# STORMWATER DRAINAGE & FLOODING IN EAST COUNTY COMMUNITIES



#### Did you know...

East County is part of the Sacramento River Delta. Flooding occurred naturally as the delta waterways swelled during winter rains. Due to the desire to protect crops and farm buildings in the early 1900's, levees were built and reclamation districts were formed to maintain them. The general topography is flat, and water drains slowly eastward where it must be pumped over the levees. There are four drainage components in East County communities which all need to work together to reduce the risk of flooding during heavy rains.

- Delta Levees prevent Delta water from spreading across East County. See Reclamation Districts map at the end of this document.
- Marsh Creek Watershed Flood Protection
  Infrastructure channels, dams, and detention
  basins in Antioch, Oakley, and Brentwood keep



Upper Sand Creek Basin, Antioch

floodwaters in Marsh Creek rather than spreading out eastward as it had historically.

Roadway Drainage – roadside ditches and cross culverts located within public road right of way.





**Roadside Ditch** 

**Road Cross Culvert** 

**Private Drainage** – ditches, driveway culverts, and overland flow within private property.





**Private Ditch** 

**Driveway Culvert** 

Most East County drainage features are not part of a drainage master plan or public system.

#### Frequently asked questions:

What are the public agency flood control and drainage maintenance responsibilities in East County?

- Reclamation Districts are responsible for the Delta levees and pumps
- Flood Control District is responsible for the Marsh Creek flood control facilities
- County Public Works
  Department maintains the roadside ditches and cross culverts.
  To report an issue, call (925) 313-7000 or download Mobile Citizen at contracosta.ca.gov/7875/Mobile-Citizen

### Who is responsible for maintaining private drainage?

Driveway culverts and all other drainage on private property, whether in a ditch or overland, is the responsibility of the property owner according to California Drainage Law. Each property owner must act reasonably to accept water flowing onto their property and allow water to leave their property without causing damage to adjacent property.

#### How can flooding be minimized?

- Investigate your property each fall for blockages and obstructions, including fallen trees, leaves, debris or trash congesting your **Private Drainage**.
- Consult an engineer or contractor to clean and remove large blockages or obstructions, and before making repairs.
- Report flooding of **Roadway Drainage** to the County Public Works Department.
- If flooding is caused by your neighbor not properly maintaining their **Private Drainage**, communicate and work together to help reduce flooding.



<u>DO NOT</u> remove blockages or obstructions during an active flooding event! Floodwater can be dangerous and should not be entered.

Due to the flat landscape, no local drainage plans, and pumps being the only outlets for stormwater, East County experiences localized flooding in the low-lying areas during heavy storm events. This flooding has occasionally contributed to poor water quality conditions at wells and underground septic systems in the area.

In addition to the above, the Knightsen Town Community Services District was formed in 2005 to study and address localized private drainage and flooding issues. They have not installed any facilities and do not have any maintenance responsibility. See <a href="mailto:knightsentowncsd.specialdistrict.org">knightsentowncsd.specialdistrict.org</a>

#### Additional things to consider...

#### **SANDBAGS**

If flooding is imminent, you should make preparations to protect your home and property. Installing sandbags and plastic sheeting is often effective to keep floodwaters at bay and seal openings to your home. Sandbags and plastic sheeting can be purchased from your local hardware or building materials store. You should obtain them ahead of the winter season so you are prepared. For more information about sandbags visit: contracosta.ca.qov/5976/Sandbags

#### **WEED ABATEMENT**

Proper weed abatement can improve drainage and reduce flooding. Weed abatement outside of the public road right of way is the responsibility of the property owner and should occur in the spring after the rainy season. Consider using Integrated Pest Management (IPM) strategies when managing your property: <a href="mailto:cchealth.org/ipm">cchealth.org/ipm</a>

#### **VECTOR CONTROL**

Another benefit of reduced flooding is less standing water for mosquitoes. The Contra Costa Mosquito & Vector Control District (CCMVCD) serves all of Contra Costa County and provides public health services through the control of mosquitoes and other vectors. This is important to prevent the transmission of disease and to minimize vector population outbreaks. Visit contracostamosquito.com for more information and advice to minimize vector impacts to your property. In some cases, CCMVCD may perform work on your property to reduce standing water and vector issues.

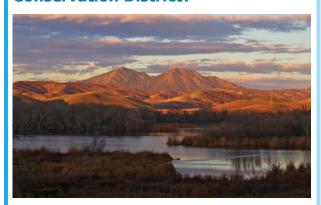


Modifying or blocking natural drainage paths can be a violation of the County's 1010 Drainage Ordinance, and enforcement action may occur.

## Can I pump or divert floodwaters away from my property?

Pumps can be rented at an equipment rental company. Taking matters into your own hands is good advice to prepare for and respond to flooding, however, certain actions can make flooding worse and/or impact your neighbors. You should not pump floodwaters onto your neighbor's property without their permission. You should not cut the roadside ditches to drain water from your property. If your property has a history of flooding, you should work with the County and/or your neighbors to develop a response plan that is safe, legal, and beneficial. Then, when the next big rain comes, you will be able to mitigate the flooding.

## Who is the Contra Costa County Flood Control and Water Conservation District?



Mount Diablo Sunrise over Marsh Creek Reservoir, Brentwood

Following World War II, the population of Contra Costa experienced rapid growth, and many homes and businesses were built in lowlying areas susceptible to flooding. After decades of widespread flooding, the Contra Costa County Flood Control and Water Conservation District was formed to plan and provide flood protection. In addition, reclamation districts, County and Ordinances, and FEMA regulations, have been put in place to reduce drainage and flooding impacts, improving public safety.

Since 1951, the Flood Control District has completed many major flood control projects in Contra Costa County in order to make it a better and safer place to live. Today, the Flood Control District's mission has expanded to include stewardship of the environmental resources in creeks and watersheds.



Visit us: cccounty.us/floodcontrol

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