



## Is a Dry Well Feasible at My Residence?

### Dry wells are appropriate where the following site characteristics are present:

- Roof areas with downspouts or other impervious areas are required.
- Sites must have soils suitable for infiltration, with a minimum saturated hydraulic conductivity of 0.3 in/hr.
- Dry wells should be installed at least 25 feet from building foundations and 10 feet from property lines, or have an approved impermeable liner installed to prevent infiltration under these facilities.
- An overflow area that will not run onto neighboring properties is required.

Dry-Well systems present an easy to install and sustainable solution for storm water control. This Best Management Practices water run-off choice is known as the “invisible” solution - it’s underground!

### How Large Does My Dry Well Need to Be?

A dry well should be sized to capture the runoff produced from the design storm over the connected impervious area, with account taken for any gravel or fill material that is used. This will ensure the capture and infiltration of the design storm volume. The following table should be used as minimum sizing guidance for dry wells.

Contributing Area (sq. ft.)	Dry Well Volume—Without Fill (gallons)	Dry Well With Gravel Fill (gallons)
500 - 1000	250	600
1,001 - 1,500	400	1,000
1,501 - 2,000	550	1,400
2,001 - 2,500*	700	1,800

\* Projects adding roof or impervious areas in excess of 2,500 sq. ft. shall add 150 gallons of dry well volume (without fill) or 400 gallons of dry well volume (with gravel fill) per every 500 sq. ft. of additional area.



## Design Criteria and Considerations

When installing a dry well, the following criteria should be adhered to unless otherwise permitted by the City of Long Beach. The owner should check all boxes that will be complied with.

- Location is at least 25 feet from home foundation and 10 feet from private property lines.
- Dry well has been properly located and installed to intercept and collect runoff via a downspout from a roof or adjacent impervious area.
- Utilities have been located before digging by calling Dig Alert at (800) 227-2600 or [www.digalert.org](http://www.digalert.org) at least two days before digging.
- Dry well is appropriately sized in accordance with the sizing table above.
- For dry wells with gravel fill, gravel used is 2" or greater diameter stone.
- The soil under the dry well has been over-excavated to at least one foot in depth. The soil has been replaced uniformly without compaction, or amended with 15-30% of coarse sand and replaced without compaction.
- A fine mesh screen has been installed on the inlet to prevent sediment and debris from entering the dry well.
- An observation well has been incorporated into the dry well design. The observation well consists of a slotted or perforated pipe (typically PVC), 4 – 6 inches in diameter, capped with an above-ground, sealable lid.
- An overflow has been incorporated in the dry well such that excess water will flow into the storm drain system or another pervious area and away from any nearby foundations or neighboring properties.
- Detention and infiltration do not (knowingly) cause geotechnical hazards related to slope stability or triggering expansive (clayey) soil movement.

### Owner Certification

"As the owner of the project property, I hereby certify that the above information is true, accurate, and complete, to the best of my knowledge."

Owner Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Operations and Maintenance

Once a dry well is installed, the following criteria should be adhered to. The owner should check all boxes that will be complied with.

- Water level, drawdown time, and evidence of clogging will be monitored monthly during the rainy season.
- Standing water will not remain in an exposed dry well for more than 3 days. Extended periods of flooding may result in the breeding of mosquitoes or other vectors. If vector breeding occurs at a site as a result of contained stormwater or inadequately maintained BMPs, I understand that the City of Long Beach Department of Health and Human Services, Bureau of Environmental Health, has the ability to fine site owners for violating the California Health and Safety Code (Section 2060 – 2067).
- Rain gutters and downspouts will be inspected and cleaned at least twice annually.
- If the dry well ever becomes plugged and overflows on a continual basis, the dry well will be excavated and removed. The dry well will be repaired or replaced as necessary, and gravel media fill will be cleaned or replaced to enhance the infiltration capacity.



For more information, contact  
Long Beach Development Services at  
**(562) 570.5237** or [www.lbds.info](http://www.lbds.info)