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**CITY OF LOS ANGELES
NATIONAL FLOOD INSURANCE PROGRAM
Newsletter
Winter 2010-2011**

Dear Resident:

The City of Los Angeles joined the **National Flood Insurance Program** (NFIP) in 1980 and made federally-backed flood insurance available to all City residents. The NFIP/**Community Rating System** (CRS) was implemented by The **Federal Emergency Management Agency** (FEMA) in 1990 as a program for recognizing and encouraging community floodplain management activities that exceed the minimum NFIP requirements, and flood insurance premium rates are adjusted to reflect the reduced flood risk.

Since October 2005, the City has received a class 7 rating under CRS which means the residents within FEMA designated **Special Flood Hazard Areas** (SFHA) receive a 15% flood insurance premium discount and others in the City, outside the SFHA, receive a 5% discount.

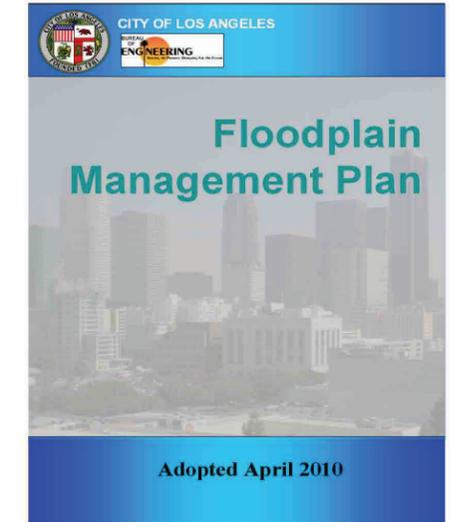
In February 2009, the City was subjected to a 5-year cycle CRS verification visit conducted by FEMA's consultant. The purpose of this 5-year cycle visit was to ensure the City continues to implement creditable activities to reduce flood risks. One of the activities identified under the 5-year cycle visit is to update the **Floodplain Management Plan** (FMP) and conduct a **Repetitive Loss Property** (RLP) analysis by April 2010.

In April 2010, the City Council adopted the latest FMP including RLP analysis. Both documents can be found online at:
http://eng.lacity.org/projects/fmp/final_plan.htm

Natural and Beneficial Functions of Local Floodplain

A natural flood control system is composed of open spaces that provide natural and beneficial functions. Surface water, floodplains and watersheds are part of an ecological system that exists in a state of dynamic equilibrium. If a disturbance occurs in one part of the system, the entire system will readjust toward a new equilibrium. The geomorphological, hydrological, and biological effects of the system's readjustments may be evident far upstream and downstream from the disturbance and may last for a long period of time. Therefore, floodplain development and modification should be viewed with caution and with careful assessment of the potential adverse impacts on the natural resources and beneficial functions, including flood protection to existing development.

Floodplains in their natural or relatively undisturbed state provide three broad sets of natural and beneficial resources values. These values are; (1) water resources values including natural moderation and attenuation of floods, water quality maintenance, and groundwater recharge; (2) biological resource values including large and diverse populations of plants and animals; and (3) societal resource values including historical, archeological, scientific, recreational, and aesthetic.



As a covered entity under Title II of the American with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities.

Record Rainfall

There was some good news on the rain front during the 2009-2010 rainy season. A new rainfall record was reached in Downtown Los Angeles with the 0.60 inches of rain which fell on April 5, 2010. The total amount of rain up to that date was 15.26 inches. This is above the 1971 through 2000 annual rainfall norm of 15.14 inches.

By June 30, Downtown Los Angeles ended the water year with 16.36 inches which is about 8% above normal. However, several more years above normal rains and snow will still be needed to bring the current drought to an end.

NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

The NFIP is a Federal program enabling property owners in participating communities to purchase insurance protection against property losses due to flooding. This insurance is designed to provide an insurance alternative to disaster assistance to meet the escalating costs of repairing damage to buildings and their contents.

Flood insurance covers direct losses caused by surface flooding, including a river flowing over its banks, a lake or ocean storm (including tsunamis and seiches), and local flooding problems.

Did you know...

Flood damage is not covered by your homeowner insurance policy.

There is a 30 day waiting period before the policy becomes effective.

There are two types of coverage: structural and contents.

- Structural coverage is for the walls, floors, insulation, furnace and other items permanently attached to the structure.
- Contents coverage, purchased separately, requires the contents to be in an insurable structure.

