



# Downspout Redirection (Rainwater Harvesting Rebate Program) Guidelines

## Did you know?

The City of San Diego now offers rebates totaling \$40 per redirected downspout!

## INTRODUCTION

A downspout is a pipe that carries rainwater from the roof to a storm drain or the ground. Unfortunately, many homes have downspouts that convey rooftop runoff directly to the storm drain system. Redirecting downspouts to landscaped areas naturally filters runoff, helping to decrease the amount of pollutants, such as trash, dirt, oil, and metals that get transported downstream to our waterways. Downspout redirection helps conserve water and are a great 'do it yourself' home improvement project.

Figure 1-1 provides examples of proper downspout redirection locations. Rooftop runoff should be directed to a pervious landscaped area where the water can soak into the ground without causing flooding or erosion.

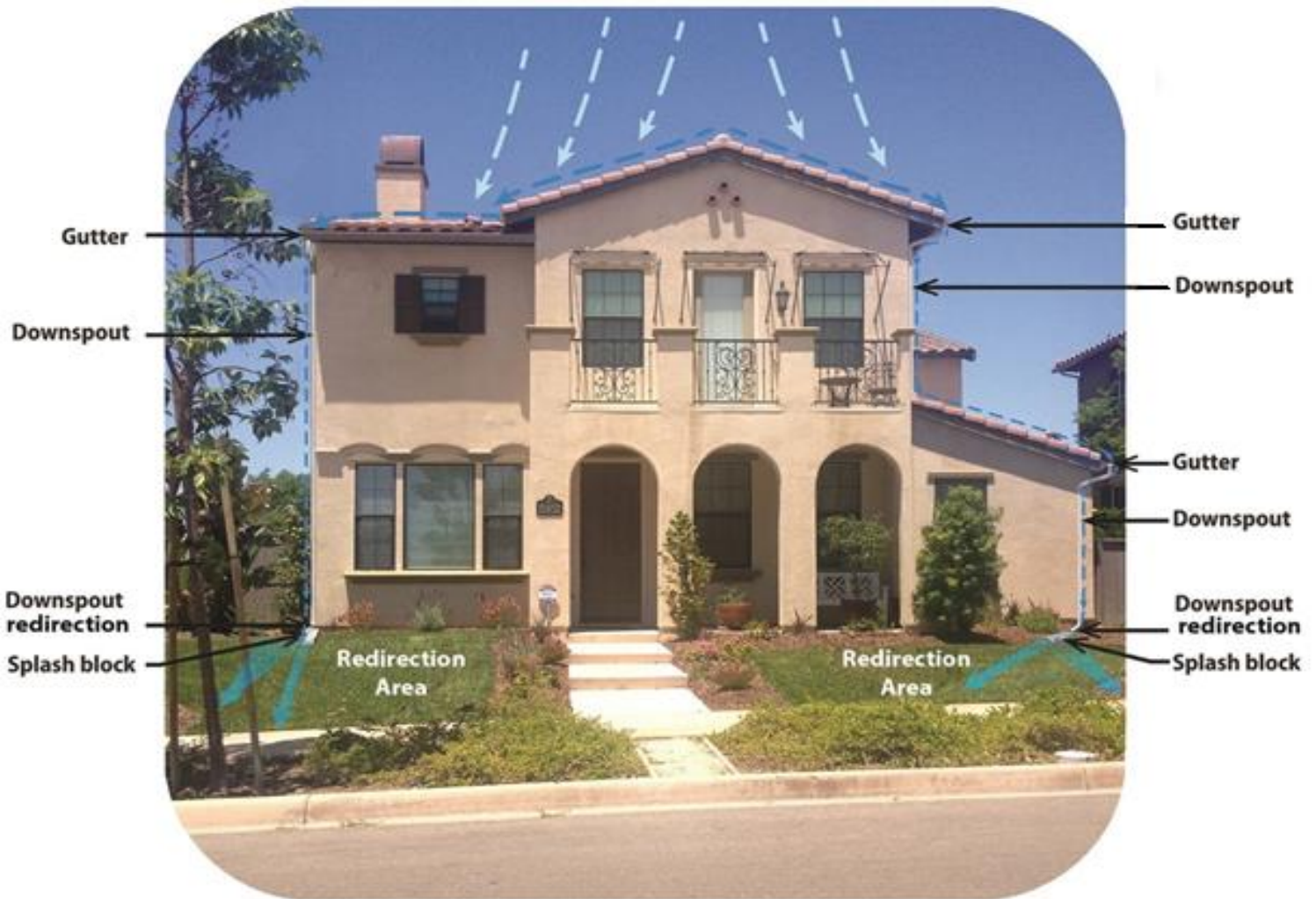
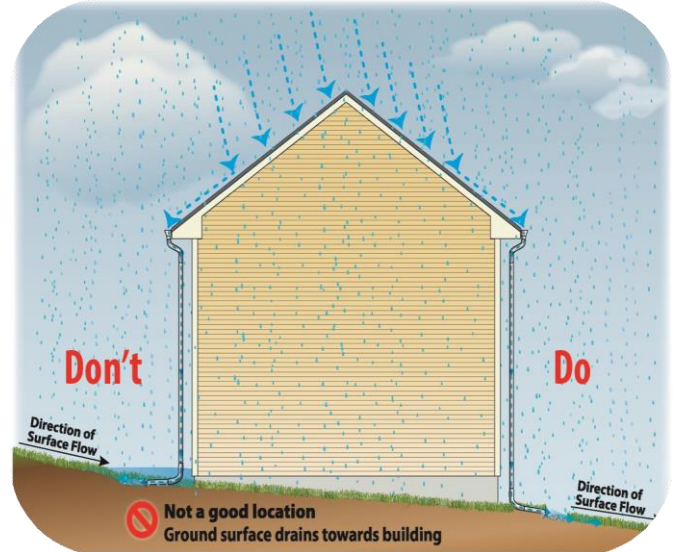


