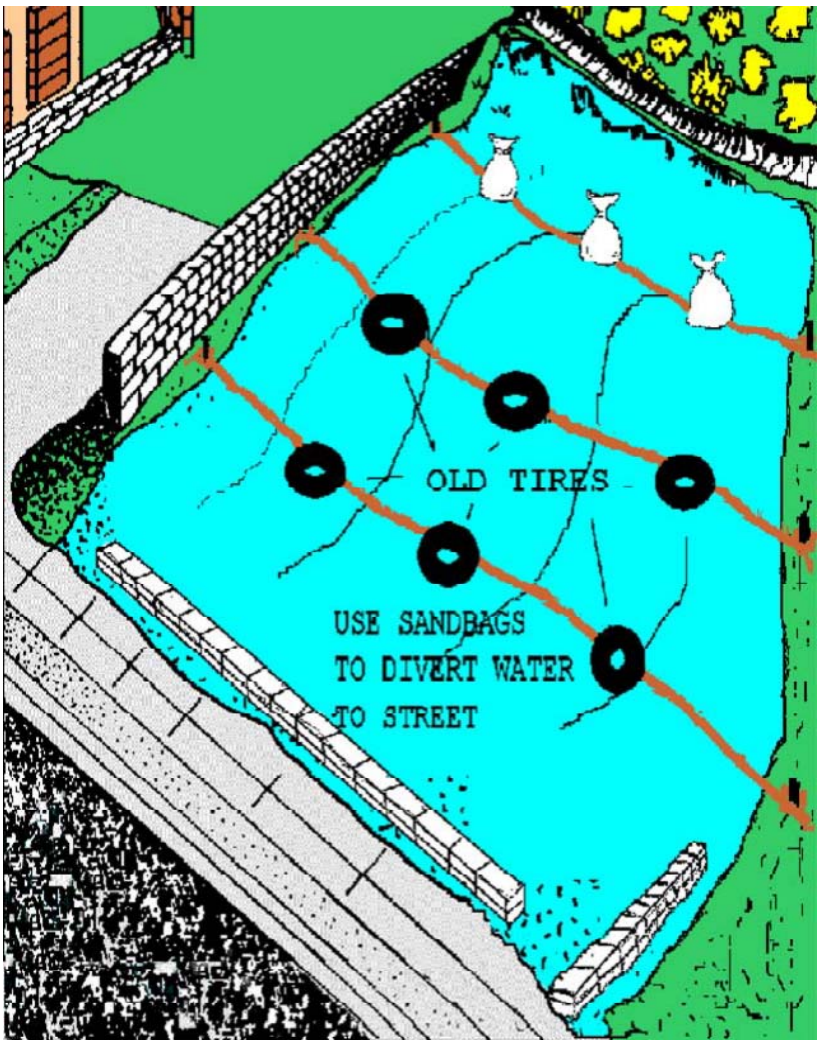


Figure 5

SAND BAGS

Sand bags should be used to divert flows away from improvements and onto the street or a natural watercourse by creating a channel or path for debris. Between storms be sure to remove any residual debris and/or silt from these channels to prevent dangerous build-up. Remember, the purpose of sandbagging is to divert debris flows, not to act as a dam. Improperly placed sand bags may cause more damage than if they had not been used at all.

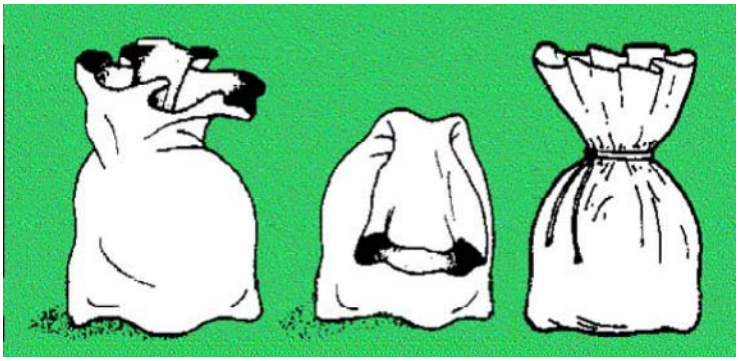


Figure 6

Fill sand bags with common construction or playground sand. If sand is not available, local soil may be used. Care should be taken that only loose topsoil is used. Do not dig into a hillside as this may cause more problems than it will prevent. Fill the sand bags half full, gather the top and tie with heavy string or cord (figure 6). If string is not available, carefully fold the top over (figure 6). In either case the opening in the flap should be in the direction of flow (figure 7).

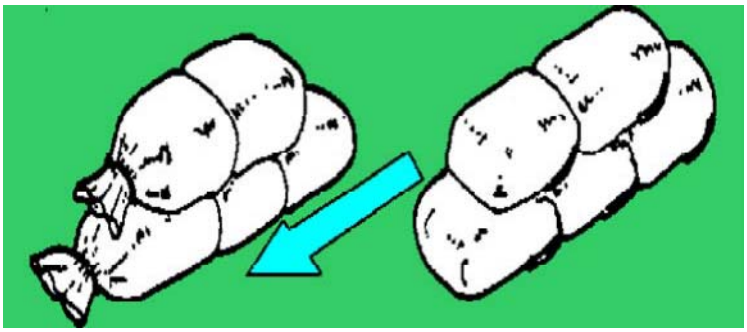


Figure 7

Lay the sand bags so that each course overlaps the previous one and stamp down firmly into place before laying the next course. Stack the sand bags no more than three courses high. You may stack higher if the base is at least as many bags wide as it is high (figure 8).

