



# Memorandum

Date: September 16, 2020  
To: Utilities Commission  
From: Stan Gryczko, Public Works Utilities and Operations Director  
Adrienne Heinig, Management Analyst  
Subject: Item 6D – Stormwater Outreach Next Steps

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## **Recommendation**

Receive informational report.

## **Background**

An important piece of the Stormwater Cost of Service Study is the outreach to the community and local stakeholders. City staff, including the Public Works Utilities and Operations Communication team, as well as a representative from the City Manager's Office Communications Team, met with SCI Consulting Group to review the plan for outreach and communication as the work of the Commission moves towards recommendations on rates for City Council consideration and review.

The work is broken out into two phases: 1) Actions taken prior to the Council approval to move the rate process forward, and 2) Actions taken after the Council approves the rate process. Prior to Council approval, staff will work with the consultant to develop messaging (building off of existing messaging already in use by the City), identify key stakeholders, and draft the Proposition 218 notice for the rate adjustments. After the Council approves the rate process, the Communications teams will work with SCI to implement the messaging, conduct community and stakeholder meetings, and develop community education on the measure.

## **Key Messages to Develop:**

- What the stormwater program does,
- Why more funding is needed, and
- What the funding will be used for.

## **Samples of City Outreach**

- **Utility Introduction Booklet** (*attached*)  
In keeping with the booklets developed for the recent Commission introductions for cost of service studies, and posted online for general outreach. Positive feedback has been received so far on the previously created booklets, from general public and other commissions. The [Water](#) and [Wastewater](#) utility booklets are linked in this document for reference.

- **Webpage Updates**

Recently the City’s website pages related to stormwater have been undergoing significant updates to allow for easier browsing: <https://www.cityofdavis.org/city-hall/public-works-utilities-and-operations/stormwater>

- **Environmental Column published in the Davis Enterprise (May 2020)**

*Keeping Litter Out of Stormwater*

*In recent years, more and more litter, particularly plastic, is finding its way into our waterways. When litter is left on the ground, it can be blown or washed directly into creeks and rivers. More frequently though, litter is carried by wind and water into street gutters, where it is washed down stormdrain inlets and carried directly to local ponds and waterways. As it breaks down, litter is frequently mistaken for food in the aquatic environment, often killing the animals that eat it. Plastics act as magnets for toxic chemicals, and once they are eaten by animals, the plastics and toxins within those animals can enter the food chain.*

*Recognizing the seriousness of litter in waterways, the State of California has mandated that cities must capture all materials from their stormwater runoff that are 5 mm in size (the size of a cigarette butt) or larger. Cities have until 2030 to demonstrate compliance with this requirement. As Davis continues to look for ways to mitigate litter, we can all do our part to reduce the impact of litter on our environment:*

- *Place waste in the correct bin (trash, recycling or organics) and keep the bin lids closed.*
- *to prevent waste from being blown out.*
- *Purchase products that use the least amount of packaging to avoid generating more waste.*
- *Avoid single-use plastics such as plastic straws and cup lids.*
- *Choose products that are compostable or recyclable whenever possible.*

- **Social Media Messaging (See Examples Below)**

Recently, City staff have been utilizing the tool of “boosted” Facebook posts (essentially targeted ads) in an effort to increase residents’ interaction with the City on the Facebook platform, as well as sign up for the City’s Greener Davis Newsletter, which includes messaging and informational items on a number of utility and environmental issues. The boosted posts have resulted in increased engagement with the City, however staff will continue to balance the need for expanding followers on social media with “ad fatigue” that can be a challenge of using this tool. Samples of these ads, and the engagement metrics, are included below.

**Ad 1: Pick Up Litter (Posted July 22)**

GreenerDavis  
Published by Greener Davis-Staff (7) · July 22

No one likes litter. If you accidentally drop something on the ground, please be sure to pick it up to prevent it from blowing into stormdrains and waterways. Check it before you toss it and be sure to recycle as much of your waste as you can, especially bottles and cans, which are recyclable everywhere in California. #NoOneLikesLitter

**THAT FACE YOU MAKE**

**WHEN SOMEONE DIDN'T PICK UP THEIR LITTER**

16,679 People Reached 640 Engagements [Boost Again](#)

Boosted on Jul 22, 2020 By Greener Davis-Staff Completed

People Reached	16.8K	Post Engagement	835
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[View Results](#)

👍❤️👍 211 10 Comments 15 Shares

Like Comment Share

**Ad 2: You Toucan (Posted July 24)**

GreenerDavis  
Published by Greener Davis-Staff (7) · July 24

No one likes litter. You can help prevent litter by placing your waste into the correct bin, sorting out your bottles, cans and other recyclables, and keeping the lids closed on all outdoor waste bins. #NoOneLikesLitter

**YOU TOUCAN**

**PREVENT LITTER**

16,137 People Reached 437 Engagements [Boost Again](#)

Boosted on Jul 24, 2020 By Greener Davis-Staff Completed

People Reached	18.6K	Post Engagement	496
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[View Results](#)

👍❤️👍 142 7 Comments 13 Shares

Like Comment Share

**Social Media (Facebook and Instagram)**

- *Greener Davis Facebook account has 3,147 followers and Instagram has 416 followers (as of 8/21/2020)*
- *City of Davis Facebook account has 5,567 followers and Instagram has 1,176 followers (as of 8/21/2020)*
- **Greener Davis Newsletter (See Sample Attached)**  
One of the most effective outreach tools used by the Environmental Resources Division, the monthly Greener Davis Newsletter has a wide reach in the community, a high open rate, and has been correlated with increases in requested interactions with the public, especially when seeking responses to community surveys.

Messages about Stormwater are regularly included in the newsletter, and are usually included based on the time of year (preparing for the winter/rainy season, or during significant rain events, etc.)

**A recent article:**

*3 Things We Can Do to Prevent Litter*

*Have you ever wondered how all that litter ends up alongside roadways and in our waterways? The answer might surprise you: It's often accidental. Any one of us could have contributed to that litter! Fortunately, there's three simple things we can all do to help prevent litter.*

1. *Keep waste and recyclables secured in closed bins. Wind can play a major role in litter. That's why it's important to make sure all your waste is always placed securely inside a bin. Make sure it's in the right bin (recyclables should always go in a recycling bin, compostable waste should go in the organics bin) and always keep the lids closed to prevent wind from blowing waste out, and rainwater from getting in.*
2. *Keep waste and recyclables secured in your vehicle. While some people may toss trash out of their vehicles on purpose, it often blows out accidentally. An unrolled window generates a lot of airflow when a car is moving, and can easily blow waste out of the vehicle. Opening a car door on a windy day can also blow trash out. An open truck bed is not a secure place for loose wastes, which easily blow out of the back of trucks as they are being driven. Keep your waste secured inside your vehicle at all times to prevent accidental littering.*
3. *Avoid purchasing and use of plastics. Whenever possible, try to minimize the use of plastics, particularly single-use plastic products, as these are some of the most problematic types of litter found in the environment. Look for metal, glass, reusable or compostable alternatives instead.*

*For more information, please see our Litter Prevention webpage.*

#### **Greener Davis/Davis Together E-blast**

- *Constant Contact has 17,917 contacts as of 6/9/2020; average 25% open rate*

#### **• Other Outreach**

Other outreach includes flyers and handouts (for Farmer's Market, City Hall, and public events like Arboretum plant sales, Celebrate Davis and Discover Davis) which are not used as frequently in the current COVID-19 pandemic, new resident flyers that are mailed to all new residents, and other forms of print media.