Insurance Premium Discount: Due to the City of Los Angeles' active participation in the **National Flood Insurance Program (NFIP)** and **Community Rating System (CRS)**, new and renewed flood policies in Special Flood Hazard Areas continue to receive a 15% premium discount.

Through the NFIP, flood insurance is available to all City residents who wish to purchase flood insurance regardless of their flood risk or flood history. Properties outside the Special Flood Risk Areas receive a 5% premium discount.

Insurance agents should use the latest Insurance Manual in order to apply the discount automatically. This manual is available on the web at:

www.fema.gov/business/nfip/manual.shtml

Did you know...

Your home has a 26% chance of being damaged by a flood during the course of a 30-year mortgage, compared to a 9% chance of fire. A home mapped in a high-risk area is three times more likely to suffer damage from a flood than a fire in the lifetime of a typical mortgage! Roughly 25% of all claims paid by the NFIP are for policies in low- to moderate-risk communities. The average annual U.S. flood losses in the past 10 years (96-05) was more than \$2.5 billion. The NFIP awarded nearly \$17 billion in flood claims in 2005.

Why Flood Insurance is better than Disaster

- **Flood Insurance Assistance?** You are in control. Flood insurance claims are paid even if a disaster is not declared by the President.

- Between 20 and 25 percent of all claims paid by the NFIP are outside of Special Flood Hazard Areas.

- There is no payback requirement.

- Flood insurance policies are continuous, and are not non-renewed or cancelled for repeat losses.

- Flood insurance reimburses you for all covered losses up to \$250,000 for homeowners and \$500,000 for businesses.

- The average cost of a \$100,000 flood policy is a little more than \$400 annually, or just over one dollar per day. The cost of a \$50,000 flood policy may be as low as \$180 annually, depending on where you live, or less than 50 cents per day.

- **Disaster Assistance** Most forms of federal disaster assistance require a Presidential declaration.
- Federal disaster assistance declarations are awarded in less than 50% of flooding incidents.

- The most typical form of disaster assistance is a loan that must be repaid with interest.
- The duration of a Small Business Administration (SBA) disaster home loan is approximately 30 years.

- The average Individuals and Households Program award is about \$4,000.

- Repayment on a \$50,000 SBA disaster home loan is \$240 a month or \$2,880 annually at 4% interest. This comes out to more than \$ 7 dollars per day.

Since 1978, the NFIP has paid \$37 billion for flood insurance claims and related costs (as of 7/2009). About 5.7 million people currently hold flood insurance policies in more than 21,000 communities across the U.S.

Mandatory Purchase Requirement: The mandatory flood insurance purchase requirement applies to all forms of federal or federally related financial assistance for buildings located in a **Special Flood Hazard Area (SFHA)**.

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 Bureau of Engineering district offices. For flood zone information and availability of elevation certificates, contact us by email at Eng.NFIP@lacity.org, or call (213) 485-4820 (*Call back time is within 2 business days*). This information is also available to you directly through the internet at:

<http://navigate.la.lacity.org>

Investigation of Drainage Deficiencies

Request a drainage investigation when the water in the streets overtops the curb by calling your local **Bureau of Engineering (BOE)** District office:

- Harbor District: (310) 732-4690
- West L. A.: (310) 575-8534
- Valley District: (818) 374-4643
- Central District: (213) 485-1604
- Espanol: (213) 485-4513

If requested, a staff engineer from BOE will visit your property to review your flood problem and explain ways to stop flooding or prevent flood damage. Call the NFIP info line at (213) 485-4820. These services are free.

Report Clogged Catch Basins

The City of Los Angeles Bureau of Sanitation routinely cleans out the city's 35,000 catch basins at least once a year, some with more frequency. However, if your neighborhood catch basin becomes clogged with debris, please call 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 week-ends.

And remember, storm drains are for rainwater only!

Illegal Dumping

Used motor oil, discarded food, trash and other debris are just some of the items routinely dumped into storm drains throughout the city. Curbside catch basins are the entry points of the storm drain system, which eventually discharges out into the ocean. Additionally, catch basins filled with debris can create unhealthy conditions in residential neighborhoods by becoming a breeding ground for rats, roaches and disease.

Residents are encouraged to report illegal dumping by calling the Stormwater Program at (800) 974-9794. Please note: after 5:00PM and before 7:00AM Monday through Saturday and all day Sunday the 800-974-9794 will roll over to the City's 311 number.