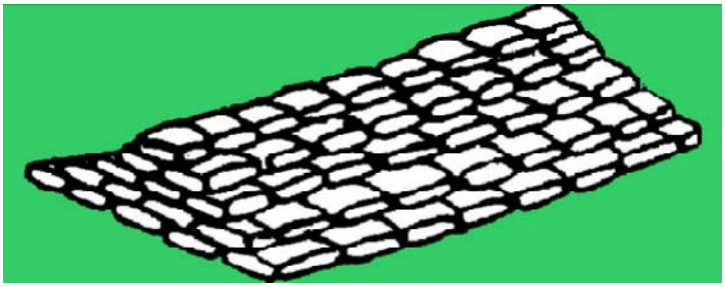


Figure 8

PLYWOOD

Plywood placed over doors and windows is an effective way of preventing mud and debris from entering through these openings (see figure 10). By placing plastic sheeting against the opening before covering with plywood, water intrusion can be further reduced. You may use an inexpensive plywood at least 3/8" thick and overlap the door or window several inches. Stack sandbags or use 2"x4" braces against the plywood to secure it.

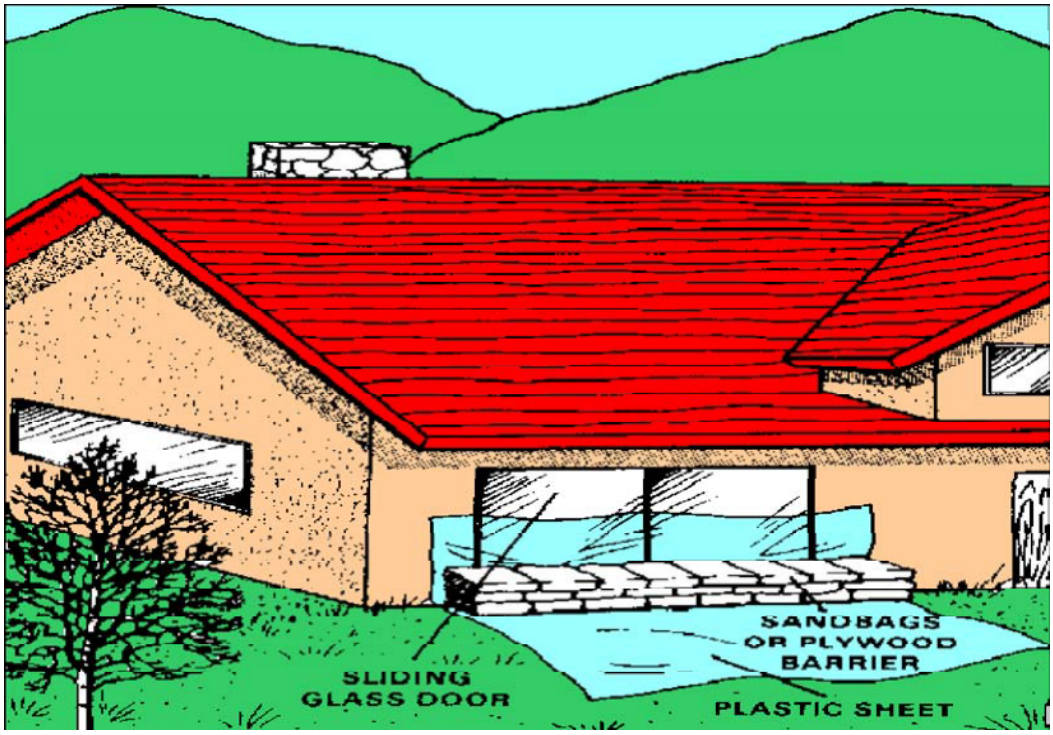


Figure 9

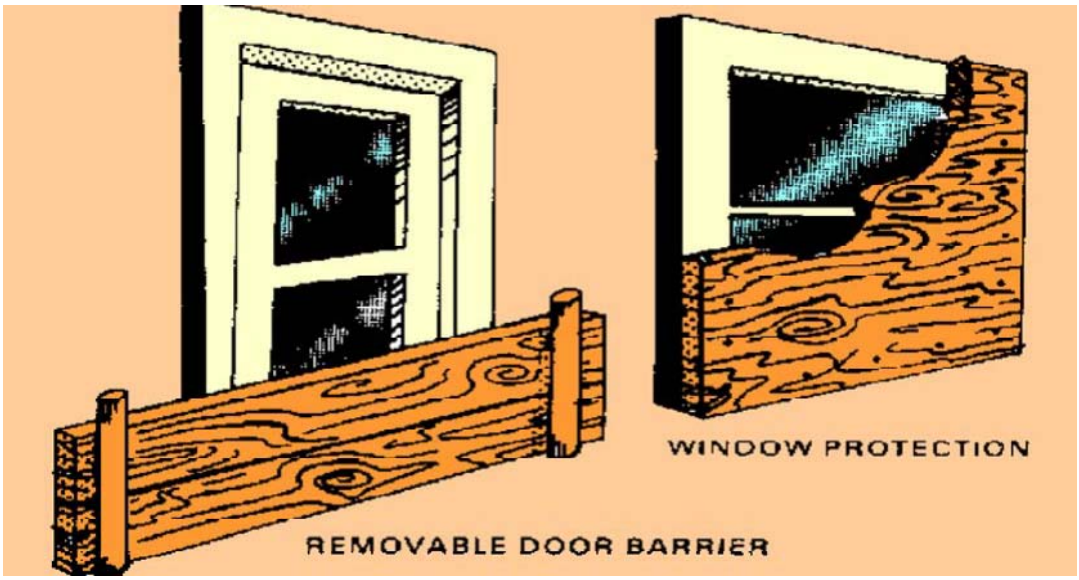


Figure 10

AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE.

This old adage certainly applies here. Practicing the following recommendations can save you considerable expense and grief.

PLANTING FOR SLOPE PROTECTION

After the rainy season, fire resistive plants should be planted. The purpose of this re-planting is to protect slopes and watershed areas to prevent or minimize damage from erosion. In areas where controlled planting exists, the damage from erosion tends to be relatively small.

Fire resistive plants that are hardy and drought resistant, with a good root structure are the best choice for ground cover plants to limit erosion. These include grasses or other ground cover, evergreen shrubs, and trees.

After a fire the remaining ash can contribute to the regrowth of plants as long as its not too thick. Rake the ash and soil together 2-3 inches in depth and water it thoroughly before replanting. Water lightly twice or three times daily until the ground cover is established.

Your local Fire Department will sometimes use a chemical called Borate to extinguish fires. This chemical is usually dropped from the air by helicopter or airplane onto the fire below. If borate was used to extinguish the fire, the soil may be sterile and unable to support plant growth for up to 3 years. All visible borate should be removed. Consult with a landscaper or nursery on how to treat the soil to revitalize it.

Plant growth for erosion resistance takes time to stabilize the soil. Some degree of surface stability can be achieved before and during plant growth by any of the following methods:

STRAW MULCH - Straw applied thickly to the soil surface after seed planting, can be punched in or covered with chicken wire to prevent its being blown away. This will hold the soil surface and moisture for the germinating seeds.

JUTE MATTING - Heavy woven jute mesh can be rolled over the slope face and staked or stapled to the ground. When properly installed, after planting, the jute will not be blown or washed away and will not interfere with plant growth as it slowly decomposes, gradually being replaced by grasses and plants.

