

CALIFORNIA DRAINAGE LAWS: When dealing with drainage issues on your property you should always consider how any changes to the existing drainage on your property may impact an adjoining property. California laws governing water rights and drainage are complex, since they have been determined by case law which is constantly evolving. Serious disputes between landowners are often settled in court on a case by case basis. Simply, water should enter and leave your property where it did prior to any construction activities. Changing the flow of water in a manner that creates damage to an upstream or downstream neighbor, may result in legal liabilities for those damages.

CHECKLIST TO WINTERIZE YOUR HOME!

It is important to winterize a home for the cold winter season, especially if you plan to be away from the house for an extended period of time. A winterized property will be protected against the elements and save you money on heating costs, water damage and general inconveniences. Weather can be extreme in San Luis Obispo County. We often get hard cold snaps and heat waves that catch all of us off guard. So, it is worth while to take preventative steps to save money and protect our property!



☑ PRE-WINTER CHECKLIST ☑

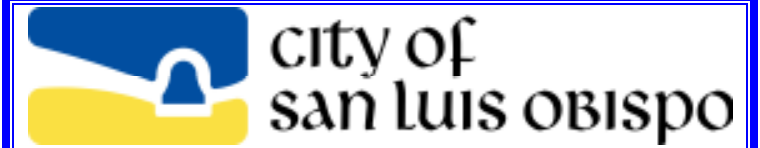
- ☑ Have furnace inspected and cleaned annually.
 - Change or clean filters monthly
- ☑ Have air-duct system inspected & cleaned annually
- ☑ Have fireplaces inspected annually (“Level 1”)
 - Clean as needed
 - Check mortar & tuck points
- ☑ Reverse ceiling fan direction (i.e. to clockwise)
- ☑ Check house for exterior air leaks (doors, windows, recessed lighting, electrical outlets, cracked glass, etc.)
- ☑ Inspect roof, gutters and downspouts
 - Clean out gutters
 - Check and repair roof flashing as needed
 - Replace damaged or missing shingles



- Inspect and clear roof vents
- ☑ Consider adding insulation to attic (10” – 12” deep)
- ☑ Check foundations
 - Rake away all debris and edible vegetation from the foundation
 - Seal up entry points to keep small animals from crawling under the house
 - Tuck-point or seal foundation cracks. Mice can slip through a space as thin as a nickel. Mice are no different than us, they are searching for a warm place to spend the winter and your house looks just fine!
 - Inspect sill plates for dry rot or pest infestation.
 - Secure crawlspace entrances
- ☑ Inspect and test smoke & carbon dioxide detectors
 - Replace batteries
- ☑ Check and replace fire extinguishers as necessary
- ☑ Prepare landscape and outdoor surfaces
 - Hold off on pruning, but remove dead wood, damaged branches, & branches hanging over a structure
 - Good time to transplant & plant trees
 - Time to add mulch
 - Clean the pond/fountain
 - Reduce or turn irrigation off
 - Repair stairs, & seal concrete cracks
- ☑ Prepare an emergency kit
 - Candles
 - Flashlight
 - List of utility providers
 - Buy a battery backup power source
 - Install surge protectors on key electrical appliances
 - Store extra bottled water
 - Prepare an evacuation plan.



The tips contained in this brochure provide useful information to help prevent flood damage and winterize your home. For detailed information on flood protection and winterizing your home please visit our website at via: <http://www.slocity.org/publicworks>, then stormwater or call us at (805) 781-7530. (Rev 1/2009)



Best Management Practices for Flood Protection
(Floods Can Happen Anywhere!)



Protecting your home is something that all of us should consider throughout the year, whether or not we live in a flood zone. Most people think that floods occur because of hurricanes or tropical storms, but those natural disasters are not the sole causes. Some areas can also flood due to rising creek or river waters, flash flooding from heavy rainstorms or rapid snow melt. A **flood**, in layman terms, is **any sudden accumulation of water or mud in an area that ordinarily is not wet**. Floods can also occur from man made events, such as poor landscape grading design, or poor landscape grading work.

The information in this brochure provides useful tips on how to protect you from flood damage.

More Information Call

(805) 781-7530 or visit

<http://www.slocity.org/publicworks>

FLOOD PREVENTION 101!

Floods can happen anywhere at anytime. In fact **your home**, no matter where you live, is **three times more likely to be damaged by flooding than by fire.** The City of San Luis Obispo routinely maintains flood controls systems throughout the city. These systems begin with the City's stormwater conveyance system ("SCS" - gutters, streets, storm drains, creeks, stormwater detention ponds) which is designed to hold and carry water during moderate storms to prevent flooding in urbanized areas. During extreme rain events **you may need to take steps to protect your home!**

FLOOD PREVENTION TIPS!

