The East Merced Resource Conservation District (EMRCD) is a nonprofit that acts as independent local liaisons between the federal government and landowners. We address a wide variety of conservation issues, such as water and air quality, soil erosion control, and wildlife habitat restoration.

In May 2017, the East Merced RCD was awarded the REV grant through the Department of Conservancy. With the REV grant the EMRCD hopes to achieve relevancy, excellence, and visibility. We are reaching these benchmarks by working with multiple partners which include the Natural Resource Conservation Service (NRCS), Department of Water Resources (DWR), Merced Irrigation District (MID) and other RCDs around the state.

Some of our major goals we are striving to achieve within this grant are:

- Preserve and enhance the river and floodplain along the Lower Merced River
- Provide educational and technical assistance to support implementation of stewardship practices to conserve resources and improve ecosystem function
- Improve understanding of watershed conditions
- Implement and oversee high priority habitat and water quality improvement projects on private and public land
- Better understand water quality and availability as it relates to supporting agricultural, rural and urban users
- Promote the stewardship of natural resources in Merced County
- Support management and education efforts for noxious weed control
- Protect surface water and groundwater quality

During the past few months we have given multiple school presentations, participated in community events, partnered with many agencies to service farmers, and attended local supervisor meetings.

In the future we are looking to strengthen our partnerships within the community, host watershed clean-up events, provide landowner workshops pertaining to healthy soils, carbon sequestration, and continue to support farmers and landowners as best we can.

We present to classrooms!

Do you know that we present to classrooms all over Merced county? We cover a variety of environmental conservation topics whether it be watershed health, the water cycle or the life-cycle of a salmon! If you want us to come present at your child’s school or if you’re interested in volunteering contact the Program Director at Kimberly@eastmercedrcd.org.
Groundwater is a critical resource for all of us. It is a resource that we don’t see, but we rely on it extensively for drinking water and to grow crops. Over the last few decades, as demand for groundwater has increased, more water is being drawn out of underground aquifers than is being replaced or replenished. And, if there is no rain, then there is no water returning to the groundwater below, and the groundwater aquifer is not “recharged” or refilled.

In 2014, to begin to identify ways to bring groundwater levels and usage into balance, California passed the Sustainable Groundwater Management Act (SGMA). Under SGMA, 21 groundwater basins and subbasins in California were declared critically overdrafted by the Department of Water Resources (DWR). The Merced Groundwater Subbasin is critically overdrafted and has also been designated by DWR as a high-priority basin.

SGMA requires that local and regional authorities in the medium- and high-priority groundwater basins form a locally-controlled and governed Groundwater Sustainability Agency (GSA), which is responsible for developing and implementing a Groundwater Sustainability Plan (GSP) by January 31, 2020. SGMA protects existing surface water and groundwater rights.

**What is a Groundwater Sustainability Plan?**

A Groundwater Sustainability Plan identifies ways to bring the groundwater basin into balance by 2040, when groundwater withdrawals are balanced with groundwater recharge. A primary goal of a GSP is to develop sustainable groundwater management practices for the future without causing undesirable results. A GSP must include a physical description of the basin or subbasin, including groundwater levels, groundwater quality, land subsidence, information on groundwater-surface water interaction, data on historical and projected water demands and supplies, monitoring and management provisions, and a description of how the plan will affect other plans, such as city and county general plans. The GSP must also include groundwater sustainability goals for the basin or subbasin. The plan must explain how the goal will be achieved in 20 years, with a 50-year planning and implementation horizon, and monitoring data.

**What is a Groundwater Sustainability Agency?**

In 2017, water management and land management agencies within the Merced Subbasin formed three Groundwater Sustainability Agencies (GSAs): the Merced Subbasin Groundwater Sustainability Agency, the Merced Irrigation-Urban Groundwater Sustainability Agency, and the Turner Island Water District Groundwater Sustainability Agency #1. The three GSAs have agreed to develop one comprehensive Groundwater Sustainability Plan for the area encompassing all three GSAs. The unified GSP will be referred to as the Merced Subbasin GSP. To develop and implement the GSP, the governing boards of the three GSAs will work together to make decisions necessary to review existing groundwater conditions and develop a plan that supports the long-term sustainability of the entire Merced Groundwater Subbasin.

**What’s Next?**

The development of the Merced Subbasin GSP is getting underway now. The three GSAs have formed a Coordinating Committee to guide the planning activities and a consulting team has been hired to prepare the Plan. A Stakeholder Committee will be appointed soon to represent community, business, and environmental interests in the planning process. Throughout the GSP development process, the public and interested stakeholders will be encouraged to provide input through community meetings and other events.
What is Arundo Donax and where is it found?

Arundo Donax is an invasive plant that is extremely fast growing and resembles bamboo. It is considered a noxious weed, which means that it is harmful to natural habitats and agricultural land. It can grow four inches in a day and reaches 30 feet tall. Arundo is most commonly found along streams.

What are the dangers of Arundo?

1) Arundo creates erosion and flooding problems

Their roots are easily broken off by stream flows. When they break off they can take big clumps of dirt with them causing stream erosion to occur and water pollution. This can also result in stream obstruction and flooding to occur. Large Arundo infestations can alter steam flow.

2) Arundo displaces native plants

Arundo is able to out-compete native plants for space and resources by growing at a faster rate than its counterparts. It can drastically change the richness (diversity) of an ecosystem by displacing native plants and replacing it with large monocultures of arundo. This is not surprising as Arundo has taken over many riparian habitats around the country.

3) Arundo can exacerbate fires

Arundo is highly flammable and burns green. Arundo can promote the spread of a fire by negating the once natural fire-resistant buffer within and around the waterways. This would put agricultural land, houses, wildlife and plants in danger. Arundo has adapted to fire prone ecosystems allowing it to grow back at a quicker pace compared to other plants.

4) Arundo destroys fish and wildlife habitat

Creeks, rivers, and streams are home to a diverse range of plants and animals from willows to birds to fish to reptiles. By displacing native plants, arundo negatively affect the wildlife such as fish that depend on those plants for food, shelter, and a breeding habitat.

5) Water Consumption

Arundo consumes a large quantity of water. About 1 acre of arundo consumes 5.62 ac-ft of water per year or it consumes $337.20 worth of water each year!

What can you do?

If you spot arundo on your property report it to the East Merced RCD as quickly as possible (remember it spreads fast!). Once you notify us, we can work with you to see how we can eradicate it from your property. Don't be hesitant to ask for help we are here to service you.

Information provided by:
Sonoma Ecology center with assistance from Team Arundo del Norte, USDA and NCRS Madera office along with Jeannie Habben.
Picture 1: Erika Casillas (Program Assistant) reading "Diary of a Worm", from Doreen Cronin to a kindergarten class.

Picture 2: Two high school students make their own super soil at the 2018 Parent Institute at Golden Valley High School.

Picture 3: Erika Casillas and Aaron Rives (Soil Conservationist-NRCS) helping kindergarten put together their super soils.

Picture 4: Kimberly Rodriguez (Project Manager) giving a presentation a healthy soils presentation at Farm2U day.

Picture 5: Volunteers Kathy Weber and MaryAnn Reynolds leading a salmon scent activity at McConnell State Park to Ballico-Cressy students