HYDRO-MULCH - This mixture of fibrous material, fertilizer, bonding agent and seed is blown on under pressure onto slopes to create an erosion resistant surface that both plants and stabilizes. The application of hydro-mulch is available only through commercial outlets.

IRRIGATION OF SLOPES

Slope irrigation is as important to slope stability as planting. Sustained moisture is absolutely necessary in order for seeds to germinate and to maintain healthy plants. An effective method of irrigation should be provided. Watering can be as simple and portable as a hose connected from the garden faucet to a board with sprinkler heads mounted to it, or as complex as a buried pipe irrigation system. No satisfactory ground cover can be grown without watering and the weather cannot be depended on for irrigation.

Do not over water the ground cover before it has been fully established. This could cause the soil to erode and carry away the germinating seeds. If automatic or timer activated irrigation is used, it should be monitored closely during the rainy season (October 1-April 15). The combination of normal irrigation and heavy storms can erode a slope to the point that no amount of planting can resist.

MAINTENANCE

The owner of a hillside property is responsible for maintaining all yard and slope areas. Maintenance is of greatest importance during the period between a destructive summer fire and the rainy season. Every effort should be made to restore damaged hillside ground cover in order to stabilize the property through the rainy season.

The owner or person responsible for maintaining the yard areas, should periodically inspect the slopes for potential failures. While this is especially true just prior to the rainy season, checking earlier in the year will allow time for improvements or repairs. The following recommendations may prevent slope failure during heavy rains:

1. Make sure all drainage is directed to the street or other water course by approved devices, such as drainage channels, ground gutters, paved swales, or yard or area drains.

2. Check all drainage devices and remove any accumulated dirt and debris. In some areas, drainage devices may cross property lines or be in what is considered common areas. Don't let conditions on your property create a problem for those next to you. Cooperate with your neighbors and work together to prevent problems for both of you.

3. Catch basins, grates and underground drainage piping are frequently blocked by silt, weeds and debris. Inspect and clean them regularly to make sure they are free flowing.

4. Roof gutters and down spouts may become damaged or clogged with leaves, twigs and silt. Inspect and clean them to ensure that they are free flowing. If your roof shows signs of wear, have it checked by a licensed roofing contractor. Do not allow the down spouts to discharge directly onto the soil, use splash stones, driveways or walkways to divert runoff to the street or other watercourse.