#### **Attachments**

- Stormwater Utility 101 Booklet
- Greener Davis Newsletter (May 2020)
- New Resident Flyer (2019-2020)



CITY OF DAVIS  
**STORMWATER UTILITY 101**  
PUBLIC WORKS – UTILITIES & OPERATIONS



UTILITIES COMMISSION

**SEPTEMBER 16, 2020**



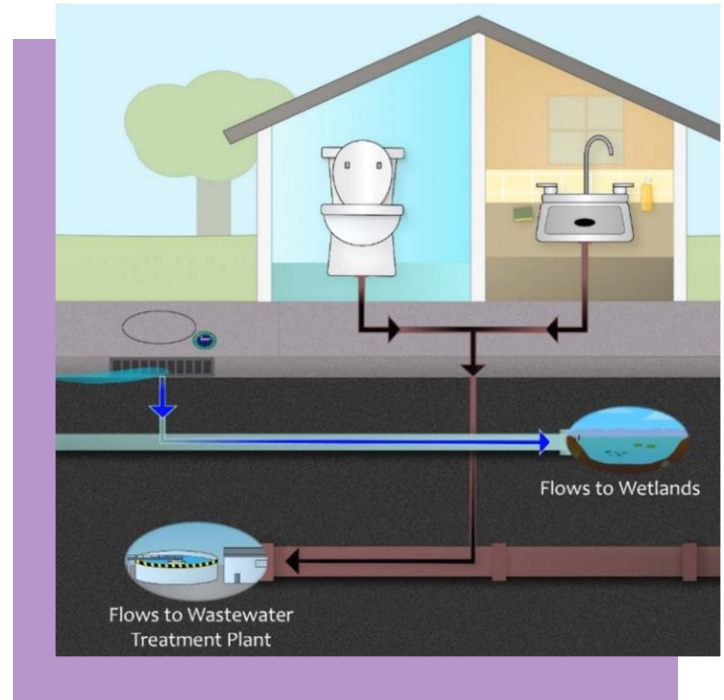
# WHAT IS STORMWATER?

**Stormwater** is water from precipitation that flows across the ground and pavement when it rains.

## Where Does Stormwater Go?

Unlike wastewater that goes down the drain inside a home (via sinks, showers, toilets, etc.), stormwater is not treated; it flows directly into wetlands and waterways.

North of I-80 in Davis, most stormwater flows from the streets to local detention ponds (West Area Pond, Evergreen Pond, Julie Partansky Pond, Sutter Davis Hospital Pond, the Cannery Pond and the Core Area Pond), then to the Willow Slough Bypass where it discharges to the Yolo Bypass and eventually to the Sacramento River. In South Davis (South of I-80), the stormwater flows to the drainage channels (Former Putah Creek and the El Macero Drainage Channel) and then is pumped into the Yolo Bypass.



**Did You Know:** Stormwater runoff is one of the leading causes of water pollution in the United States.

## The Stormwater Utility

The City's Stormwater Utility is housed in the Public Works Utilities and Operations Department. The support for the utility is divided among two divisions within the department: the Streets Division and the Environmental Resources Division.

### Operations and Maintenance

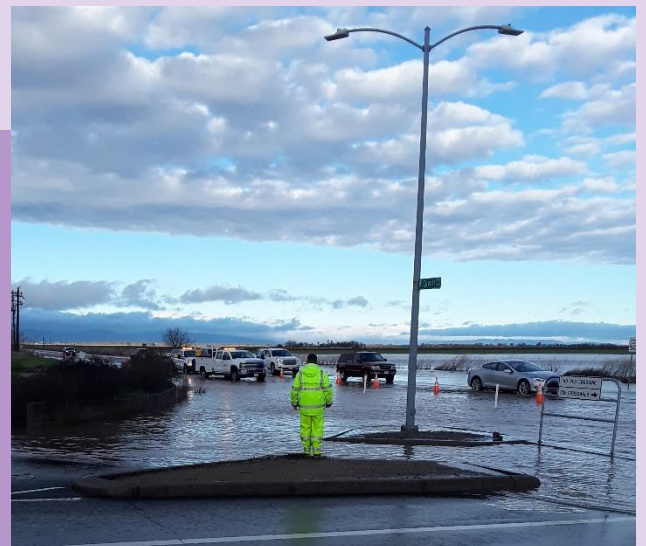
#### *Stormwater Division*

This team manages the City's stormwater infrastructure to ensure the protection of life and property from flooding.

### Stormwater Quality

#### *Environmental Resources Division*

This team is responsible for monitoring and protecting stormwater quality in accordance with federal, state, and local environmental regulations.





# STORMWATER SYSTEM

The City's **stormdrain system** is composed of:

- on-street and public parking area stormdrain inlets
- underground stormwater pipes
- stormwater detention ponds
- drainage channels
- stormwater lift stations

These facilities are all designed to convey stormwater and prevent flooding as they move stormwater away from properties and streets.

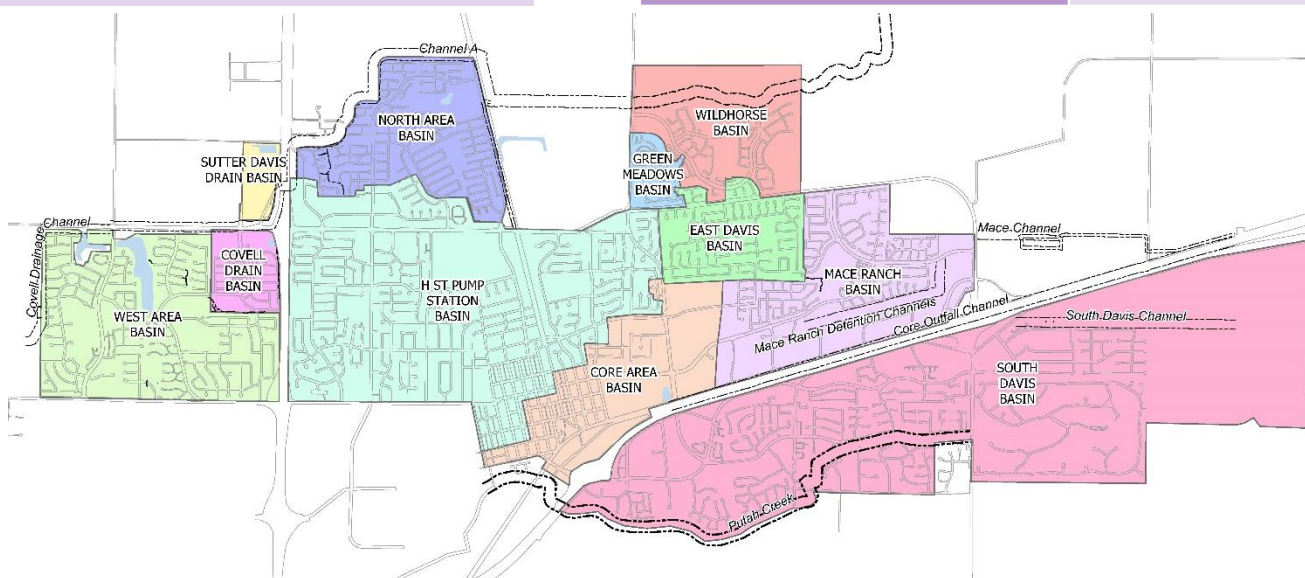
The city's stormwater flows by gravity into six City detention ponds and two detention basins. Nine stormwater drainage pump stations lift stormwater from the ponds and basin into several main drainage channels. These channels are tributaries to the Willow Slough Bypass and the Yolo Basin Wetlands. The City has approximately 15 miles of access roads that are used to gain access to ponds and drainage channels for on-going maintenance tasks.



## City's Stormwater Infrastructure

The City operates and maintains the following infrastructure.