More information are available at: www.Lastormwater.org

FEMA NFIP phone numbers

General information: (800) 427-4661
Need a Flood Insurance Agent?.....(800) 720-1093

All other questions

311 Please call

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.

Hillside Problems

Report problems with hillslides as well as temporary erosion caused by construction projects, and alteration or modifications to natural drainage that affect your property to the Building and Safety Call Center at (888) 524-2845.

Sand Bags

Free sand and sandbags are offered through the Fire Stations and the Bureau of Street Services yards during the storm season. A complete list of maintenance yards and local fire stations offering sand bags is available on line at the following web site (or call 311 to request a copy of this list). <http://bss.lacity.org/resurfacing/storm.htm>

Flood protection library

Additional information regarding flood protection, floodplain management and the NFIP can be found through the FEMA web site at www.fema.gov or at the City's Central Library (Science, Technology and Patents Department) at: www.lapl.org

CITY SERVICES AND PHONE LIST

DRAINAGE SYSTEM MAINTENANCE

The original storm drain system was developed in the 1930 by the Army Corps of Engineers. As the City began to grow rapidly in the 1920s and 1930s, rainwater that was once absorbed by miles of undeveloped land began to run off the newly paved and developed areas, increasing amount of water flowing into Los Angeles rivers and local creeks. These waterways could not contain the increased amount of water and the region experienced massive flooding. Because of this, the Army Corp of Engineers lined the Los Angeles River and Ballona Creek with concrete and started the development of an underground urban drainage system. As Los Angeles continued to grow, a complex drainage system developed.

Today, the City's storm drain system total 35,000 catch basins, over 1,500 miles of underground pipes, and 100 miles of open channels. Runoff from approximately 1,060 square miles of developed land reach Santa Monica and San Pedro Bays through approximately 60 storm drain outfalls. Approximately 100 million gallons of water flow through Los Angeles' storm drain system on an average dry day. When it rains, the amount of water flowing through the channels can increase to 10 billion gallons reaching speeds of 35 mph and depths of 25 feet. Runoff from streets, parking lots, yards, etc. enters the storm drain, receives no treatment and flows directly to the ocean. Paint thinner and paint products, motor oil, pesticides, Styrofoam cups, paper, human and animal wastes, antifreeze, golf balls, dirty diapers and dead animals are found everyday in the storm drain system. Every year, roughly 40 tons of trash and debris are deposited onto our local beaches from stormwater runoff. It's important to our environment and safety that we keep our waterways clean.

An ordinance passed in 1999 (LAMC Sec 64.70) makes it illegal to dump or discharge trash, debris, chemicals, contaminated water, or any other liquid or solid material into the storm drain system. Violators are subject to stiff fines and criminal prosecution. The Stormwater Program's Enforcement Section receives many calls to its **(800) 974-9794** hotline number from the public reporting illegal dumping violations and these calls are investigated.

If you want to know more about our storm drain system, please log on to: www.lastormwater.org

Typical Flood Problems

Hillside Drainage Problem: This occurs on properties located at the bottoms of steep hills. Floods happen when the drainage system is deficient or inadequately designed. Runoff is not diverted to the street and enters the home or garage. In some situations, neighbors change the normal drainage patterns, creating flood risks to other properties. Mudslides from slope failures are also

common problems. If erosion on your property is a problem or if others have change the normal drainage patterns, you can call **(213) 485-4820** to request an investigation, or information on how to protect your home. Sandbags are provided free during the rainy season (please refer to the City Services Phone List provided).

Street Drainage Problem: Flooding may occur when street runoff enters private property. If the property is located on a street sump area (lowest point of the nearby streets), or if the building pads on these properties are lower than the street level, and/or the driveway is sloped toward the house and garage, the street flow can pond. Drainage problems can be caused by undersized or broken City storm drains, or clogged City catch basins. If this problem applies to you, you can call the Bureau of Engineering to request a drainage investigation, and the Bureau of Sanitation at **(800) 974-9794** to request that the catch basins be cleaned or obstructions removed from City drains.

On-Site Drainage Problem: When private drain inlets or v-ditches are inadequate or become plugged with yard debris, water ponds within the property and cannot drain to the street. Underground garages with insufficient drainage are also commonly flooded.