5. Concrete swales around the perimeter of a structure, are designed to direct water away from it. Make sure that they are not cracked or broken to the point that they loose their effectiveness. Keep them clean and repair any fractures that may allow water to penetrate them.

6. Building sites that were developed since the mid-fifties have berms of densely compacted earth at the top of slopes to prevent water from running over the slope. Make sure that these are maintained in good condition.

7. Check slopes for large amounts of loose soil, rocks, brush, or debris and remove any that may become dislodged during storms. Loose brush can act as a dam for silt. During storms it can wash down slopes causing damage or blocking drainage devices. If the brush is firmly rooted, it should be allowed to remain until after the rainy season which will help support the soil.

8. Large rocks and boulders may become loose during storms. Consult with a licensed Geologist or Soils Engineer in order to determine the best method for correcting this condition.

9. Don't let water run wild. During heavy rains and storms, inspect the slope for erosion and correct any problems immediately. If unusual cracks, settling, or earth slippage start, don't wait, act immediately.

10. Inspect any retaining walls that may effect your property. If there is any listing, leaning, overturning , or cracking, contact a licensed engineer immediately.

When landscaping, avoid disrupting the flow patterns established when your property was originally developed. When in doubt, consult a licensed Geologist or Soils Engineer.

For further questions regarding these or other related matters, please feel free to call the Department of Building and Safety at:

Toll Free	(866) 452-2489
In Los Angeles County	(213) 473-3231
For TTY Users	3-1-1

FIRE STATION LOCATIONS

(ALL LOCATIONS PROVIDE SANDBAGS)
*** SAND AVAILABLE WHERE NOTED**

The Los Angeles "City" Fire Stations have sandbags available in the event of pending major storms and storm emergencies. A limit of 25 burlap bags are available to each household. Property owners and residents should not solely rely on these sources, as high demand may rapidly strap resources and create spot shortages.

FIRE STATION	ADDRESS	PHONE
HAZARD AREAS (NORTH VALLEY)		
7	**14123 Nordhoff Street, Arleta 91331**	**(818) 892-4807**
8	**11351 Tampa Avenue, Northridge 91324**	**(818) 756-8668**
18*	**12050 Balboa Boulevard, Granada Hills 91344**	**(818) 756-8618**
24*	**9411 Wentworth Street, Sunland 91040**	**(818) 756-8624**
28*	**11641 Corbin Avenue, Northridge 91326**	**(818) 756-9728**
70	**9861 Reseda Boulevard, Northridge 91324**	**(818) 756-7670**
72	**6811 De Soto Avenue, Canoga Park 91303**	**(818) 756-8672**
73	**7419 Reseda Boulevard, Reseda 91335**	**(818) 756-8673**
74	**7777 Foothill Boulevard, Tujunga 91042**	**(818) 756-8674**
75	**15345 San Fernando Mission, Mission Hills 91340**	**(818) 756-8675**
77	**9224 Sunland Boulevard, Sunland 91352**	**(818) 756-8677**
84*	**21050 W. Burbank Boulevard, Woodland Hills 91367**	**(818) 756-8684**
87*	**10124 Balboa Boulevard, North Hills 91343**	**(818) 756-8687**
91	**14430 Polk Street, Sylmar 91342**	**(818) 756-8691**
93	**19059 Ventura Boulevard, Tarzana 91356**	**(818) 756-8693**
96*	**21800 Marilla Street, Chatsworth 91311**	**(818) 756-8696**
98*	**13035 Van Nuys Boulevard, Pacoima 91331**	**(818) 756-8698**
103	**18143 Parthenia Street, Northridge 91325**	**(818) 756-8603**
104	**8349 Winnetka Avenue, Canoga Park 91306**	**(818) 756-8604**
105	**6345 Fallbrook Avenue, Woodland Hills 91364**	**(818) 756-8605**
106*	**23004 Roscoe Boulevard, West Hills 91304**	**(818) 756-8606**
107	**20225 Devonshire Street, Chatsworth 91311**	**(818) 756-8607**
OTHER FIRE STATION LOCATIONS		
1	2230 Pasadena Avenue, Los Angeles 90031	(213) 485 6201
2	1962 E. Cesar Chavez Avenue, Los Angeles 90033	(213) 485-6202
3*	108 N. Fremont Avenue, Los Angeles 90012	(213) 485-6203
4	450 E. Temple Street, Los Angeles 90012	(213) 485-6204
5	8900 S. Emerson Avenue, Los Angeles 90045	(213) 485-6205
6	326 N. Virgil Avenue, Los Angeles 90004	(213) 485-6206
9	430 E. 7th Street, Los Angeles 90014	(213) 485-6209
10	1335 S. Olive Street, Los Angeles 90015	(213) 485-6210
11	1819 W. 7th Street, Los Angeles 90057	(213) 485-6211
12	5921 N. Figueroa Street, Los Angeles 90042	(213) 485-6212
13	2401 W. Pico Boulevard Los Angeles 90006	(213) 485-6213
14	3401 S. Central Avenue, Los Angeles 90011	(213) 485-6214
15	915 W. Jefferson Boulevard, Los Angeles 90007	(213) 485-6215
16	2011 N. Eastern Avenue, Los Angeles 90032	(213) 485-6216

