



ZONE 4

Flood Operations
and
Maintenance Update

The Marin County Flood Control and Water Conservation District (District) staff is sharing this Flood Operations and Maintenance Update for Flood Zone 4 in Tiburon. While the COVID-19 pandemic has impacted our work force at the County generally due to Disaster Service work assignments, essential maintenance of Zone 4 facilities continues. Questions and comments can be directed to floodinquiry@marincounty.org.

The District's mission is to reduce the risk of flooding for the protection of life and property while employing sustainable practices. We aim to meet this mission through effective, transparent, and responsive planning, design, construction, operation, and maintenance of facilities such as stormwater pump stations, detention basins, bypass drains, creeks, ditches, and levees. Within the Flood District, eight zones were created in areas with specific flooding concerns. These zones have limited funds to mitigate flooding including the construction of improvements to creeks and drainage facilities.

**COVE STORMWATER
PUMP STATION UPGRADE**

On January 23, 2020, a ribbon cutting ceremony was held to celebrate the upgraded Cove Stormwater Pump Station which was completed under budget last winter. Designed by CSW/ Stuber-Stroeh Engineering Group, the upgrades were constructed by general contractor, Valentine Corporation, and was admirably overseen by Project Manager Scott McMorrow, Chief of Construction Marl Madayag, and Inspector Travis Fleetwood.

- ✓ Replaced pumps and motors to increase pumping capacity
- ✓ Modified the existing pump bays and wet well
- ✓ Installed an onsite generator with diesel fuel pod and automatic transfer switch
- ✓ Replaced the trash rack with one designed to be less prone to clogging
- ✓ Replaced the motor control center
- ✓ Electric and structural upgrades
- ✓ Replaced the existing programmable logic controller and Operator Interface Terminal
- ✓ Added wet well access hatches
- ✓ Provided redundant, water-level sensors and associated controls
- ✓ A protective fence around the proposed generator
- ✓ Replaced existing 36-inch corrugated metal pipe (CMP) connected to the wet well with 48-inch reinforced concrete pipe (RCP)
- ✓ Replaced existing 18-inch CMP connected to the wet well with 18-inch RCP
- ✓ Installed new storm drain manholes
- ✓ Installed a SCADA system and autodialer

ANNUAL AND PREVENTATIVE MAINTENANCE WORK PROGRAM

Pump Stations

Individual pumps and motors are typically removed and serviced for major maintenance on a six-year interval at each of the zone's three stations. In addition to major maintenance, preventative maintenance at all pump stations also takes place every year and includes the inspection, testing, and as needed replacement of electrical and mechanical components.

The next pump planned for major maintenance is Pamela Ct #2; this work was originally scheduled for this year but due to COVID-19 impacts to staff was rescheduled for 2021. Pamela Ct #1 is scheduled for maintenance in 2022 and Pamela Ct back-up pump will be serviced in 2023. Strawberry Circle #1 is scheduled for 2024 and Strawberry Circle #2 in 2025.

Since the new Cove pumps were installed in 2019, all three pumps will be due for service in 2025 but they will not all be maintained the same year. Most likely staff will recommend that two be serviced in 2025 and the 3rd in 2026, assuring that there will always be a pump in service at COVE station.

Vegetation

The East Creek access road has been mowed. Late in the summer or early fall the Conservation Corps North Bay will trim cattails and remove any low or downed branches in the channel at East Creek, and clean debris from West Creek and the Karen Way Trash Rack.

Sediment Removal

No sediment removal is planned this year. Staff will do an assessment next summer in 2021.

FLOOD ZONE 4 FY 2020-21 BUDGET

Following the Shelter In Place Order in March, most fund budgets from Fiscal Year 2019-2020 were automatically rolled over into the next fiscal year, including Zone 4's. Going forward, the County Administrator's Office requested that the zones recommend a baseline budget for the beginning of each fiscal year that does not include major project expenses. Baseline budgets are intended to be relatively consistent year to year. Major projects will require separate actions from the AB and District BOS to adjust the budget as needed. As usual, the approved budget may be adjusted, as necessary, as priorities and cost estimates for projects and studies planned for this coming fiscal year are more clearly identified. This year's Zone 4 budget was approved by the District Board at their June 9 meeting (<http://bit.ly/Zone4Budget>) and there is sufficient funding to maintain Zone 4 facilities.