Other Hazards: These properties have site-specific problems that need special and individual attention. For example:

- Buildings damaged by coastal flooding exacerbated by a storm drain failure;
- Catastrophic rains far exceeding drain capacity;
- Buildings built too low into the bed of a natural watercourse;
- Groundwater seepage enters the lower level of the house, flooding the basement after heavy storms.

Flood Prevention Tips

- Keep drainage areas (ditches, swales, small channels) free of debris.
- Consult an engineer to design a permanent water/flood debris control device, if needed.
- Ensure that drainage pipes within your property are cleared and work properly.
- Landscape slope areas with plants suitable for fire retardant and erosion control.
- Report clogged catch basins to request cleaning and floodwaters overtopping the curb for engineering investigations.

This requirement affects loans and grants for the purchase, construction, repair, or improvement of any publicly or privately owned building in the SFHA, including machinery, equipment, fixtures, and furnishings contained in such buildings.

Financial assistance: include loans and grants from agencies such as the Department of Veterans Affairs, Farmers Home Administration, Federal Housing Administration, Small Business Administration, and Federal Emergency Management Agency. The requirement also applies to secured mortgage loans from financial institutions, such as commercial lenders, savings and loan associations, saving banks, and credit unions that are regulated, supervised or insured by Federal agencies such as the Federal Deposit Insurance Corporation and the Office of Thrift Supervision. It also applies to all mortgage loans purchased by Fannie Mae or Freddie Mac in the secondary mortgage market.

FEMA grant assistance are provided to those who have suffered damage and loss from disasters occurring in that state. When there is a presidential declaration, FEMA begins accepting assistance applications for a period of time that varies depending on the scope and magnitude of the disaster as well as affected areas and amendments to the governor's declaration request. Those applicants maybe eligible for FEMA grant money. This disaster assistance does not have to be repaid and is to be used for vital expenses that cannot be managed via other means.

How it works: Before a person can receive a loan or other financial assistance from one of the affected agencies or lenders, there must be a check to see if the building is in an **Special Flood Hazard Areas** (SFHA). The SFHA is the base (100-year) floodplain mapped on a **Digital Flood Insurance Rate Map** (DFIRM). It is shown as one or more zones that begin with the letter "A" or "V".

Many lenders and insurance agents also have copies of the DFIRM for the City of Los Angeles. It is the lender's responsibility to check the DFIRM to determine if the building is in an SFHA. If the building is in a SFHA, your lender is required by law to require you to purchase a flood insurance policy on the building. The requirement is for structural coverage equal to the amount of the loan (or other financial assistance) or the maximum amount available, whichever is less. The maximum amount available for a single-family house is \$250,000.

The mandatory purchase requirement does not affect loans or financial assistance for items that are not covered by a flood insurance policy, such as vehicles,

business expenses, landscaping, and vacant lots. It does not affect loans for buildings that are not in the SFHA, even though a portion of the lot may be flood prone. While not mandated by law, a lender may require a flood insurance policy as a condition of a loan for a property in any zone on a DFIRM.

The most important thing you can do to protect yourself from financial loss is to have flood insurance. Floods can also pose life-threatening risks to you and your family. So be smart. Be prepared for anything nature sends your way. Federal disaster assistance is usually a loan that must be paid back with interest. For a \$50,000 loan at 4% interest, your monthly payment would be around \$240 a month (\$2,880 a year) for 30 years. Compare that to a \$100,000 flood insurance premium, which is about \$500 a year (\$33 a month).

If you live in a low to moderate risk area and are eligible for the Preferred Risk Policy, your flood insurance premium may be as low as \$112 a year, including coverage for your property's contents.

You are eligible to purchase flood insurance because the City of Los Angeles participates in the National Flood Insurance Program. It takes 30 days after purchase for a policy to take effect, so it's important to buy insurance before the floodwaters start to rise. All claims and expenses of the NFIP program are funded by insurance premiums, not tax dollars.

Special Flood Hazard Area

The City of Los Angeles has approximately 30,000 structures in Special Flood Hazard Area (SFHA). According to the Federal Emergency Management Agency (FEMA), your property is located within or adjacent to an SFHA and has a 1% chance of being flooded each year.

The term "100-year flood" is misleading because it leads people to believe that it happens only once every 100 years. The truth is that an uncommonly big flood can happen any year. The term "100-year flood" is really a statistical designation, and there is a 1-in-100 chance that a flood this size will happen during any year. Big floods happen irregularly because the climate naturally varies over many years. Perhaps a better term would be the "1-in-100 chance flood".