FIRE STATION	ADDRESS	PHONE
17	1601 S. Santa Fe Avenue, Los Angeles 90021	(213) 485-6217
19*	12229 Sunset Boulevard, Los Angeles 90049	(310) 575-8519
20	2144 W. Sunset Boulevard, Los Angeles 90026	(213) 485-6220
21*	1192 E. 51st Street, Los Angeles 90011	(213) 485-6221
23*	17281 Sunset Boulevard, Pacific Palisades 90272	(310) 575-8523
25	2927 E. Whittier Boulevard, Los Angeles 90023	(213) 485-6225
26	2009 S. Western Avenue, Los Angeles 90018	(213) 485-6226
27*	1327 N. Cole Avenue, Los Angeles 90028	(213) 485-6227
29	4029 W. Wilshire Boulevard, Los Angeles 90010	(213) 485-6229
33	6406 S. Main Street, Los Angeles 90003	(213) 485-6233
34	3661 S. 7th Avenue, Los Angeles 90018	(213) 485-6234
35	1601 N. Hillhurst Avenue, Los Angeles 90027	(213) 485-6235
36	1005 N.Gaffey Street, San Pedro 90732	(310) 548-2836
37	1090 S. Veteran Avenue, Los Angeles 90024	(310) 575-8537
38*	124 E. "I" Street, Wilmington 90744	(310) 548-7538
39	14415 Sylvan Street, Van Nuys 91401	(818) 756-8639
40	330 Ferry Street, Terminal Island 90731	(310) 548-7540
41*	1439 N. Gardner Street, Los Angeles 90046	(213) 485-6241
42	2021 Colorado Boulevard, Los Angeles 90041	(213) 485-6242
43*	3690 S. Motor Ave., Los Angeles 90034	(310) 840-2143
44*	1410 Cypress Avenue, Los Angeles 90065	(213) 485-6244
46	4370 S. Hoover Street, Los Angeles 90037	(213) 485-6246
47*	4575 Huntington Dr. South, Los Angeles 90032	(213) 485-6247
48	1601 S. Grand Avenue, San Pedro 90731	(310) 548-7548
49	400 Yacht Street (Berth 194), Wilmington 90744	(310) 548-7549
50	3036 Fletcher Drive, Los Angeles 90065	(213) 485-6250
51	10435 Sepulveda Boulevard, Los Angeles 90045	(213) 485-6251
52	4957 Melrose Avenue, Los Angeles 90029	(213) 485-6252
55	4455 E. York Boulevard, Los Angeles 90041	(213) 485-6255
56	2759 Rowena Avenue, Los Angeles 90039	(213) 485-6256
57	7800 S. Vermont Avenue, Los Angeles 90044	(213) 485-6257
58	1556 S. Robertson Boulevard, Los Angeles 90035	(213) 485-6258
59	11505 W. Olympic Boulevard, Los Angeles 90064	(310) 575-8559
60	5320 Tujunga Avenue, North Hollywood 91601	(818) 756-8660
61	5821 W. 3rd Street, Los Angeles 90036	(213) 485-6261
62	11970 W. Venice Boulevard, Los Angeles 90066	(310) 397-2662
63	1930 Shell Avenue, Venice 90291	(310) 575-8563
64*	118 W. 108th Street, Los Angeles 90061	(213) 485-6264
65	1801 E. Century Boulevard, Los Angeles 90002	(213) 485-6265
66	1909 W. Slauson Avenue, Los Angeles 90047	(213) 485-6266
67	5451 Playa Vista Drive, Los Angeles 90094	(310) 862-2844
68	5023 W. Washington Boulevard, Los Angeles 90019	(213) 485-6268
69	15045 Sunset Boulevard, Pacific Palisades 90272	(310) 575-8569
71*	107S Beverly Glen Boulevard, Los Angeles 90024	(310) 575-8571
76	3111 N. Cahuenga Boulevard, Los Angeles 90068	(213) 485-6276
78*	4041 Whitsett Avenue, Studio City 91604	(818) 756-8678
79	18030 S. Vermont Avenue, Gardena 90247	(310) 548-7579
80	6911 World Way West, Los Angeles 90045	(213) 485-6280

