

The Southeast Metro Stormwater Authority (SEMSWA) is an independent governmental entity formed to provide stormwater management for the south Denver metro area. SEMSWA charges an impact fee for residential and business property owners based on the amount of

impervious surface (rooftops, driveways, and parking lots) each property contributes to the storm sewer system. These fees provide the necessary funds to help protect people and property from flooding, maintain vital stormwater infrastructure, and protect the quality of our creeks and riparian areas. This summary highlights activities to manage stormwater on behalf of the City of Centennial and Arapahoe County. Visit [www.semswa.org](http://www.semswa.org) to see a more complete 2019 annual report or visit our offices, 7437 South Fairplay Street, Centennial, 80112.

## Field Operations Division

SEMSWA crews conduct routine maintenance, including sediment, debris, trash, and nuisance vegetation removal and disposal, at drainage facilities to ensure adequate flood flow conveyance in channels and storm runoff storage in ponds. In 2019, 72,400 feet of pipe was inspected using a robotic camera closed-circuit TV (CCTV) system to verify condition and assist in scheduling routine maintenance. Also in 2019, maintenance along channels removed and recycled over 2900 cubic yards of material.



During 2019, Inspections staff conducted 1,840 inspections at 218 development sites to maintain compliance with SEMSWA's General Stormwater Discharge Permit, issued to protect stormwater quality at building sites, both during construction and after completion.



Maintenance Crew conducting Inlet sinkhole repair at Lima St & Peakview Ave



Example vegetation removal to improve flood flow conveyance in channels (above) and storage capacity in regional ponds (below)



AFTER

## WQ Program

The goal of the Water Quality Program is to reduce pollutants in stormwater runoff entering our waterways. SEMSWA does this through educating the public, permitting and inspecting construction sites, maintaining regional ponds, investigating illicit discharges, and collecting residential household hazardous waste (HHW). 2019 highlights include:

- **12** water quality message ads/articles in local newspapers and newsletters
- **22** outreach events, including booths, public meetings, workshops & student projects
- **35** potential improper disposal investigated
- **391** collections of HHW, with more than **20,000** pounds of HHW collected and almost **14,500** pounds recycled.



Prize wheel fun at outreach events

## Floodplain Program

In 2019, SEMSWA continued to work with FEMA, the Mile High Flood District (MHFD), the City, and the County to update the Flood Insurance Rate Maps (FIRMs). This mapping is a key step in protecting families, homes, infrastructure, and services against future flood risk. SEMSWA provided map information in 2019 for 20 inquiries requesting assistance in defining floodplain limits on parcels and what that means to property owners. Additional outreach efforts provided flood risk information through

newsletter articles and direct mailings that reached over 60,000 residents and businesses. Visit our website at <https://www.semswa.org/maps.aspx> to see the Floodplain Map and view your risk.

All activities in the floodplain, regardless of impact, need to be permitted so SEMSWA is aware of the activity, can assess the impact, and review compliance with City/County Land Use Codes. During 2019, 33 floodplain permits were issued, 18 requests were assessed for floodplain impacts, and 9 requests for modification of a floodplain were reviewed.

In April, the Colorado Water Conservation Board (CWCB) and FEMA conducted a Community Assistance Visit with SEMSWA to discuss Centennial's participation and compliance with the National Flood Insurance Program (NFIP). In September, SEMSWA also completed the 2019 Community Rating System (CRS) 5-year Cycle Verification for the City and County. The CRS is a voluntary program for NFIP participating communities that provides flood insurance premium discounts as an incentive to develop a comprehensive stormwater program to reduce flood risk.



## Master Planning Program

Master planning is used to plan for regional flood control and water quality, to prioritize construction of adequate storm drainage infrastructure, and to guide responsible development. In 2019, the Hydrology & Alternatives reports of the High Line Canal Master Plan were completed. Since Master Plans can take several years to complete, from consultant selection to final plan approval, there were several plans in progress during 2019, including:

- SJCD 6100 N, Major Drainageway Plan (MDP) & Flood Hazard Area Delineation (FHAD)
- First Creek Tributaries (Upstream of I-70), MDP
- Goldsmith Gulch, MDP & FHAD
- Willow Creek Tributaries (Upstream of Englewood Dam), MDP & FHAD
- Cherry Creek Tributaries (Upstream of Cherry Creek Reservoir), MDP & FHAD
- Sand Creek, Flood Hazard Zone Pilot Study

## Land Development Program

The Land Development Program staff review land development cases to ensure comprehensive and effective stormwater management in the City and the County. During 2019, there were 48 Arapahoe County case referrals and 79 City of Centennial case referrals. Also, during 2019, staff reviewed 14 capital infrastructure project cases to confirm that public projects meet land use codes, engineering standards, and design criteria.

Pre-submittal Meetings are essential to providing the Developer Team with a framework for successful plan/report submittal and approval. Staff conducted 169 meetings in 2019, continuing the favorable development climate in the South Metro area illustrated by 157 meetings in 2018 and 186 in 2017.

## Capital Improvement Program (CIP)

