Examples of First Flush Diverters
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If roof water is to be used for potable purposes or if roof contaminates will spoil rainwater (such as heavy bird droppings) then a first flush system will be needed. These devices keep the first wash of water out of your collection container. General rule of thumb for the discard quantity: 5 - 10 gallons per 1,000 sq ft of roof or smaller. For larger roofs, discard 10 gallons per 1,000 sq ft.

With this simple system attach ABS pipe to the gutter at the optimal location. The length of the first flush pipe depends on the roof area being flushed. A one foot length of 3 inch inside diameter pipe holds approximately 0.74 gallons, and a one foot length of 4 inch inside diameter pipe holds approximately 1.30 gallons. Put a screw cap on the end to close and unscrew to drain.