FIRE STATION	ADDRESS	PHONE
81	14355 W. Arminta Street, Panorama City 91402	(818) 756-8681
82*	1800 N. Bronson Avenue, Los Angeles 90028	(213) 485-6282
83	4960 Balboa Boulevard, Encino 91316	(818) 756-8683
85	1331 W. 253rd Street, Harbor City 90710	(310) 548-7585
86*	4305 Vineland Avenue, North Hollywood 91602	(818) 756-8686
88*	5101 N. Sepulveda Boulevard, Sherman Oaks 91403	(818) 756-8688
89	7063 Laurel Canyon Boulevard, North Hollywood 91605	(818) 756-8689
90	7921 Woodley Avenue, Van Nuys 91406	(818) 756-8690
92	10556 W. Pico Boulevard, Los Angeles 90064	(310) 840-2192
94*	4470 Coliseum Street, Los Angeles 90016	(213) 485-6294
95	10010 International Road, Los Angeles 90045	(213) 485-6295
97*	8021 Mulholland Drive, Los Angeles 90046	(818) 756-8697
99*	14145 Mulholland Drive, Beverly Hills 90210	(818) 756-8699
100	6751 Louise Avenue, Van Nuys 91406	(818) 756-8600
101*	1414 W. 25th Street, San Pedro 90732	(310) 548-7501
102	13200 Burbank Boulevard, Van Nuys 91401	(818) 756-8602
108*	12520 Mulholland Drive, Beverly Hills 90210	(818) 756-8608
109*	16500 Mulholland Drive, Los Angeles 90049	(818) 756-8609
110	2945 Miner Street (Berth 44A), San Pedro 90731	(310) 548-7545
111	1444 S. Seaside Avenue (Berth 256),Terminal Island 90731	(310) 548-7541
112	444 S. Harbor Boulevard (Berth 86), San Pedro 90731	(310) 548-7542
114	16617 Arminta Street, Van Nuys 91406	(818) 756-8635

Los Angeles Fire Department Information for TTY – (213) 485-6026

Los Angeles Fire Department Emergency for TTY- (213) 623-3473 (24 Hour Line)

BUREAU OF STREET SERVICES

During the storm season, the Bureau of Street Services also offers free sand and sandbags. Individuals may pick up sand and sandbags at the Bureau of Street Services locations listed below. Please note that residents must fill the sandbags themselves. Shovels will be available at the yard. The maximum number of bags per resident is 25 bags at the yards.

LIST OF AREAS/YARDS WHERE SAND AND SANDBAGS ARE AVAILABLE

AREAS/YARDS	SAND & SANDBAGS SERVICE HOURS
Bay Harbor Area	
Venice Yard 2000 Abbott Kinney Bl. (310) 575-8830	8:00 a.m.-2:00 p.m.
San Pedro Yard 1400 N. Gaffey St. (310) 548-7661	8:00 a.m.-2:00 p.m.
Central City South Yard 4206 S. Central Ave. (213) 485-3717	8:00 a.m.-2:00 p.m.
East Valley Area	
Bel-Air Yard 11165 Missouri Ave. (310) 575-8478	8:00 a.m.-2:00 p.m.
North Hollywood/Studio City 10811 Chandler Blvd. (818) 756-8807	8:00 a.m.-2:00 p.m.
Sunland Yard 9401 Wentworth St. (818) 756-9612	8:00 a.m.-2:00 p.m.

AREAS/YARDS	SAND & SANDBAGS SERVICE HOURS
North Central Area	
Hollywood Yard 6640 Romaine St. (213) 485-4501	8:00 a.m.-2:00 p.m.
East Yard 452 San Fernando Rd. (213) 485-5667	8:00 a.m.-2:00 p.m.
West Valley Area	
Reseda/Woodland Hills Yard 6015 Baird Ave. (818) 756-8809	8:00 a.m.-2:00 p.m.
Granada Hills Yard 10210 Etiwanda Ave. (818) 756-8449	8:00 a.m.-2:00 p.m.
Canoga Park Yard 7453 Canoga Ave. (818) 756-8728	8:00 a.m.-2:00 p.m.
Palisades Yard 1479 Stoner Ave. (310) 575-8479	8:00 a.m.-2:00 p.m.

For TTY users, please use 3-1-1 operator for assistance to reach any of the yard locations listed above.

To report storm-related emergencies such as trees down, landslides, potholes, and road erosion, please call **(800) 996-2489** or the **3-1-1 operator**. TTY users can dial 3-1-1 to report storm-related emergencies as well.

You may also visit their website at **www.lacity.org/boss/Resurfacing/storm.htm** for up-to-date information.

REDUCE THE CHANCE OF FLOODING IN YOUR NEIGHBORHOOD

Even in the best of weather, **urban runoff pollution** is a major threat to the health of our local bays. But in stormy weather, the threat increases over a millionfold.

Urban runoff pollution is all the materials that flow from our yards and streets into the catch basins at the end of the block, and from there directly to local bays through the 3000 miles of local channels and underground drains designed to carry stormwater quickly and safely out of our neighborhoods.

Urban runoff pollution can include: all litter and trash; pet droppings; chemicals dripped and spilled from our vehicles; chemicals like fertilizers and pesticides washed from our lawns; chemicals (like motor oil) deliberately dumped in storm drains—in short, anything on the street.

In dry weather, as much as *100 million gallons* of water runs through the storm drains and into the bay—water from lawn overwatering, from washing cars, from construction sites, from industrial discharges, etc.—carrying with it urban runoff pollution. These pollutants can linger in the storm drains, attracting vermin and smelling up the neighborhood. When flushed through, they cover our beaches, can make human beachgoers sick, and can harm or kill the creatures that live in our bays.