Asset	Quantity
Stormdrain Line	130 miles
Drainage Inlets	3,100+
Stormdrain Laterals	33 miles
Maintenance Holes	2,000
Drainage Channels	16.7 miles
Detention Ponds/ Basins	7 (65+ acres)
Drainage Pump Stations	9
Bike Tunnel Sump Pumps	10
Force Mains	0.5 miles
Siphon Structures	8
Access Roads	15 miles



**Did You Know:** In Davis, our drainage channels, detention ponds and wetlands all have natural soil surfaces and vegetation, which act as a natural water treatment filtration system. Some of the stormwater will remain in the channels, ponds and wetlands, providing habitat for aquatic plants and wildlife. The remaining stormwater flows into the Yolo Bypass and eventually the Sacramento River and the San Francisco Bay.



# OPERATIONS AND MAINTENANCE

## Mission

The mission of the City's Stormwater Division is to operate and maintain the City's stormwater infrastructure to ensure stormwater is collected and discharged in accordance with federal, state, and local environmental regulations while protecting life and property from flooding. This division maintains the stormwater conveyance system, consisting of 9 pump stations, 127 miles of storm drainage lines, 16 miles of open channels, and 8 detention basins and ponds. The division also operates and maintains the El Macero Maintenance District Stormwater Pump Station.

## Operations and Maintenance Crew

The operations and maintenance (O&M) crew for the Stormwater Division consists of 3 regular full time staff. This crew includes two maintenance workers and a working supervisor who report to the Streets Division Manager.

## Stormwater Team Tasks

- Clear and maintain the City's drainage channels annually.
- Hydro clean and video inspect underground drainage pipes as part of a preventative maintenance program.
- Maintain the maintenance access roads to pump stations and along drainage channels on an annual basis.
- Clearing channels, plugged storm drain inlets, and other stormwater structures when blocked during storm events.
- Removing downed trees which may be a hazard adjacent to storm facilities or in the public right of way to assist the City's Streets crew when necessary.
- Monitoring storm drain pump stations and adjusting pump operations to keep up with storm demands.
- Providing traffic control signage when flooding impacts streets.



**Did You Know:** Every year before the rainy season, the Stormwater team cleans out all the stormwater drainage inlets along the gutters throughout the City. This ensures that the stormdrains are cleared in problem areas to prevent flooding





# CHALLENGES WITH DEFERRED MAINTENANCE

## Aging Stormwater Infrastructure

### What is a Stormwater Pump Station?

Stormwater pump stations protect urban areas by pumping excess water from rain or storm events away from streets and sidewalks and into the stormdrain system, to prevent flooding. Floodwater often contains debris (such as sand, dirt, leaves, trash etc.), which makes the maintenance of these stations essential. The heaviest use of the stations occurs seasonally, unlike water and sewer infrastructure.

The City's stormwater pump stations are in need of significant upgrades. Information on a few of these stations is included below (summarized from a 2016 evaluation of the infrastructure).

### Stormwater Station No. 3 | in operation for 75 years

Station No. 3 is the City's largest stormwater pump station, and operates on diesel power. Built in 1945, the station can no longer handle the capacity necessary for its location. There have been significant changes to the area around the station (including the construction of the Covell Overpass, and the Cannery Development).

### Stormwater Station No. 5 | in operation for 55 years

Station No. 5 is the City's only station located south of Interstate 80. Built in 1965, the station has issues with flooding and sediment build-up, causing challenges and additional work for stormwater staff. The station has unique challenges with the location – a substantial percentage of the stormwater drainage to the station comes from surrounding agricultural fields. It has been recommended that the station be relocated and raised.

### Stormwater Station No. 6 | in operation for 96 years

Station No. 6 is the City's oldest and smallest station. Built around 1924, the station has a number of issues, not the least of which is concerns around access. The station needs to be relocated and modernized.

## Understanding the Need

The current stormwater rates do not cover the costs for capital investment needs within the Stormwater Enterprise, which is typical for cities with stormwater enterprise funds that are separate from general funds.

Funding restrictions create a largely reactive operations program with little room for operational studies or infrastructure upgrades. This can cause a number of issues, not the least of which is the lack of funding available to assess how the needs of the utility has changed over the many years of operation.

More than half of the City's drainage piping is over 40 years old, and 18 percent is over 60 years old. While there have been no piping failures thus far, replacements and repairs (assessed by pipeline conditions) will be critical moving forward.

As the system continues to age, and investments in infrastructure are deferred, failures within the stormwater system are more likely to occur, causing property damage via flooding, as well as incurring emergency repair costs.



## What's the Deal with Stormwater Rates?



See Page 9 of this booklet for more information on the rate setting process for stormwater utilities in California.



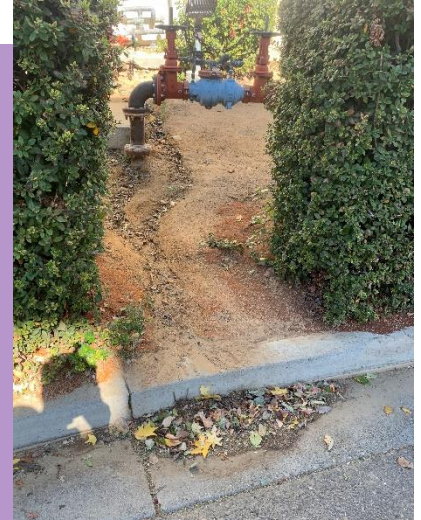
# STORMWATER QUALITY

## Education, Outreach and Enforcement

Stormwater starts as just rainwater, but as it runs off roofs, yards, driveways, and any impervious surface, it can pick up pollutants such as dirt, trash, animal waste, oil, gas, fertilizers, pesticides, metals, and other materials in its path. When stormwater carries pollutants into waterways, it not only harms aquatic plants and animals, but can also cause adverse effects on our use of water for swimming, fishing, drinking, and agriculture.

### Stormwater Pollution Prevention Tasks:

- Review development plans for stormwater quality best management practices and regulatory compliance.
- Perform annual training for City field staff on pollution prevention detection, elimination, and hazmat response procedures.
- Perform public outreach to residents and businesses.
- Conduct inspections on pollutant spills and work with property owners to oversee clean-up.
- Develop and amend City Municipal Code to ensure compliance with State and Federal stormwater quality regulations.
- Monitor and sample the City's stormwater outfalls.
- Monitor and survey litter accumulation and waste storage
- Conduct inspections of construction, industrial, and municipal sites and private sites with stormwater treatment controls.
- Develop and implement spill response plans, pollution prevention plans, sampling and monitoring plans, and trash implementation plans.
- Provide annual records to the State to show compliance with stormwater quality regulations.



### Stormwater Quality Staff

The stormwater quality staff consists of one Environmental Program Specialist within the Environmental Resources Division. In addition, the city's Wildlife Resource Specialist, Conservation Coordinators, and other Environmental Program Specialists assist as needed.

### Stormwater Pollution Prevention Online Games

In order to reach a broader audience and help customers understand more about the importance of protecting stormwater, city staff worked with senior computer science students at Sacramento State to develop online stormwater games. These two games are suitable for all ages and show how everyday actions can either protect or pollute our waterways.

The games are available online at [Stormwater.CityofDavis.org](http://Stormwater.CityofDavis.org)





# STORMWATER QUALITY REGULATIONS

## Stormwater Regulations

Stormwater is regulated under the Federal Clean Water Act and under multiple state regulations. The State Water Resources Control Board (SWRCB) is charged with enforcement of stormwater quality requirements in California.