FLOOD ZONE

Flood Zone Map

In the middle of this news letter is the flood zone map of the City of Los Angeles. If you want to verify whether or not your property is located within a flood zone, you can log on at: <http://navigataela.lacity.org> or email us at Eng.NFIP@lacity.org, or call (213) 485-4820.

The Bureau of Engineering keeps copies of Flood Insur-

ance Rate Maps for the City of Los Angeles. If you have recently purchased or re-financed your home, your lender may require you to obtain a flood insurance policy. Whether you own or rent the property you live in, you need to know the flood risks associated with the flood designation in order to take precautions that protects your interests. The City of Los Angeles prepares annual mailing designed to provide you with information that may help you understand and reduce the flood risk surrounding your home. If you have questions regarding this publication, you can email the City of Los Angeles at Eng.NFIP@lacity.org or call (213) 485-4820. If you receive this newsletter in error, please disregard.

What can homeowners do if they believe their homes are erroneously included in the flood zone ?

If a homeowner can show that the home is located above the base flood elevation and was built before 1980 (with no significant improvements, such as major additions over 50% of the original structure since then) he/she can apply for a map amendment by completing an application for a **Letter of Map Amendment** (LOMA) and submitting this request to FEMA. A LOMA application (known as MT-EZ) can be obtained on line at:

www.fema.gov/plan/prevent/fhm/dl_mt-ez.shtm

FEMA's review is free to individual property owners who apply for single lot LOMA review. However, a Registered Professional Engineer or Licensed Land Surveyor will need to be hired by the homeowner to certify the elevation information in the application. More information is available by accessing FEMA's web site (Surveyor's guide to Elevation Certificates) at: www.training.nfipstat.com/ecsurveyor

If you would like assistance in completing a LOMA application from a Map Specialist, you may call the FEMA Map Assistance Center toll-free at **1-877-FEMA-MAP** or **1-877-336-2627**. Please note that the City does not approve or deny any map amendment requests since the Flood Insurance Rate Maps are published by a federal agency.

Building or Re-modeling in the Flood Zone

All developments in the floodplain, not just construction of buildings need local permits.

Did you know....

The **Lowest Finished Floor** (LFF) of all new buildings and significant improvement (including remodeling) located in SFHAs must be elevated one foot higher than the expected **Base Flood Elevation** (BFE) per City Ordinance No. 172081.

Certain flood hazard areas are considered floodways or passages to the 100-year flow, therefore, no new development will be allowed. Other areas experience velocity and debris loads and may require special design considerations.

No basements for residential structures located in the flood zones will be permitted in new buildings. Substantial improvements and substantial damage residential-projects (including multiple residential units) will be required to seal any existing basements.

Mandeville Canyon is considered a Flood Risk Area and developers are likely to be required to obtain a water-course permit per Special Order SO003-1005. A copy of the Special Order can be obtained by emailing a request to Eng.nfip@lacity.org.

If your property is in the flood zone, please contact the City NFIP Information Line at **(213) 485-4820** or email us at: Eng.nfip@lacity.org before designing your project.

Substantial Improvements

Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either:

- Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions or

- Any alterations of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

Floodplain management requirements for new construction apply to substantial improvements. Increased **Cost of Compliance** (ICC) coverage does not apply to substantial improvements unless a structure is substantially damaged due to flooding. More information on ICC can be found at <http://www.fema.gov/plan/prevent/floodplain/nfipkeywords/>

RECENT HEADLINES

The City has completed an extensive floodplain analysis

of the Sun Valley watershed, and this comprehensive study has resulted in changes to the SFHA. As required by the CAV, the City of Los Angeles has filed a LOMR application with the FEMA for possible revision on FEMA's FIRMs in the Sun Valley watershed.

Once the City receives FEMA's determination, the City will notify those property owners who are impacted by the revised map. Properties located within the SFHA, and financed by federally backed mortgages, will be required to purchase flood insurance.

California Severe Winter Storms, Flooding, and Debris and Mud Flows – FEMA- 1884-DR Declared March 8, 2010 ¹

On February 11, 2010, Governor Arnold Schwarzenegger requested a major disaster declaration due to severe winter storms, during the period of January 17 to February 6, 2010.

