

**STORM WATER
QUICK REFERENCE GUIDE**

TIER 3/4

City of Santa Barbara



OUR GOAL



Storm water is rainfall that runs off **impervious** (hard) surfaces such as rooftops, driveways, and parking lots, instead of soaking into the ground. It rapidly flows into our streets and storm drains, which lead to our creeks and ocean untreated. This fast-flowing runoff can carry pollutants like oil, pet waste, and litter, and contribute to flooding of our streets and creeks.

Effective storm water management aims to mimic natural conditions by slowing storm water down and letting it soak into the soil (**infiltration**). Undeveloped natural areas act as a sponge by soaking up rain and reducing runoff, breaking down pollutants as the water infiltrates through the soil. This also reduces the flow of water to our streets and creeks, helping to reduce flooding.

The goal of the City's storm water management program is to ensure that as development and redevelopment of buildings and paved areas takes place in Santa Barbara, the storm water runoff is captured and treated - protecting our creeks and ocean, and reducing the risk of flooding.

STORM WATER REQUIREMENTS

The City of Santa Barbara regulates storm water runoff from new and redeveloped impervious surfaces in order to comply with the Federal Clean Water Act, the State's General Storm Water Permit, and Central Coast Regional Water Quality Control Board requirements.

There are four tiers of storm water requirements, based on project size. This handout summarizes Tier 3 and 4 requirements. Detailed information can be found in the City's Storm Water BMP Technical Guidance Manual at SantaBarbaraCA.gov/SWMP.



Infiltrative Design



Non-Infiltrative Design

Is your project Tier 3 or 4?

Tier 3 projects include a total proposed new and/or redeveloped impervious area between **2,000 - 14,999 square feet**.

Tier 4 projects include a total proposed new and/or redeveloped impervious area **of 15,000 or greater square feet**.

New impervious area = hardscape surfaces such as concrete, asphalt, and roofing proposed over existing pervious area.

Redeveloped impervious area = hard surfaces proposed over existing impervious area.

Consider storm water guidelines in the initial design of your project.
Reducing impermeable surfaces as part of your project design will reduce the volume of storm water your project is required to capture and infiltrate, and may also reduce the project Tier that applies to your project.

MANAGING STORM WATER



To meet Tier 3 and Tier 4 requirements, your project must include Storm Water Runoff **Best Management Practices (BMPs)** to capture and infiltrate the runoff generated from the total post project impervious area (existing to remain and proposed).

How much water should my project accommodate?

Tier 3 projects must capture and infiltrate the volume of runoff generated from a 1" 24-hour storm (from at least 95% of the site's total impervious area), or the increased runoff from the proposed site during a 25-year storm event, whichever is larger.

Tier 4 projects must comply with Tier 3 requirements AND retain and infiltrate the volume of runoff generated from a 1.2" 24-hour storm from all replaced impervious area as well as the 2.4" 24-hour storm for all new impervious areas.

1" of rain falling on 1 square foot of impervious area generates 0.62 gallons of storm water.

BMP options can be combined, if needed, to meet the total storm water management requirement. A complete list of BMP options, site considerations, sizing calculations, and worksheets can be found in Chapter 6 of the City's Storm Water BMP Technical Guidance Manual at SantaBarbaraCA.gov/SWMP.

Plan Ahead

Proposed impervious areas are cumulative for 2 years after certificate of occupancy to prevent "piecemealing" of projects.

BMP EXAMPLES

There are several different storm water BMP options for addressing Tier 3 and 4 requirements. Often times more than one BMP option may be most effective. Please see Chapter 6 of the City's Storm Water BMP Guidance Manual (2020) and required worksheets for specific considerations applicable to your site.

1 BIORETENTION AREAS

Bioretention areas like rain gardens use shallow depressions to retain and infiltrate storm water. Including soil amendments with the right mixture of organic matter and sand helps to infiltrate storm water and provides water quality benefits through the removal of contaminants.



2 PERMEABLE PAVING

Replacing traditional hardscapes like driveways, patios, and parking lots with permeable surfaces that allow rainwater to flow through can reduce runoff volumes and storm water requirements. Permeable paving systems can also be built with additional storm water capacity by thickening the gravel base layer that acts as a reservoir.



3 CISTERNS

These containers capture and temporarily store water for non-potable reuse such as irrigation. Cisterns are large (100 gallons or more) and can be installed above or below ground. To meet Tier 3/4 requirements, they should be sized to accommodate the design volume for your project site.



4 GREEN ROOFS

Green roofs can be designed in place of a traditional roof to absorb rain and reduce runoff. Green roof systems typically include a reservoir, a layer of soil, and vegetation over a waterproofing membrane. When designed to retain the design storm for the project, they can be considered permeable and reduce storm water requirements. (Not allowed in high fire areas.)



5 UNDERGROUND INFILTRATION

Underground storage and infiltration BMPs such as dry wells, storm water chambers, and infiltration trenches temporarily store and infiltrate runoff from rooftops and other impervious areas.

For more ideas and inspiration, view our BMP Visual Guide at SantaBarbaraCA.gov/SWMP.