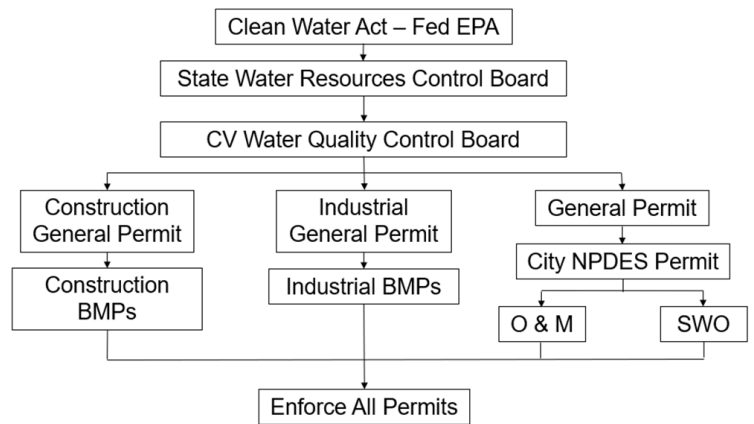
The City is required by the Phase II Small MS4 General Permit to monitor all activities that discharge to the stormdrain system and to report annually on permit compliance. The permit also requires the city to monitor construction activities by conducting plan reviews and inspecting all construction activities, ensuring that the construction is complying with best management practices (BMPs) to keep material out of the stormdrains.



## Phase II Small MS4 General Permit

The Phase II Small MS4 General Permit regulates the operation of each stormwater permittee with the State. There are two different phases of the Permit. Davis is a Phase II permittee, which applies to stormwater discharge requirements for cities with populations between 25,000 and 100,000. The Permit provides the regulations and standards for all land uses and discharger's activities (including municipal activities) within the City's boundaries.

## Regulatory Hierarchy



## Stormwater Quality Inquires and Concerns

### Stormwater Quality Testing

Stormwater that travels downstream is used for drinking water for other cities, for recreation, agriculture and for aquatic plant and wildlife habitat. Required stormwater quality monitoring varies by region and may include monitoring for pesticides and herbicides, bacteria, mercury, pH, temperature, turbidity, and dissolved oxygen.

### Illegal Dumping

Dumping trash or pouring carpet cleaning water, motor oil, pesticides or any other materials into gutters, drain inlets, creeks, wetland or other waterbodies is an illegal activity.

If you see someone in the act of illegal dumping (into the storm drains or yard waste into the street), call Public Works Utilities and Operations at 530-757-5686 or call 911.





# TRASH AMENDMENTS

## What are the Trash Amendments?

In 2015, the State Water Resources Control Board (SWRCB), the agency that monitors stormwater quality, adopted statewide trash regulations (called “amendments,” as they modify the MS4 General Permits) requiring the full capture of litter down to 5mm in diameter (the size of a cigarette butt) from specific land uses in regulated stormwater systems. These rules are required to be fully implemented by 2030, using new and enhanced management actions and capture devices aimed at achieving the requirement of capturing 100% of litter in stormwater.

Litter reduction in the stormdrain systems will result in less litter in surface water from the direct discharges of MS4s. While trash originating from other sources, such as illegal dumping and wind dispersion, are not addressed by the Trash Amendments, it is anticipated that the litter control programs implemented by municipalities will result in a significant decrease in trash traveling into creeks, rivers, lakes, and the ocean.

### The Trash Amendments accomplish the following:

- Establish water quality objectives for litter
- Establish restrictions on the discharge of litter in stormwater
- Provide implementation requirements for permitted stormwater and other dischargers
- Set a time schedule for compliance
- Provide a framework for monitoring and reporting requirements

The City will diligently perform measures on its own properties, and will work in partnership with stakeholders and private properties in order to meet the state-mandated goals (see sidebar).



**Did You Know:** Just as there are many kinds of trash, there are many methods to prevent it from reaching waterways.



## What is the City's Plan?

In order to meet the requirements of the amendments, in 2018 Environmental Resources Division staff performed an ‘On Land Visual Assessment Survey’ and mapped out the areas of town and sections of streets that have the most litter. Only those areas determined to be ‘high-trash generating land use’ sites are required to be surveyed. These sites include multifamily apartments, industrial and commercial properties, public transportation hubs, and public schools.

Staff has devised an implementation plan to facilitate trash reduction that will likely include the following:

- Installation of devices that capture and remove litter from stormwater
- Improved waste collection bins
- Signage and public outreach to increase awareness of and reduce littering
- Improved waste enclosures and trash and recycling containers
- More frequent pick up of waste containers and increased street sweeping in high litter generating areas



# PROTECTING STORMWATER QUALITY

While it is possible to clean up most pollutants that end up in stormwater, it can be very difficult and expensive. The best way to protect our stormwater quality is to keep pollutants out of the water. There are simple actions we can all take to help keep our stormwater clean and avoid pollution.

## Pollution Prevention at Home

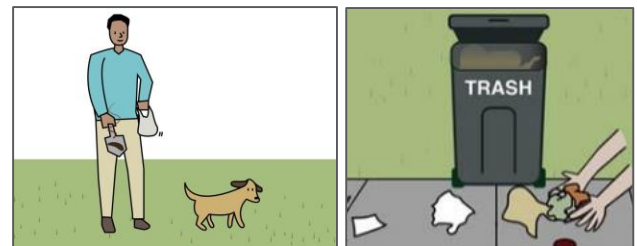
Here are some tips to help protect our stormwater at home.

- Keep lids on trash, recycling and organics carts closed to keep rainwater out and to prevent wind from blowing out waste.
- Never leave litter on the ground.
- Recycle and compost as much of your waste as possible.
- Securely bag any trash so that it doesn't blow out of the cart when it's being emptied.
- When possible, limit the use of single-use plastics. Single-use plastics, including water bottles and straws, are a significant source of plastic pollution.
- Always pick up pet waste, seal it in a bag, and put it in the trash bin. Pet waste contains harmful bacteria that can kill fish and make animals and humans sick.
- Wash off painting equipment and brushes in the sink.
- If you need to wash your vehicle, car wash facilities are best choice because the water is recycled and sent to the wastewater treatment plant for cleaning. If you wash your car at home, use a small amount of water and make sure the dirty water flows into your landscaping and not into the street.
- Clean oil spills and leaks from your car with kitty litter or a rag. Never wash it off.
- Keep your car in good repair and ensure that it is not leaking oil or other fluids.
- Make sure that your irrigation sprinklers do not spray onto pavement and create runoff that reaches the street.
- Use less toxic pesticides and fertilizers.
- Wherever possible, ensure that drainage from roofs flows into landscaping areas. Disperse the energy and spread the water out at the bottom of the roof drain by using rock cobble at the base.
- Consider capturing roof drainage in cisterns or rain barrels for future supplemental irrigation for landscaping.



## Pollution Prevention at Work:

- Make sure that all waste ends up in containers and bins and that the lids are closed on all outdoor trash, recycling and organics bins.
- Encourage everyone at work to recycle and compost.
- Encourage carpooling, cycling, and other low-polluting travel methods.
- Participate in a creek clean-up event or volunteer to pick up litter at a nearby park or greenbelt.
- Follow your workplace guidelines when handling and storing materials and wastes to keep yourself and co-workers safe, and prevent pollutants being discharged into the stormdrain system.
- Never wash anything down the stormdrain system.
- Report any suspected discharges of anything other than pure rain water into the stormdrain system to the City. Take a picture, observe time, date, and location in reporting what you see.





# STORMWATER & PROP 218

## Why are Stormwater Rates Different?

Proposition 218 allows for trash, water, and wastewater rates to be set without a vote by the public. However, many consider stormwater fees to be “property related fees” which are different than sewer or trash fees. Under Proposition 218, if an agency wants to implement a new property related fee or raise the rate of an existing one, it must go through a process which includes a written notice to property owners, a public hearing at which property owners may object to the new or increased fee, and if fewer than 50% of the property owners object by the time of the public hearing, a ballot is mailed to the property owners so they can vote on the proposed new or increased fee. A majority of those voting on the ballot must vote in favor of it before the new or increased fee can be implemented.