On March 8, 2010, President Obama declared that a major disaster exists in the State of California. This declaration made Federal grant available to the Southern California residents.

¹ www.fema.gov/pdf/news/pda/1884.pdf

Los Angeles County Levee De-certification at Dominguez Channel & Compton Creek ^{1, 2}

The FEMA requires levee owners, like the **Los Angeles County Flood Control District** (LA County) to provide document certifying that their levees meet the Federal requirements for flood protection. LA County conducted extensive analysis to certify its levees. However, its analysis concluded that the levees within Compton Creek and the Dominguez Channel can no longer contain a 100-Year Flood. Areas subject to inundation will be shown as a SFHA on FEMA's FIRMs.

Properties located within the SFHA, and financed by federally backed mortgages, will be required to purchase flood insurance.

¹ www.ladpw.org/wmd/dsp_LeveeCertificationFAQs.cfm

² The National Levee Challenge

Levees and the FEMA Flood Map Modernization Initiative

RECENT HEADLINES

Park Mesa Heights, - Removed from Zone A

Good news for those living in the Park Mesa Height area. As of December 28, 2009, the **Federal Emergency Management Agency** (FEMA) has removed the area out of the **Special Flood Hazard Area** (SFHA), formerly shown as Zone A and is now shown as Zone X. This means that residents currently living in the area are not subject to **National Flood Insurance Program** (NFIP) requirements. For more information please visit our website at <http://eng.lacity.org/index.cfm> under City Links.

Mudslides aftermath of Station Fire and Flooding at 4th/Grand in San Pedro

The Station fire, the largest fire in Los Angeles County history, burned through a 250-square-mile in August and September of 2009. The first rain storm in January 2010 caused public works crews to clear 1.2 million cubic yards of material from debris basins. Even though the fire has ceased, work continues to go in terms of cleaning up debris in basins and planning for the next big storm.

Torrential rain came down in the San Pedro neighborhood area along Grand Ave. between 3rd and 4th Street in the month of January. This neighborhood lies within the SFHA designated in the Flood Insurance Rate Map (FIRM) published by FEMA. In less than 20 minutes, 2-inches of rain fell causing this rain storm to be considered a 100-yr. storm event.

Several homes and apartment buildings were evacuated as a result of the flooding. Some of the residents have blamed the new catch basin screens for the flooding problem. Screens were recently installed on curb face to prevent debris from entering the storm drain system. Those screens in the affected area have been removed. The City is looking for solutions to prevent this problem from occurring in the future.

Sun Valley LOMR

In March 2007, the California **Department of Water Resources** (DWR) conducted a **Community Assistance Visit** (CAV) for the City of LA. As a result of the CAV findings, the City was required to undertake a floodplain study for the Sun Valley watershed area. Any changes resulting from the study will require the City to file a **Letter of Map Revision** (LOMR).

PERSONAL SAFETY DURING A FLOOD

The most visible features of the City of Los Angeles are the 270 miles of open flood control channels, which include the Los Angeles River, Dominguez Channel, and Ballona Creek. They serve to collect rainwater from most of the City's storm drains and smaller open channels, and move the water out to either the Santa Monica Bay or San Pedro Bay. When it rains, it fills up with fast flowing water that can kill anyone who gets caught up or swept away in it. It is illegal to enter the flood control channels at anytime.

What if I see someone fall into the channel?

Immediately call 911, do not go into the channel to try to save them. Don't try to save them using a rope, the force of the water will pull you in. Find some sort of flotation device, Styrofoam ice chests, foam cushions, any unattached object they can use to hang on to.

What if I fall in?

Remain calm, float on your back with your head up from the water. Use your feet and legs to steer yourself clear of obstructions. If a large obstacle is blocking the channel, try to flip over your stomach and approach the object head on, and crawl over the top of it. People die in swift water when they get pinned or trapped against debris. Never finding yourself in this situation is the best way of surviving swift waters.

- Do not walk through flowing water.
- Do not drive through a flooded area.
- Stay away from power lines and electrical wires.
- If flooded, have your electricity turned off by the Department of Water and Power.
- Look out for animals, especially snakes.
- Be alert for gas leaks.

New Emergency Alert System

On January 7, 2010, Los Angeles county officials launched an emergency alert system, similar to reverse 911, that will notify residents and businesses by phone, text or e-mail about dangerous conditions in their area. Residents and businesses will be contacted if there are emergencies like wildfires or floods near their home or offices, and tell them whether evacuation is necessary.