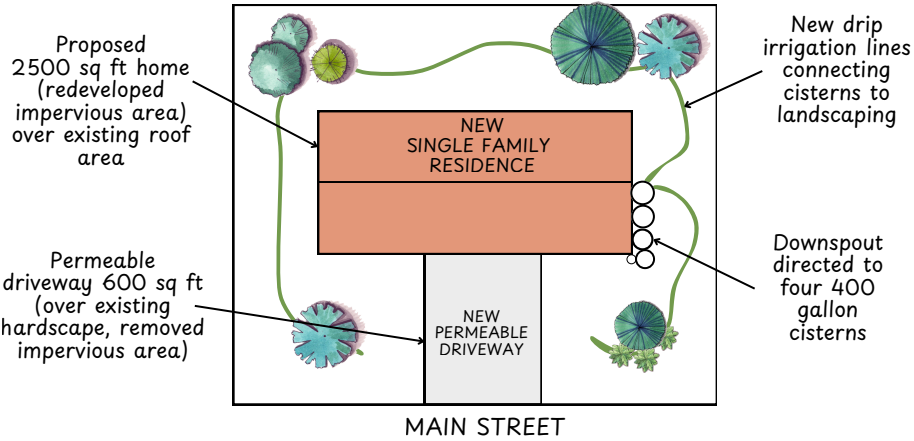
HOW TO COMPLY

Tier 3 and 4 projects require a storm water or drainage report to demonstrate compliance, including modeling of the required design storms and detailed calculations verifying that all requirements are met. To comply, project plans typically need to include the following:

- 1. Identify and Quantify Impervious Areas.** Include an exhibit that clearly labels each new, redeveloped, and removed impervious surface area for the proposed project site. Provide a summary of the total square footage for each category and ensure the scale is accurately embedded in the plan set document. These steps allow staff to confirm your reported square footage and the applicable project tier.
- 2. BMP Locations and Detail.** On the site plan, indicate the location and provide a cross-section detail for each BMP that provides adequate dimensions to confirm storm water capacity, and construction information, including brands and models of materials to be used (i.e. permeable paver brand and model or stone type/size). The plan must also demonstrate that drainage is routed correctly to each BMP.
- 3. BMP Sizing.** Provide completed worksheets with calculations from the Storm Water BMP Guidance Manual (2020), or equivalent method, confirming that proposed BMPs have sufficient capacity for the required runoff volume.
- 4. Drainage Routing.** Clearly show drainage routing for the entire site, including how runoff from impervious surfaces reaches proposed BMPs. Include elevations, inlets, and outlets of the complete drainage system. Consider breaking the site up into drainage management areas (DMAs) that depict exactly which site surfaces are tributary to each BMP.
- 5. Cover Sheet Details.** On the plan set cover sheet, include a table with the square footage of new, redeveloped, and removed impervious surfaces, a summary of runoff calculations for the design storm, a list of proposed storm water BMPs in the Scope of Work section (or equivalent), a signed maintenance statement, and a list of inspections required during construction for the BMPs.

Find report templates, a sample maintenance statement and more information on required inspections at [Santa Barbara CA.gov/SWMP](https://www.santa-barbara.ca.gov/SWMP).

SIMPLIFIED EXAMPLE SITE PLAN



Storm Water Management

Proposed new impervious area:
 Proposed redeveloped impervious area:
 Existing impervious area to remain:
 Removed impervious area:

Total new & redeveloped:

0 sq ft
 2,500 sq ft
 0 sq ft
 600 sq ft
2,500 sq ft

Runoff from 1" storm calculation

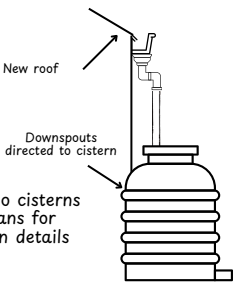
2,500 sq ft x 0.62 gallons/sq ft =
 1,557.5 gallons

Proposed Rain Cisterns (400 gallon)

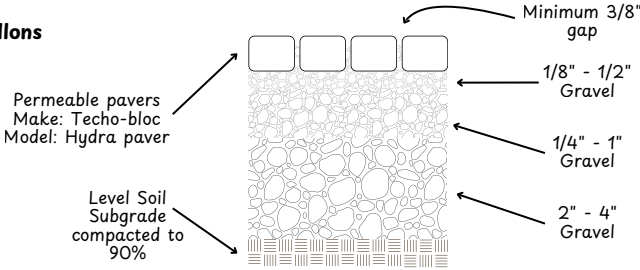
4 at 400 gallons each = 1,600 gallons

1,600 > 1,557.5 gallons

CISTERN DETAIL



PERMEABLE PAVER DRIVEWAY DETAIL



Have questions or need help complying with the City's storm water requirements?

Email us at SWMP@SantaBarbaraCA.gov or visit SantaBarbaraCA.gov/SWMP.



City of Santa Barbara
**SUSTAINABILITY
& RESILIENCE**



City of Santa Barbara
Sustainability & Resilience Department
Creeks Division

CONTACT US

801 Garden Street, Suite 200
Santa Barbara, CA 93101
(805) 897-2658

Creeks@SantaBarbaraCA.gov
SantaBarbaraCA.gov/Creeks

September 2025