Wet weather compounds the situation, because *billions of gallons* can run through the storm drains in a single storm. Heavy rains sweep everything before them, sometimes clogging storm drains with debris, causing neighborhood flooding, or carrying pollution to the Santa Monica and San Pedro Bays.

Here are the best ways to keep urban runoff pollution from clogging our storm drains and flooding our neighborhoods. In the hours before a storm arrives:

1. Pick up all litter and loose objects in your yard and on your property. Anything loose can be washed away. This includes yard clippings, branches, etc., that can clog storm drains. Dispose of yard clippings in your City-issued green container.
2. Check your own yard drains to make sure they aren't clogged. If they are, clean them and properly dispose of the debris. Also, look at the catch basin at the end of your street. If it's clogged, report it to the City at 1-800-974-9794. **For TTY users, please use 3-1-1 operator for assistance.**
3. Sweep all dirt from driveways and walkways and throw it in the City-issued black trash containers. Even dirt is a pollutant when carried into the bay. Never hose down sidewalks or walkways.
4. Don't fertilize or use pesticides on your lawn and garden before a storm. These chemicals are washed off the lawn into the street and storm drains.
5. Don't store paints or any other toxic chemicals outdoors. Only store them in containers with tight-fitting lids.
6. Always clean up pet waste and flush it down the toilet, or throw it, wrapped, in the black container.

PETS AND DISASTERS

People cannot prevent a disaster from occurring but they can reduce the impact of a disaster on their pets. Pet owners are responsible for their pets before, during and after a disaster. Pets are completely dependent on their owners for their survival and well being. To assure that their needs are met pet owners should have an emergency response plan. Readily accessible kits with provisions for family members and pets are a must. The following information has been compiled to help pet owners prepare:

* Keep current identification on your dog or cat. If your pet can't wear an I.D. then label their containers and cages.
* Take current color photos of your pet(s) showing any special markings and keep them with your emergengy supplies.
* If you are certain a disaster is going to occur, control your animal with a leash or carrier.
* Ask a neighbor to care for your pet in your absence.
* If you need to evacuate, take your pet with you if possible
* Predetermine a safe place for your animal to stay during a crisis. Most evacuation shelters will not accept animals, except service animals.
* Contact your local Los Angeles City Animal Care and Control Center to find out their available services during a disaster. They can provide temporary sheltering for pets and they have plans for livestock evacuation.

You should have adequate supplies for your pet readily available such as:

* portable carrier
* pet food in plastic bottles
* medications
* health records
* leashes
* food/water bowls
* litter and litter box for cats
* first aid kit with manual for animal care
* special instructions for diet or feeding

City of Los Angeles Animal Services
Animal Evacuation Shelters

Information:
www.laanimalservices.com
Phone Number: 1-888-452-7381
(818) 756-9323 (24-hour phone number)

Small Animal

North East Animal Center
15321 Brand Boulevard
Mission Hills, CA 91345
(Primary Evacuation Shelter for small animals)

Harbor Animal Center
957 N. Gaffey
San Pedro, CA 90731

East Valley Animal Center
14409 Vanowen St.
Van Nuys, CA 91405

North Central Animal Center
3201 Lacy St.
Los Angeles, CA 90031

South Los Angeles Animal Center
3612 S. 11th Av.
Los Angeles, CA 90018

West Los Angeles Animal Center
11361 Pico Blvd.
Los Angeles, CA 90064

West Valley Animal Care Center
20655 Plummer Street
Chatsworth, CA 91311

Large Animal

Hansen Dam Equestrian Center*
11127 Orcas Avenue
Sylmar, CA 91342

Los Angeles Equestrian Center*
480 W. Riverside Dr.
Burbank, CA 91506

Pierce College Equestrian*
6201 Winnetka Ave
Woodland Hills, CA 91731

*These three locations are not owned by the City of Los Angeles and will not be opened until activated by LAAS.

FLOOD HAZARD AND FLOOD PROTECTION INFORMATION

Free Flood Information: The City of Los Angeles provides free flood zone information. Copies of the Federal Emergency Management Agency Flood Insurance Rate Maps are available for review in all Engineering offices. Flood information is also available by calling the number:

(800) 974-9794
Call back time is 24 hours and 48 hours during peak hours.

This information is also available to you directly through the Internet at: http://navigatela.lacity.org/floodgis. If requested, the City's Floodplain Manager will visit your property to review its flood problem and explain ways to stop flooding or prevent flood damage. Call the City's Floodplain Manager at (800) 974-9794. These services are free.

Investigation of Drainage Deficiencies: Request a drainage investigation when the water in the streets overtops the curb by calling your local Bureau of Engineering District office:

Harbor District - (310) 732-4677	West L.A. District - (310) 575-8384
Valley District - (818) 374-5088	Central District - (213) 482-7030

Clogged Catch Basins: Report clogged catch basins to the City Hot Line (800) 974-9794 between 8 a.m. and 4 p.m. Monday through Friday or (213) 485-7575 after 4 p.m. and on weekends.