*Except for fees or charges for **sewer, water, and refuse** collection services, **no property related fee or charge** shall be imposed or increased **unless and until** that fee or charge is submitted and **approved by a majority vote** of the property owners of the property subject to the fee or charge...*

*--Proposition 218, approved by voters in November 1996*



**Did You Know:** Proposition 218 was written by the Howard Jarvis Taxpayer’s Association, and was called the ‘Right to Vote on Taxes Act’ even though it applies to fees and assessments as well as taxes.



## Who Gets to Vote for a Property Related Fee?

The authors of Proposition 218 felt that since property owners are the ones who are obligated to pay property related fees, they should be the ones who get to vote on it. As a result, these fees are not voted on by registered voters at a polling place. Instead, Proposition 218 calls for ballots to be mailed to property owners, whether or not they are registered to vote, and whether or not they live within the City limits. Property owners who may oppose any proposed new or increased property related fee actually get two chances to stop it: First, if a majority of them object to it in writing or in person at the public hearing, it cannot go to ballot and cannot be implemented. Second, if it does go to ballot, if a majority of them vote “No,” it cannot be implemented.



# STORMWATER RATES

## Current Rate Structure

In the City’s current utility rates, there are two line items that create one charge on the utility bill to fund the stormwater utility: Storm Sewer and Drainage. Both of these fees are calculated based on a monthly fee per square foot of each parcel.



### Storm Sewer

The Storm Sewer rate has remained the same since 2005. Revenue derived from these fees are used for the operations and maintenance of the detention ponds, the conveyance channel, the wetlands, sampling and testing of stormwater, studies, reporting, and permitting. Vacant parcels are exempt from the storm sewer water quality charge.

Land Use	Monthly Rate per Sq. Ft.
Single-family dwelling unit through quadplex dwelling unit	\$0.0002321
Multi-dwelling units, 5 or more	\$0.0004643
Mobile home unit	\$0.0004643
Churches	\$0.0004643
Private day care and Group Living	\$0.0002321
Commercial	\$0.0004643
Industrial	\$0.0008357
Open space and irrigation	\$0.0002321
Agriculture	\$0.0009284

### Drainage

Revenue from the storm drainage and flood control rate (referred to on utility bills as “drainage”) are used for the acquisition, construction, reconstruction, maintenance and operation of storm drainage water systems and related facilities.

Unlike the Storm Sewer rate, the drainage fee can increase 3% each August, unless waived by City Council resolution.

Land Use	Monthly SqFt of Lot Size
Single Family home, condo or duplex	\$0.000544
Multi-family (3 or more units)	\$0.000698
Mobile Home Dwelling Units	\$0.000544
Commercial and Commercial	\$0.000971
Open Space and Irrigation	\$0.000282
DJUSD Schools	Exempt
Private Day Care	\$0.000282

## Sample Rate Calculations

The samples below show how these rates are calculated.

#### Example 1: Single Family home on a 5,800 sqft lot

Storm sewer Rate: 5,800 x \$0.0002321 = \$1.35 per month

Drainage Rate: 5,800 x \$0.000544 = \$3.16 per month

**Total Storm Sewer Rate: \$4.51**

#### Example 2: Multi-Family property on a 12,000 sqft lot

Storm sewer Rate: 12,000 x \$0.0002321 = \$2.79 per month

Drainage Rate: 12,000 x \$0.000544 = \$6.53 per month

**Total Storm Sewer Rate: \$9.32**





# BUILDING A RESILIENT UTILITY

## Planning for a Resilient (& Evolving) Utility Infrastructure

The City's stormwater system changes as the City evolves. What was initially a system for the small university farm town of Davisville in 1917 has grown to drainage basins, pump stations, and stormwater infrastructure for 10 square miles of Davis, California. With slow and steady growth, each section of town was designed as the City was developed. New developments under construction have been required to mitigate any increases in stormwater and pollutants contribution, leading to the installations of on-site treatment measures, ponds and pump stations over the years.

### The Changing Nature of Storms

As the climate continues to change, weather events may become more extreme and move away from the type of precipitation and storms that the City infrastructure was designed to accommodate. While small localized flooding will occur in predictable areas, recent weather events have demonstrated the increased potential for more frequent substantial flooding. In 2016, the City performed a condition assessment of all stormwater pump stations. This was the first step in developing a plan to ensure these facilities can not only handle current demand, but allow for increased stormwater from unanticipated storm events. As funding is available, staff will perform hydrology studies for each basin, and the information will be used to appropriately size improvements to City pump stations.

The City has also started to look at overall rainwater management capacity. A survey of the City's detention ponds was recently completed to determine what volume of storage was still available after years of sedimentation. With these volume calculations being completed, we now know how much material needs to be removed to return the detention ponds to their original design capacity. In addition, as future hydrology studies are completed and with projections for increases in rainfall due to climate change, we will have topography available to plan for potential future projects to increase to the capacity of these ponds.

### The Most Important Protector of Our Stormdrains, Wildlife Habitat, and Water Quality? Us.

Stormwater runoff is one of the leading causes of water pollution in the United States. Efforts are underway across the State (like the Trash Amendments to the City's MS4 General Permit) to educate the community on the impacts of pollutants such as animal waste, litter (especially plastics), motor oil, antifreeze and much more on the delicate ecosystems that link to the stormwater drainage channels. Much of stormwater protection relies on the simple act of keeping these pollutants out – something we all have the power to do right now.



### Emerging Regulations

Staff are carefully monitoring new stormwater quality management trends and regulations coming from the Regional Water Quality Control Board, including efforts to expand the use of recycled water to increase drought resilience, adopting regulations to increase the collection of urban stormwater, and efforts to reduce flood risk and enhance water supply.





# BUILDING A RESILIENT UTILITY

## Plans, Studies & Assessments

Within the limited resources of the Stormwater Utility, it is a priority for staff to assess the equipment and staffing levels to understand the needs of the utility, and develop plans should the utility funding allow for necessary upgrades and equipment replacements, or organizational restructuring.



### Stormwater and Sewer Stations Assessment (2016)

To develop a plan for capital improvement needs within the utility, an assessment of the stormwater infrastructure was undertaken to further understand the anticipated timelines, cost and priority for each project. This review looked at the City's sewer lift stations as well as the stormwater drainage stations. The report presented planning level recommendations for improvements to the City's stormwater drainage stations. The reports recommended that two storm drainage stations past their useful life be replaced and that another be upgraded (stations and their components have a useful life of between 20-50 years depending on the equipment and maintenance levels). The remaining five stormwater drainage stations are in good condition.

### Stormwater Operations Assessment Report (2018)

Seeking guidance on moving from a reactive operational model to a proactive one, staff worked with a consultant to conduct a Stormwater Operations Assessment Report (completed in 2018). This report reviewed the City's stormwater operations and maintenance activities, infrastructure management, and staffing, and provided recommendations on adequate program staffing levels, stormwater infrastructure maintenance frequencies, and priority task setting to meet best practices and/or the City's desired level of service, as well as benchmarks from similar agencies. Chiefly the report recommended a more robust preventative maintenance program, to "maximize the useful life of all system facilities and minimize emergency conditions by performing system maintenance in a regularly scheduled and timely manner."

### Stormwater Resources Plan for Yolo County (2018)

In 2018, the Water Resources Association (WRA) of Yolo developed a Storm Water Resource Plan (SWRP) to inform future water management decisions and promote effective conjunctive use as well as alleviate flooding, groundwater, and water quality issues through stormwater management throughout Yolo County. The City of Davis participated in the development of this plan. The plan can be viewed on the WRA's website ([yolowra.org](http://yolowra.org)).