The Sheriff Department's Emergency Communications Center will be responsible for sending out the alerts. Members of the public who would rather receive the emergency notification via their cell phone or e-mail account will have to register that information through the www.alert.lacounty.gov web site.

You will also have the option of registering your fax numbers and voice-over IP lines. But only one phone number or e-mail address may be entered per street address. If the number is busy or does not answer, the system will

DOCUMENTS YOU SHOULD HAVE BEFORE MAKING YOUR APPOINTMENT FOR FLOOD ZONE CLEARANCE

	SUBSTANTIAL IMPROVEMENT	LESS THAN A SUBSTANTIAL IMPROVEMENT
SCOPE OF PROJECT	<ol style="list-style-type: none"> 1) Two (2) sets of plans, including floor plans, site plans, cross-section/elevation views. Plans must be signed and stamped by a licensed civil engineer or architect. 2) Topographic survey with footprint of proposed structure on existing site (undisturbed project site) stamped, dated and signed by licensed surveyor if Base Flood Elevation (BFE) is not known. Survey must reference 1988 Datum Reference and City Benchmark Map with ID number. 3) Site plan or survey should show proposed structure with elevation information of lowest finish floor and adjacent grounds. If Base Flood Elevation (BFE) is unknown, it will be determined from the highest grade adjacent to the improvement, plus the flood depth expected. The minimum finish floor elevation will be the BFE plus one foot for freeboard. 4) Plans must show waterproofing for materials susceptible to water damage below the minimum required finish floor elevation (FFE). Metal, concrete, cement and masonry are considered to be waterproof. Flood certificate will be required after construction for commercial projects. 5) Plans must also show flood venting at ground level based on the ratio of one square inch of venting per one square foot of additional improved space of building. Venting must sit at ground level. 6) If existing walls are to be removed as part of the improvement, the existing floor must be raised where the addition joins the existing structure. 7) Any additional information such as documentation or calculations confirming that new or improved structure will withstand potential flooding such as (but not limited to): <ul style="list-style-type: none"> - hydraulic and hydrologic calculations - FEMA-established calculations for hydrostatic, hydrodynamic and buoyancy forces - Written correspondence from any government agency confirming approval of improvement within an agency easement. - Structural plans and calculations wet-stamped and signed with original signature of a licensed civil or structural engineer. 	<p>If you contend that your improvements are less than 50% of the appraised value of the existing structure, you will need to bring the following documents to your appointment for verification.</p> <ol style="list-style-type: none"> 1) Recent appraisal of existing structure by certified appraiser dating from no more than twelve months ago. County Assessors tax records may be used in lieu of an appraisal report. 2) Cost estimate from contractor, with breakdowns for labor, material, profit and overhead. (Material costs must be further broken down by <u>unit cost</u> and <u>quantity</u> of each type of material). <p>Organizing costs and receipts in an easy-to-read format will facilitate the review of your case. Should your case require extensive time to review, you may need to pay an additional \$1000.</p>
		COMMERCIAL PROJECTS WITH SUBGRADE STRUCTURES
		<p>In addition to the documents listed on the left, you must submit an emergency plan for flooding and a covenant agreement attached to the property.</p>
WITHIN FLOODPLAIN?	LETTER OF MAP AMENDMENT (LOMA)	LETTER OF MAP REVISION (LOMR)
	<p>If you believe that your project does not sit within a floodplain, you must file a Letter of Map Amendment (LOMA) with FEMA, which approves your petition. Issuance of a LOMA eliminates the Federal flood insurance purchase requirement for Federal or federally backed financing, but not necessarily for private mortgage lenders.</p> <p>Your first step is to file a Conditional Letter of Map Amendment (CLOMA). Please review FEMA's website at www.fema.gov/plan/prevent/fhm/hm_main.shtml before making your appointment.</p>	<p>If you believe that the floodplain boundary is incorrect and wish to request a re-drawing of the boundary, you must file a LOMR with FEMA (or a Letter of Map Revision – Fill [LOMR-F] for a revision based on increased elevation of property due to certified fill). The LOMR application should include, but is not limited to, calculations specified on the application. The Stormwater Engineer can guide you in preparing the LOMR, if necessary. However, please review www.fema.gov/plan/prevent/fhm/hm_main.shtml before making an appointment.</p>