Before You Build in the Floodplain: All new development and construction in the floodplain is regulated and requires a special review before a building permit is issued. Contact the Floodplain Manager at (213) 974-9794 during the planning stages to inquire about the regulations applicable to your project. Suspected illegal floodplain development can be reported at the same number.

Flood Protection Library: Additional information regarding flood protection, floodplain management and the National Flood Insurance Program (NFIP) can be found through the FEMA website at http://www.fema.gov/business/nfip or at the City's Central Library (Science, Technology, and Patents Department) at http://www.lapl.org/central/science.html.

NFIP Phone Numbers: General Information - (800) 427-4661
Looking for a Flood Insurance Agent? - (800) 720-1093

If You Decide to Purchase Flood Insurance, You Need to Know That: The City is a participant of the Community Rating System (CRS) with a CRS rating of 8, which qualifies residents in Special Flood Hazard Areas for a 10% discount. All other residents (outside Special Flood Hazard Areas) continue to qualify for a 5% discount. Please be aware that there is a 30-day waiting period from the time a flood insurance policy is purchased before coverage comes into effect. Exceptions: First time purchase for a new mortgage, or in connection with updating or revising a map.

COMMUNITY EMERGENCY RESPONSE TEAM PROGRAM
Los Angeles Fire Department – Disaster Preparedness Section
5021 North Sepulveda Boulevard
Sherman Oaks, California 91403
Phone: (818) 756-9674 / Fax: (818) 756-9681 / TTY (213) 473-7704
Email: ***lafdcert@lacity.org*** Web Page: ***www.cert-la.com***

LEVEL 1 SYLLABUS

CLASS 1 - INTRODUCTION, EARTHQUAKE AWARENESS

Registration
Introduction
Earthquake Threat in Southern California
Personal & Family Preparation
Nonstructural Hazard Mitigation

CLASS 2 - DISASTER FIRE SUPPRESSION TECHNIQUES

Fire Chemistry
Fire Extinguisher Use
Utility Control
Creative Firefighting Techniques
Hazardous Materials / Placarding

CLASS 3 - DISASTER MEDICAL OPERATIONS (SESSION 1)

Recognizing Life-Threatening Emergencies
Treating Life-Threatening Emergencies
Triage

CLASS 4 - DISASTER MEDICAL OPERATIONS (SESSION 2) AND MULTI-CASUALTY INCIDENT

Head-to-Toe Evaluation
Treating Non-Life-Threatening Emergencies
Treatment Area Management

CLASS 5 - LIGHT SEARCH & RESCUE OPERATIONS

Evacuation
Search Techniques
Rescue Methods / Cribbing

CLASS 6 –TEAM ORGANIZATION & DISASTER PSYCHOLOGY

Developing a Response Team
Incident Command System "ICS"
Psychological "Size-Up"

CLASS 7 – TERRORISM & HOMELAND DEFENSE

History of Terrorism
Do's and Don'ts During a Terrorist Act
Homeland Defense Tips

PROGRAM OVERVIEW

The Los Angeles Fire Department's CERT Program (free of charge) was developed because of the need for a well-trained civilian emergency work force. The CERT Program provides for community self-sufficiency through the development of multifunctional response teams who act as an adjunct to the city's emergency services during major disasters. When emergencies happen, CERT members can give critical support to first responders, and provide immediate assistance to victims. CERT members can also assist with non-emergency projects that help improve the safety of the community. Through this unique program, people from community organizations, business and industry, and city employee groups will become CERT members. They work as team members and perform as individual leaders by directing untrained volunteers in the initial phase of an emergency.

To become a CERT graduate, you must complete the 17-1/2 hour course (Level 1). Level 1 training is taught by professional experienced firefighters and paramedics. The course is followed by continuing education programs, including biannual refreshers.

We encourage our Level 1 graduates to enhance their education. Following the completion of Level 1, the CERT Program also offers Level 2 and Level 3 sequential training through the American Red Cross (ARC). CERT Level 2 includes 12 additional training hours in: "Introduction to Disaster Services", "Mass Care", and "Shelter Operations & Shelter Simulations". Currently, Level 2 classes are free. Check your local ARC's or CERT's website for available classes and dates.

After you have completed Levels 1 & 2 training, Level 3 is a 50 plus-hour "Emergency Response Advanced First Aid" course. A Level 3 CERT member will have completed nearly 80 total hours of training and be capable of effectively assisting the needs within the community. Contact the ARC for dates and cost for this course.

Currently, CERT teams are regionally located within the city according to the Fire Department battalion they live in or work in. Opportunities are available to join and train with a team and potentially become a CERT Battalion Coordinator. Currently, Battalion Coordinators have completed at least Levels 1 & 2 training . These Battalion Coordinators work closely with CERT team members and the Fire Department to develop a capable "response-ready" team.

If you are a licensed amateur radio operator (Ham) who desires to serve the Department and the community, the ham radio will back up the Department's 800-MHz radio system and provide radio support to CERT members, their families, and their Battalion Coordinators. Contact Captain Kevin Nida, the Los Angeles Fire Department's City Radio Officer at (213) 978-3536 or e-mail him at kevin.nida@lacity.org.

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