#### Public Works Utilities & Operations

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# Greener Davis

Working together for a Greener Davis

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## Follow-up Links

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[Greener Davis Conservation Programs](#)

[Cool Davis: Partnering to implement the City's Climate Action Plan](#)

[Solid Waste, Recycling and Organics](#)

[Water Conservation](#)


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## May City of Davis Conservation News

Stay connected with the community and sign up to receive emergency alerts at [www.yolo-alert.org](http://www.yolo-alert.org). Follow the City of Davis on [Facebook](#) for all the latest information on the county shelter-in-place order.

## Spring Landscape and Irrigation Tips

**Spruce Up Your Sprinkler System** 

**Inspect** sprinkler heads. A broken one can waste **25,000** gallons of water in six months!

**Connect** hoses and pipes well. A leak as small as the tip of a pen can waste **6,300** gallons of water per month!

**Select** a WaterSense® labeled irrigation controller and water smarter.

**Direct** spray on landscapes, not pavement!

- **Inspect your irrigation system.** Test your irrigation system to make sure it's functioning properly, as issues are not always visible unless the system is running. Look for broken and/or misaligned sprinkler heads (to avoid water on driveways and sidewalks) and leaking pipes.
- **Check drip irrigation** for broken and/or missing emitters, breaks in the drip lines and any other damage.
- **Check the batteries.** Irrigation controllers sometimes revert to factory settings after even a brief power outage. Check the batteries in your controller every six months, and replace as needed to ensure your controller runs properly.
- **Soil moisture is key.** The soil may look dry on the

surface, but it can be wet at root level. Use a soil moisture meter or screwdriver to go down a couple of inches into the soil, and see if the soil is still moist.

- **Just add mulch.** Add a layer of three to four inches of mulch around your plants to retain moisture, protect against the summer heat and suppress weeds.

See [SaveDavisWater.org](http://SaveDavisWater.org) for more information.

## Help Prevent Clogged Pipes!



Please don't treat your toilet like a trash can, and remember to flush only toilet paper! Wastewater utility operators in the State have noticed an increase in disinfectant wipes, paper towels, and other non-flushable materials being flushed down the toilet. Do not treat these items as toilet paper as these products belong in the trash. Flushing these items can lead to expensive and messy sewer backups at your home and can cause damage to sewer systems.

More information is available on our [Down the Drain flier](#).

## 3 Things We Can Do to Prevent Litter



Have you ever wondered how all that litter ends up alongside

roadways and in our waterways? The answer might surprise you: *It's often accidental*. Any one of us could have contributed to that litter! Fortunately, there's three simple things we can all do to help prevent litter.

1. **Keep waste and recyclables secured in closed bins.** Wind can play a major role in litter. That's why it's important to make sure all your waste is always placed securely inside a bin. Make sure it's in the right bin (recyclables should always go in a recycling bin, compostable waste should go in the organics bin) and always keep the lids closed to prevent wind from blowing waste out, and rainwater from getting in.
2. **Keep waste and recyclables secured in your vehicle.** While some people may toss trash out of their vehicles on purpose, it often blows out accidentally. An unrolled window generates a lot of airflow when a car is moving, and can easily blow waste out of the vehicle. Opening a car door on a windy day can also blow trash out. An open truck bed is not a secure place for loose wastes, which easily blow out of the back of trucks as they are being driven. Keep your waste secured inside your vehicle at all times to prevent accidental littering.
3. **Avoid purchasing and use of plastics.** Whenever possible, try to minimize the use of plastics, particularly single-use plastic products, as these are some of the most problematic types of litter found in the environment. Look for metal, glass, reusable or compostable alternatives instead.

For more information, please see our [Litter Prevention webpage](#).

## Environmental Activities for the Family



Check out our new webpage on [GreenerDavis.org](http://GreenerDavis.org) for a list of fun activities, websites, games and virtual tours that will keep the whole family entertained while learning about the natural environment, climate change, water conservation,

## Environmental Award Winners



Every year, the City of Davis recognizes local businesses, organizations and individuals who have made a difference in the community's overall sustainability goals through the Environmental Recognition Awards.

The 2020 award recipients from each category are:

### **Business Category**

**Nugget Markets** for their major strides in energy savings, water conservation, food waste diversion, and their new corporate office in Davis, which is a model for sustainable design.

### **Non-Profit Category**

**Cool Davis**, an important and effective environmental organization serving the Davis community that brings together diverse groups to offer education, information and community action.

### **Individuals/Groups Category**

**Jean Jackman**, founder of the Friends of North Davis Ponds and advocate for open space.

**Gerry Braun, Lorenzo Kristov, Richard McCann**, local energy experts who served on the Technical Advisory Subcommittee of the Community Choice Energy Advisory Committee.

### **Empowering Youth for the Environment Category**

**Deb Bruns** for her longstanding and ongoing work as an educator showcases her concern for current environmental issues both locally and globally.

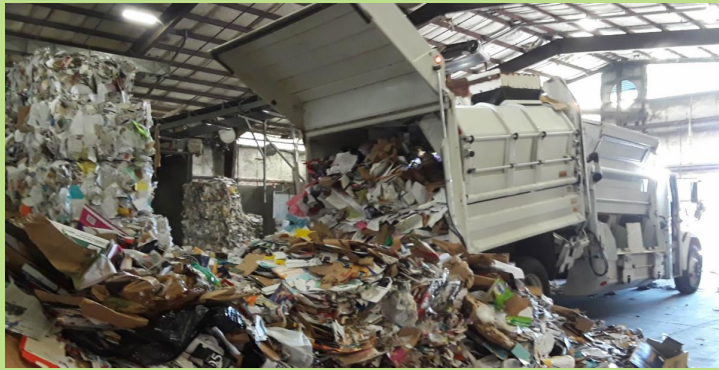
**Christal Waters** for reducing our community's carbon footprint during her quest to get more students on bikes and out of cars.

### **Environmental Legacy Award**

**City of Davis Recycling Program** that celebrated its 50th anniversary in April.

[Learn more about the award winners, nominees,](#) and [previous award winners.](#)

# 50th Anniversary of the Recycling Program!



The City of Davis Recycling Program celebrated its 50th anniversary in April!

Recycling in Davis began back in April of 1970 when a small group of environmentally concerned citizens began a newspaper drop-off recycling program. Curbside recycling of newspaper became available in Davis in 1974 when a City ordinance required that newspapers be separated from trash. Later that year, bottles and cans were added to the curbside collection program.

Over its 50-year history, the Davis recycling program has been truly successful, in keeping waste out of the landfill, thanks to the enthusiasm of environmentally conscious residents and businesses in Davis. In the last 29 years alone, Davis has recycled more than 118,872 tons of paper, 50,615 tons of cardboard, 8,512 tons of plastic, and 41,459 tons of glass. Davis currently diverts 61% of its waste from the landfill.

A number of events were planned to celebrate the program's anniversary, but unfortunately these were postponed due to the current shelter-in-place order. Instead, some of these plans will be saved to celebrate the 50th anniversary of the curbside recycling program in 2024.

[More information on the history of the recycling program.](#)

Contact us:  
(530) 757-5686  
[PWWeb@CityofDavis.org](mailto:PWWeb@CityofDavis.org)



[Subscribe to the Greener Davis Newsletter](#)

# Please sort waste into the correct bin

## RECYCLING

PLASTIC, GLASS & METALS



## PAPER



## CARDBOARD

Flatten and stack on the ground next to the recycling carts.

