Where does the water go?

A portion of the stormwater that is collected in the City is conveyed to the Davis Wetlands where it is used to support this constructed wetlands system and all its wild inhabitants.



What happens to water from storms, landscape irrigation, or car washing? This water, called stormwater or urban runoff, flows into the City's storm drainage system through over 2500 curbside catch basins - the openings located along street gutters. The water moves through the storm drain piping below our streets to our creeks, sloughs, wetlands, rivers, delta, bay and eventually the Pacific Ocean.

Initially, much of this water fills the City's detention and wildlife ponds which support an array of wildlife species. Other water flows through drainage ditches towards the northern and eastern edges of the City.

To remind everyone about the importance of preventing pollution of our stormwater, be it from other sources, the City has installed storm drain inlet markers near each drain:



Storm Drain Markers: Installing these markers in an easy hands-on project for you, your group, or organization to participate in that will help spread the pollution prevention message. If you'd like to join in this awareness effort, please contact City of Davis Public Works at (530) 757-5686

Stormwater pollution can be extremely harmful to the health of the plants and animals with which we share this planet. Help us to protect your water resources for current and future generations.

If you see anyone dumping questionable materials, please call City of Davis Public Works at (530) 757-5686.

If it is an emergency, call 911.

PLEASE KEEP OUR WATERSHED CLEAN!!





PROVIDE A BETTER GROWTH ENVIRONMENT For your plants and Trees



<u>Provided by</u>: The City of Davis



Mulching is one of the simplest and most benefitial practices you can use in the garden. Mulch is defined as a protective layer of material that is spread on the top of soil.

Mulch comes in two different types: organic and inorganic. Examples of organic mulch are: grass clippings, straw, bark chips and similar material. Mulches that are inorganic include: stones, bark chips, and plastic. Both of these types of mulch are very beneficial to your soil in their own ways.

Mulch that is both organic and inorganic provides these benefits:

- It protects the soil from erosion
- It reduces compaction from the impact of heavy rains
- Conserves moisture which reduces the need for frequent watering
- Maintains a more even soil temperature
- Prevents weed growth
- Keeps fruit and vegetables clean
- Keeps your feet clean, allowing easy access to your garden even when it is damp
- Provides a "finished" look to the garden.

Organic mulch also improves the condition of the soil. As the mulch slowly decomposes, it provides organic matter which helps keep the soil loose. Loose soil improves root growth, increases the infiltration of water and also improves water-holding capacity of the soil. Organic matter is a source of plant nutrients and it also provides an ideal environment for earthworms and other beneficial soil organisms.

Inorganic mulches have their place in certain landscapes but they do lack the soil improving properties of the organic mulch. Due to the persistence of inorganic mulch, it may be difficult to remove if you decide to change your garden at a later date.



Excessive application of mulch can result in a situation where roots grow into the mulch instead of the soil.

<u>Selecting the right mulch for</u> <u>your needs</u>

All mulches have different characteristics, some of them may have advantages in some situations and disadvantages in others. Before you choose a mulch, consider how you will use it.

Summer mulches: Summer mulches are placed during the growing season and are used primarily for flowers and vegetables. Their role is to retain moisture, reduce weed growth, and moderate soil temperatures. Summer mulches are often left in place through the winter to reduce the effects of erosion. Perennial plants can also be substituted by winter mulches.

Winter Mulches: Winter mulches are used to mainly protect shrubs and flowers from severe winter temperatures and frost heaving. Frost heaving happens when the soil expands and contracts due to freezing and thawing. Moist, fine-grained soil at certain temperatures is most susceptible to frost heaving. Winter mulches are laid down in the late fall and serve as insulation during the winter.

<u>Permanent mulches:</u> Permanent mulches are used where mulch is most desired year around and does not need to be disturbed. These places are, for example, in paths and around trees and shrubs. If a permanent mulch is organic, it will need to be replenished annually.

Sheet Mulching: Sheet mulching is a fast and labor saving technique for building beds and surpressing weeds. The quick way to do this type of mulching is by putting down some compost. Then cover the area with cardboard or layers of newspaper. Make sure that you to do not use shiny and/or colored paper. Soak each layer and finish with 6" of straw or sawdust. You will want to make sure not to bury the sawdust of the wood chips. Make soil pockets for immediate planting of just let it sit for a few months.



How to mulch

Summer mulch for annual flowers and vegetable gardens is normally applied in midspring, once the soil has warmed enough for active root growth. The best way to prevent weeds from growing is to apply mulch in the early spring. Remove any existing weeds before applying the mulch.

For winter protection, apply the mulch in early winter or once the soil has cooled but before it has frozen. For your trees and shrubs, spread mulch evenly and only 2 to 3 inches deep. For trees and shrubs in beds, mulch the entire bed. For trees in the lawn, mulch a wide range of about 3 to 6 feet from the trunk. *Never pile mulch against tree trunks*. Pull the mulch back away from the trunk about an inch or so. As the organic mulch decomposes, it may need to be replenished a little every year; but do not let the mulch get too deep (4 inches max.).

For flower beds, mulch can be applied up to 3 inches deep (after settling), but should be kept pulled back slightly from the plant stems. Mulches should throughly cover an area to a uniform depth to be the most effective. Low or bare spots will be prone to weed problems.

Mulching is a wonderful alternative for fertilizers. The best part is that you do not hasve to keep applying it. It is good year around. Fertilizers are harmful to the environment. When irrigation is used, it will take any remaining fertilizer with it. This runoff then goes into the storm drain and into our waterways. The aquatic life is then exposed to these chemicals and can kill them. Help keep our waterways clean by using mulch instead of pesticides.

Free Compost Bins Available!



The City of Davis offers a year-round compost correspondence course to Davis residents in single-family homes. To enroll, call the Public works Department (757-5686) to request a compost packet mailed to your home. Once you receive the packet, read the materials inside, fill out the enclosed quiz and return the quiz to the Public

Works Department. A city staff-person will contact you to let you know that your quiz was received and that your free compost bin is available for pick-up.