1. **Keep Your Gutters Clean:** Gutters filled with leaves and other debris can become a major problem in heavy rains. Clogged gutters and downspouts can lead to the pooling of water runoff and deposit large amounts of water at the corners of your home close to the foundation. Gutter downspouts should carry water away from the footing of any structure.
2. **Basement/Foundation:** Basements and foundations are very vulnerable to water seepage and damage for obvious reasons. There are many solutions to the problem.
 - **Drainage Around Your Home:** Drainage problems exist when the basement is wet, or the ground under a raised foundation is wet and/or water ponds within ten feet of a structure. There is a difference in the way you handle excess water, depending on whether the problem is with surface water or subsurface water. In some cases, both surface and subsurface drainage systems will be needed in order to solve the problem.
 - **Surface:** All developed property should have a grading and/or landscaping plan that provides control of all surface water runoff on the lot. First, check the grade of the area immediately around the foundation; it should slope away for several feet (10' is an ideal slope distance). If this is not the case, then determine the best course of action to keep surface run-off away from the foundation of the structure –

re-grading is an option, but consider where and how you redirect the flow.

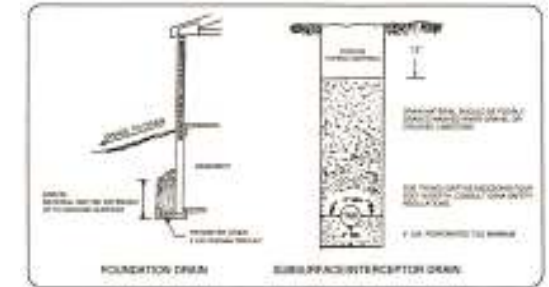
- **Sump Pump:** Every basement should be equipped with a sump pump that has back-up power. Also, elevate basement appliances (i.e. furnace, water heater, etc.) to prevent damage if water intrusion occurs.



- **Seal basement walls:** Basement waterproofing is not just a good idea in terms of flood prevention, but also to prevent seepage and cracking on a daily basis.
3. **Back-Flow Valves and Plugs:** If you are in a flood zone, experts recommend that all drains (i.e. sewer outlets) should be equipped with back-flow valves or plugs. These can prevent water from getting into your house via a drain during a flood.
 4. **Pre & During Flood Season Protection Measures:**
 - Be prepared! **Take preventative steps to protect your property** before the risk of a flood occurs.
 - Keep materials like sandbags, plywood, plastic sheeting and lumber handy for emergencies.
 - Check with a plumber regarding a valve to prevent sewer backups.
 - Make sure that drainage ditches are clear of debris and functioning properly.
 - Clear the gutters along the street in front of your property of all loose debris.
 - Again, clean out all rain gutters and garden drains in the fall.
 - Install a functioning lot drainage system.
 - If you know that a flood is coming, move valuable contents upstairs or to a safe location.
 5. **Exterior Drains:** Landscape drains help to carry stormwater away from the structure; however, they often

get clogged, or just can not cope with the volume of water during a storm. Thus, proper grading is still important. **All exterior surfaces should slope away from any and all structures for at least ten (10) feet.**

6. **Ground Seepage Problems** are often the result of construction debris buried at the base of a foundation, poor compaction or seasonal high water tables. All scenarios allow for the accumulation of sub-surface water around the foundation which allows for subsurface water intrusion. The solutions vary; (1) removing all the debris, (2) extract all soil then re-compact the area, (3) cover the area immediately around the structure with some form of impervious material (i.e. concrete), (4) install a subsurface drainage system.



7. **LID or Low Impact Development** is a concept wherein property owners attempt to minimize impervious surfaces (i.e. paved surfaces) on the site, thus maintaining more surface area for water absorption. LID designs reduce stormwater runoff.
8. To find out if your house or business is in a floodplain, consult the floodplain map at <http://getready slo.com>.
9. For more information on floods, check the following websites: www.fema.gov, or <http://getready slo.com>, or <http://www.slocity.org/publicworks>, then stormwater.
10. **How to get Help:** If you have a significant drainage issue on your property, you may want to contact an engineer, landscape architect or another expert, before taking action that could result in additional drainage issues.
11. **Purchasing Flood Insurance:** Lastly, it is a good idea to have flood insurance, since again **you are three times more likely to experience flood damage versus fire damage** during the course of your home loan.