## COMPOST



## LANDFILL



City of Davis Public Works Utilities and Operations Department  
 DavisRecycling.org PWWeb@CityofDavis.org (530) 757-5686

@GreenerDavis



# WELCOME TO DAVIS!

An introduction to your City Utilities

## CITY OF DAVIS UTILITY INFORMATION

The City's **Public Works Utilities and Operations Department** performs administrative, technical and operational activities in support of the City's drinking water, wastewater, stormwater, and solid waste infrastructure and services. **You can contact the department at (530) 757-5686 or PWWeb@CityofDavis.org.**

Billing for all City of Davis utilities is handled by the **Finance Department**. **You can contact the Finance Department at (530) 757-5651 or FinanceWeb@cityofdavis.org.**

**There are six components of your monthly city utility bill:**

**Water:** Charges are based on the amount of water used and the size of your water meter. Water use is billed two months after use (i.e., January water use will show up on the March City utility bill).

**Solid Waste:** Charges are based on the garbage cart size and include costs for trash, recycling, organics, on-street yard material collection, and street sweeping.

**Storm Drainage:** Fees based upon the size and use of your parcel.

**Sanitary Sewer:** Charges are based on your average winter water consumption (Nov.-Feb. water usage), and the number of residential dwelling units on your property.

**Municipal Service Tax and Public Safety:** For more information about these charges, please contact the Finance Department.

## WATER SERVICE

The City's Water Division operates and maintains a water system that utilizes both surface water and groundwater for its drinking water supply. Surface water is supplied by the Sacramento River and groundwater is pumped from underground aquifers.

To ensure that your tap water meets all drinking water standards, the City monitors drinking water for specific constituents on a regular basis. You can read the latest water quality report online at [CityofDavis.org/WaterQuality](http://CityofDavis.org/WaterQuality).

Your water meter has Advanced Metering Infrastructure that provides hourly water usage information to customers. The City has an online customer water use portal, AquaHawk, which allows customers to check their hourly water usage and set and receive usage alerts. When registering for the first time, you will need your account number and service address.

Using water efficiently is important, please consider these tips.



**FILL IT UP** Run full loads when washing dishes and clothes. Save energy by line drying clothes and letting dishes air dry.



**INSPECT, REPAIR, REPEAT** Check outdoor irrigation systems every few months for leaks and clogged sprinkler heads. Make adjustments quickly to prevent water waste.



**LATE NIGHTS OR EARLY MORNINGS ARE BEST** Run your irrigation system in the early morning or late at night to prevent evaporation.

Learn more at [SaveDavisWater.org](http://SaveDavisWater.org).

## WASTE COLLECTION SERVICE

The City of Davis contracts with **Recology Davis** to perform trash, recycling, organics, on-street yard material collection, and street sweeping within the city limits. Recology Davis operates on a regular schedule for all holidays, except Christmas and New Year's Day. **Please contact Recology Davis at (530) 756-4646 or [RecologyDavis@Recology.com](mailto:RecologyDavis@Recology.com) if you have any service or collection questions.**

### CURBSIDE COLLECTION

- Trash, recycling and organics are collected weekly.
- Carts may be brought to the curb after 5:00 PM on the day before pickup, but no later than 6:00 AM on collection day.
- Place the carts in the street, with the wheels against the curb.
- Carts should be placed 3 feet apart and at least 3 feet from parked vehicles.
- The lid of the carts must be able to close completely.
- Please keep vehicles and other objects away from the front of the carts so Recology Davis trucks can reach them.
- Carts must be removed from the street by 7:00 AM on the day following collection.

Please help us reach our goal of diverting 75% of our waste from the landfill by placing all recyclable and compostable items in the carts provided (see the inside of this flier for details).

For more information, visit [DavisRecycling.org](http://DavisRecycling.org).

## STORMWATER

The City's Stormwater Division operates and maintains the City's stormwater infrastructure to ensure that stormwater is collected and discharged in accordance with federal, state, and local environmental regulations while protecting life and property from flooding.

Stormwater is the water from precipitation that flows across the ground and pavement when it rains. Stormwater should mostly be rain water, but as it runs off homes, yards, driveways, and other surfaces, it can pick up dirt, trash, animal waste, oil, gas, fertilizers, pesticides, and other pollutants in its path. Stormwater is not treated before it flows into local waterways. Our daily activities can either protect or pollute local stormwater.

You can prevent stormwater pollution:



**CAN YOUR WASTE AND LIMIT PLASTICS** Make sure all your trash, recyclables, and organic wastes end up in the proper waste containers and do not become litter. Reduce the use of plastics, especially single-use plastics.



**WASH YOUR CAR THE GREEN WAY** Use a car wash facility where the waste water is sent to the sewer treatment plant instead of washing your car in the driveway or parking lot (where the water flows to our wetlands).



**CLEAN UP AFTER YOUR PETS** Pick up your pet's waste, bag it up and place it in a trash bin (biodegradable bags are best!).

Learn more at [GreenerDavis.org](http://GreenerDavis.org).

## SANITARY SEWER

Sanitary sewer, also known as wastewater, is the water and waste that goes down the toilet, sink, and shower drains in your house. All the wastewater from Davis is treated at the City's Wastewater Treatment Plant. While the treatment plant is state-of-the-art and meets all state and federal requirements, certain things should never be flushed down the toilet or placed down the drain as they can clog sewer lines in your house or under City streets. Other items cannot be easily removed from wastewater once added or cause problems at the treatment plant.

To report a sewer backup in your home, on or near your property, or on a street, call the Public Works Utilities and Operations Department at (530) 757-5686. If the problem occurs after business hours (Monday – Friday, from 8 AM to 5 PM), call the Police Dispatch at (530) 747-5400.

**NO FATS, OILS OR GREASE DOWN THE DRAIN** Fats, oils, and grease (FOG) can solidify after being poured down a drain or flushed down a toilet. This builds up and blocks the plumbing, leading to sewer backups in homes, onto streets, and into local waterways. Small amounts of cool, hardened FOG can go in your organics cart. Larger amounts should go in a container and be placed in the trash or taken to the free hazardous waste drop-off for free recycling.

**KEEP FOOD WASTE OUT OF THE SINK** The best place for food scraps is in the organics cart for composting, not in the sink. Sink drains, even sinks with a garbage disposal, are not built to handle waste. Scrape food off dishes before washing them and consider using a drain screen in your sink to catch bits of food as you wash dishes.

**DON'T FLUSH GARBAGE** Only human waste and toilet paper should be flushed down the toilet. Other products labeled as "flushable" often do not break down enough to properly flow through sewer pipes, leading to clogged sewer lines and messy, expensive sewer back-ups. Please do not flush wipes, cat litter, hair, diapers, feminine protection, and other garbage, even products labeled as "flushable."

**DISPOSE OF MEDICINES AND HAZARDOUS WASTES PROPERLY** Unused medicines and hazardous chemicals should never be poured down the sink or toilet. See below for options.

More information is available at [GreenerDavis.org](http://GreenerDavis.org).

## Free Household Hazardous Waste Drop Off at the Yolo Landfill Every Friday and Saturday from 7:30 AM to 3:30 PM

Yolo County residents can bring the following items for safe disposal:

- automotive products
- batteries & paint
- cooking oils
- fluorescent bulbs/tubes
- household cleaners
- medications
- pesticides & herbicides
- used syringes (place in a puncture-proof container)

Limit of 125 lbs. or 15 gallons due to Dept. of Transportation rules. Call (530) 666-8856 for free senior/disabled pick-up service.