Figure 1-1 Downspout Redirection Location Planning

## Program Location Requirements

### PLACEMENT AND DIRECTION

1. Downspout runoff should be directed to landscaping at least 5 feet from the structure, 5 feet from property lines.
2. Runoff may not be directed to neighboring properties.
3. Ensure that the redirected water does not infiltrate near underground utilities.
4. Redirected water must drain away from the structure at a slight slope (between 1 and 6 percent).
5. It is recommended that areas receiving rooftop runoff be landscaped with vegetation to reduce runoff and potential erosion. Vegetation can include grasses and small shrubs.
6. Native plants are recommended because they are adapted to our wet winters and dry summers.
7. If using pipe extensions, extensions should not be directed to, or cross over, impervious surfaces; such as sidewalks or driveways.
8. Landscaped areas currently prone to ponding or pooling of water are not good candidates for downspout redirections.



**Figure 1-2. Siting Considerations**

#### Did you know?

1000 square feet of roof area can capture 625 gallons with 1 inch of rain!

### DOWNSPOUT REDIRECT AREA

Splash blocks and/or riprap rock areas are encouraged because they adequately dissipate redirected flows and prevent erosion (see Figures 1-3 and 1-4). Splash blocks are comprised of either concrete or plastic and are available at most home improvement stores. Riprap rock areas should include gravel, river stones, or rock swales embedded in the soil to a depth of at least 2 inches. The downspout should be angled away from the structure foundation at the redirect location (see Figure 1-5). If the area immediately adjacent to the downspout is too flat or prone to ponding, downspouts can be lengthened to an area better suited for water flows and infiltration.



**Figure 1-3. Typical splash block**



**Figure 1-4. Splash block and riprap**



**Figure 1-5. Downspout extension**



## Installation Procedures

### MATERIALS CHECKLIST

- Elbow (aluminum, vinyl or plastic)
- Standpipe cap
- Bracket or strap – to secure downspout to house
- Splash block
- Hacksaw
- Drill
- Sheet metal screws
- Screwdriver
- Optional: downspout extension & matching convertor joint

### STEP-BY-STEP INSTRUCTIONS

1. Cut 9 inches above the top of the standpipe (the standpipe is where the downspout enters the ground), and remove the piece.
2. Cap or plug the standpipe. Standpipe caps may need to be purchased online.
3. Slide the elbow and/or the extension pipe over the bottom of the remaining downspout. If necessary, a converter joint is handy to connect round with rectangular pieces.
4. Secure the downspout, elbow, and extension with sheet metal screws.
5. Make sure the downspout is redirected to the intended area, and add splash blocks and/or riprap rock areas at the base.



Elbow



Extension



Standpipe Cap



Strap



Redirect Area



Splash Block

## Maintenance Considerations

Rain gutters and downspouts should be inspected twice per year, once before and once during the rainy season, and maintained as needed.

The entire gutter and downspout system should be free of debris. Ensure that water is not backing up or overflowing from gutters.

Check to make sure connections are fastened and that the downspout is pointing away from structures.

Vegetation should be maintained, and any grass should have a mowed height of 3-4 inches. There should be no stockpiles, sediment, debris, trees, or vegetation in the redirect area.

### ADDITIONAL RESOURCES

#### City of San Diego Rebates

<https://www.sandiego.gov/water/conservation/rebates>

#### City of San Diego Rainwater Harvesting Rebate Program

[www.sandiego.gov/water/conservation/rainwater.shtml](http://www.sandiego.gov/water/conservation/rainwater.shtml)

#### San Diego County Water Authority Sustainable Landscape Guidelines

[www.watersmartsd.org/news/sustainable-landscape-guidelines](http://www.watersmartsd.org/news/sustainable-landscape-guidelines)

#### Additional Questions

(619) 533-4126

## Rebate Application Process

1. **Take pre-installation photo:** Before installing the redirect(s), take 1 clear photograph of each existing downspout that will be redirected.
2. **Install the redirect:** Install a redirect that meets the specifications set forth in the “Program Location Requirements” section of these guidelines.
3. **Take post-installation photo:** After installing the redirect(s) take at least 2 clear photographs of each redirect, showing downspout connection to the redirect.
4. **Complete the [Rainwater Harvesting Rebate Application](#) and the [requested W-9 form](#) along with supporting documentation listed above.**
5. **Submit the application, W-9 and supporting documentation:** You may do so via US Mail or email.
  - ✓ If submitting by US Mail, send application and supporting documentation to:

City of San Diego Public Utilities Department  
Attn: Rain Barrel Rebate Program  
525 B Street, Suite 300  
San Diego, CA 92101

- ✓ If submitting by email, send application and supporting documentation to: [waterconservationrebates@sandiego.gov](mailto:waterconservationrebates@sandiego.gov) Please ensure the subject line reads: Rainwater Harvesting Program