WHAT CAN YOU DO AS A PRIVATE PROPERTY OWNER TO REDUCE FLOOD RISK IN YOUR NEIGHBORHOOD?

Localized flooding in Bel Aire and Strawberry Circle (Flood Control Zone 4) can occur when yard debris and trash block or become stuck within storm drains. These items can also be damaging to our pump stations and the natural environment when they wash through the storm drains and into our creeks, wetlands, and Richardson Bay. Thank you for taking the time to help protect your community by considering the following:

PLEASE DO

- ✓ Pick up and properly dispose of any litter.
- ✓ Dispose of yard debris, including leaves, by composting onsite or using your green cart. If your cart is full, paper bags which are 32 gallons or smaller may also be used and placed next to your cart. Visit millvalleyrefuse.com for more information.
- ✓ Use best practices for preventing soil and landscaping materials from eroding away during storms (<http://bit.ly/StormWaterBestPractices/>)
- ✓ Be observant during heavy rains for potential problems and report concerns to the Marin County Flood Control & Water Conservation District at 415-473-6992.

DO NOT

- ✓ Litter!
- ✓ Place anything in the street which could be washed into a storm drain and cause a blockage, including raked leaves.
 - ✓ Place a pile of leaves on the street and expect them to be picked up by street sweepers.
 - ✓ Pour chemicals, paints, or fuel in areas where those materials or liquids might flow into the storm drain system.
 - ✓ Construct or place anything in the way of a creek or County-maintained storm drain.

SEA LEVEL RISE

Flooding – even on sunny days – has been reported on Greenwood Cove and Tiburon Blvd. This is expected to become a more regular occurrence with rising sea levels due to climate change. Tidal flooding of the road network causes broad regional traffic and transportation delays so while there are available funds to leverage the resources in Zone 4, the burden of sea level rise adaptation on these roadways should not be only on the flood zone (see this article for more about regional delays caused: <http://bit.ly/RegionalDelays>). To this end, Zone 4 staff are regularly coordinating with the County's BayWAVE Program, County Road Maintenance and Engineering Divisions of Public Works, and Caltrans to promote the design and maintenance of more flood resilient roadways in Zone 4. A potential solution we are evaluating is whether installation of a tide gate or valve within the road right of way (not in the bay) is feasible in areas that regularly experience tidal flooding, similar to a facility that already exists on East Strawberry Drive.

Flood Zone 4 Advisory Board

Zone 4 was established in the 1960s and consists of the Bel Aire neighborhood and a small portion of Strawberry. Houses which were built within the low-lying floodplain experienced frequent flooding over the years until improvements were made, including the construction of the Cove, Pamela Court, and Strawberry Circle stormwater pump stations.

Bel Aire was annexed by the Town of Tiburon in the 1980s and the Town now owns and maintains much of the neighborhood's storm drain system. Zone 4 still operates and maintains its pump stations and receives annual revenues from property taxes collected within Zone 4. An Advisory Board of 5 residents is appointed by the Flood District's members, the County Board of Supervisors, to review and advise the Flood District on matters including the budget, neighborhood concerns, and project priorities. Since the Zone's last meeting, one advisory board member has resigned and the terms of the remaining advisory board members have expired. We appreciate the service of Robert Rodgers, Kathryn Oliver, Timothy Barteau, John Leszczynski, and Dianne Newman.

Each of these Zone Advisory Board positions are placed into consideration by the District 3 Supervisor, and their appointments are voted on and approved by the full Flood District Board. Given that Supervisor Sears' term ends in 2020, the appointment of new board members will be deferred until after the Supervisor-Elect takes office in January 2021. Given the global pandemic and the many new and unanticipated challenges local government has had to meet, the decision was made to evaluate new candidates next year when the new Supervisor takes office.

This delay does not negatively impact the Zone's ability to carry out ongoing interagency coordination and maintain essential facilities. The advisory board application form can be found here: <http://bit.ly/Zone4Board>

We look forward to seeing a full panel of Zone 4 Advisory Board members appointed in 2021, who, by offering their careful review of Zone agendas and staff reports, will impart local knowledge and insights to help guide flood protection for the surrounding community and neighborhoods.