## THESE ITEMS SHOULD NOT BE THROWN AWAY IN THE TRASH.

### BATTERIES

It is against the law to throw batteries in the trash. Sort batteries by type (alkaline, lithium and rechargeable) and place each type in a separate plastic bag. Residents can recycle their household batteries for free at these collection sites in Davis:

- Ace Hardware, 3rd & G St.
- CVS Pharmacy, 1550 E. Covell Blvd. & 1471 W. Covell Blvd.
- Davis Food Co-Op, 620 G St.
- Hibbert Lumber Co., 5th & G St.
- Senior Center, 646 A St.
- Nugget Market, 409 Mace Blvd. & 1414 E Covell Blvd.
- Rite Aid, 655 Russell Blvd. & 2135 Cowell Blvd.

### ELECTRONICS

It is against the law to put computer monitors, televisions, and microwaves in the trash. Residents can recycle these and other electronics for free every day at the locations listed below. Please call ahead to verify drop-off times and if they can currently accept your items.

- Goodwill Donation Xpress, 417 Mace Blvd., 2939 Spafford Dr. & 1351 W Covell Blvd.
- Yolo County Central Landfill, 44090 County Road 28H

### SHARPS WASTE

It is against the law to place used sharps (hypodermic needles, lancets, and other devices used to penetrate the skin) in the trash. Residents can place sharps waste in a puncture proof container, close the lid tightly and tape it shut. Write "Sharps Waste" on the outside of the container and bring the container to one of the locations listed below for free and safe disposal:

- Recology Davis Recycling Center, 2727 2nd St. Mon.—Fri., 9:30 AM - 2 PM & Sat. 8 AM - 4 PM
- Yolo County Landfill, 44090 County Road 28H Fri.—Sat., 7:30 AM - 3:30 PM

### UNUSED MEDICATIONS

Unwanted, unused, and/or expired over-the-counter medications should NOT go in the trash OR be flushed down a drain or toilet. Residents can follow the steps below for free and safe disposal:

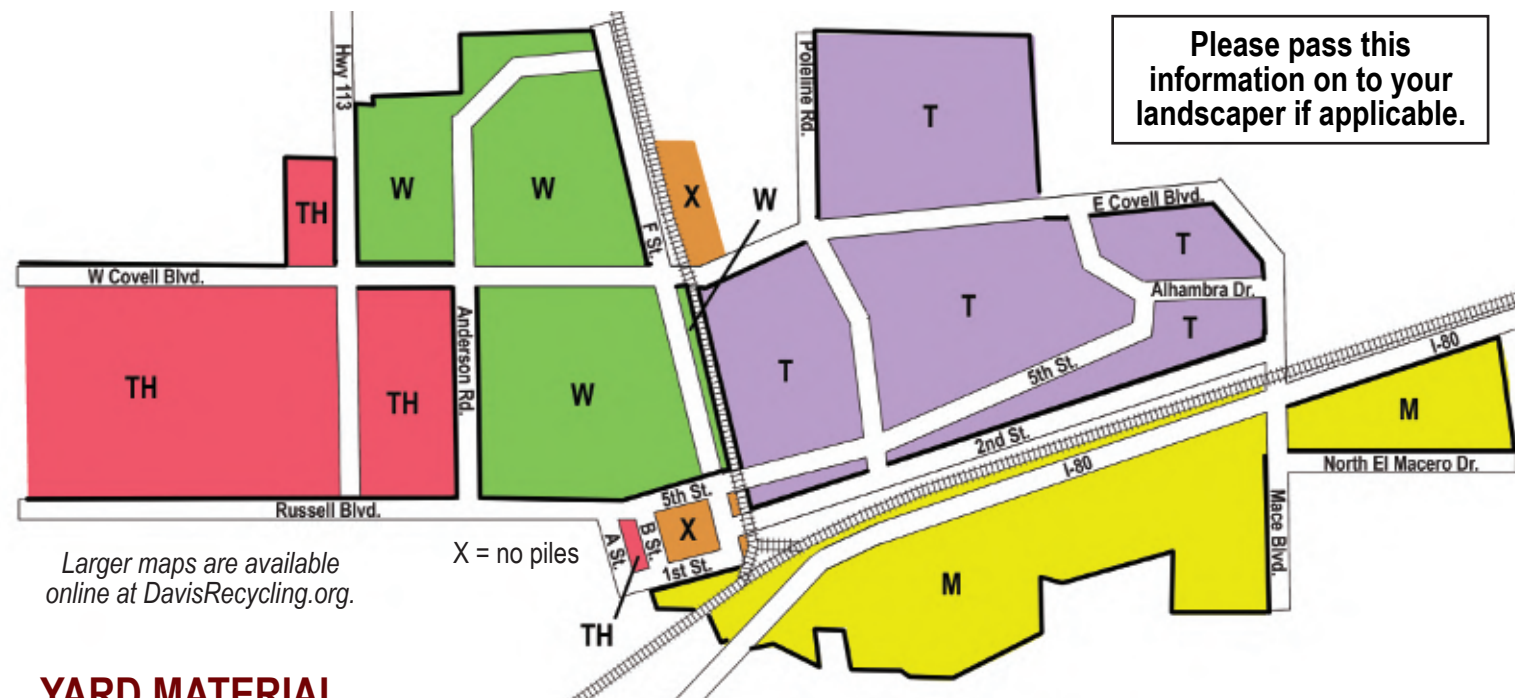
- ▶ Scratch, remove or blackout your information on the prescription label.
- ▶ Place pills in a clear zipper bag and recycle the medicine container. Keep liquids and creams in their original containers and ensure that they are tightly sealed.
- ▶ Drop off your medications at these locations:

- City of Davis Police Department, 2600 5th St. Mon—Thu. & every other Fri., 10 AM - 5:30 PM
- Yolo County Landfill, 44090 County Road 28H Fri.—Sat., 7:30 AM - 3:30 PM



## 2019 - 2020 YARD MATERIAL PILE PICK-UP SCHEDULE

Yard materials that do not fit into your brown-lidded organics cart can be placed in on-street piles for collection, subject to the rules listed below.



Please pass this information on to your landscaper if applicable.

Larger maps are available online at [DavisRecycling.org](http://DavisRecycling.org).

X = no piles

## YARD MATERIAL COLLECTION RULES

**Materials that are accepted in yard material piles:** tree and shrub prunings (branches must be less than 8" in diameter), leaves, and Christmas trees.

**Unacceptable materials include:** grass clippings, weeds, vines, sod, soil, flowerpots, florist's wire, stumps, vegetables, fruit, pet waste, and branches more than 8" in diameter. See [DavisRecycling.org](http://DavisRecycling.org) for disposal options.

**Yard material piles may not be set out more than 7 days before a scheduled pick-up day.**

**Additional rules include:**

- Yard material piles may not be placed in any portion of a bike lane.
- Sweeping or blowing leaves or other yard debris into the street is not allowed unless the materials are placed in a yard material pile on the correct day.
- Yard materials must be loose (not in bags) and piles must be placed 18" from the curb or gutter.
- Yard material piles must be placed adjacent to the property they came from and may not be placed in front of a different property.
- Yard material piles cannot be larger than 5 feet in any direction and cannot block gutters, fire hydrants, driveways, stormdrain inlets, or curb ramps for pedestrian and bike access.
- In some areas of town, yard material piles are not allowed as they will obstruct the bike lane or traffic lane. These areas include, but are not limited to: E 8th St. (from B St. to J St.), 5th St. (from A St. to L St.), B St. (from 7th St. to E 14th St.), Downtown Davis, and the Cannery. Properties in these areas that do not have access to on-street yard material pile collection do not pay for the service (they receive a credit on their utility bill).
- Streets are swept once a month, the week of the second Monday of the month.

1/1/2020 – 1/3/2020 holiday schedule: All regularly scheduled services will be shifted by one day.

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September 2020							October 2020							November 2020							December 2020											
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