

**Southeast Metro  
Stormwater Authority  
2008  
Year In Review**



**Maintenance**

## Typical Maintenance Projects...

		
Before	REGIONAL POND MAINTENANCE	After
		

## Maintenance Before & After...

		
Before	CULVERT CLEAN OUT	After
		
FLARED END SECTION REPLACEMENT & BANK REPAIR		

## 2008 Statistics

- **1,829** storm grates cleaned
- **495** vaults cleaned
- **3,686** lineal feet of ditches rehabilitated/reconstructed
- **1,846** lineal feet of storm sewer pipe flushed
- **125,693** lineal feet of storm sewer pipe inspected
- **148** manholes cleaned
- **9,273** tons of sediment removed from conveyance system
- **27** detention ponds cleaned/maintenance performed
- **334** tons debris/overgrowth removed
- **89** Citizen Service Inquiry requests processed



# Capital Improvement

## 2008 Construction Projects

 Before		 After
<p>LITTLE DRY TRIBUTARY CONVEYANCE BEHIND CASTLEWOOD LIBRARY</p>		
		
<p>SOUTHWOOD NEIGHBORHOOD OUTFALL SYSTEM TO BIG DRY CREEK</p>		

## 2008 Construction Projects

 Before		 After
<p>CHRISTENSON LANE CONVEYANCE IMPROVEMENTS</p>		
		
<p>ORCHARD VALLEY OVERFLOW CONVEYANCE IMPROVEMENTS</p>		

## Projects in Initial Design Phase

- Cherrywood Circle Storm Sewer
- Dove Creek Pond D - 1(90% complete)
- Heritage Place Storm Sewer
- Little Dry Creek Reach 6
- Piney Creek at Caley Drive Bridge
- Piney Creek Stabilization
- Spring Creek at Otero Avenue and Newport Street
- Windmill Creek Pond W - 5

## Projects in Completed Design Phase

- Big Dry Creek Bridges at Arapahoe Road and University Boulevard (preliminary )
- Cottonwood Creek Easter to Briarwood Avenues
- Dove Creek Pond D - 1 (complete to 90%)
- Dove Hill Culverts
- Forest Park Stabilization
- Greenfield Channel
- Little Dry Creek at Arapahoe Road Culverts
- Outfall C Storm Sewer (Coordinated design with Arapahoe County)
- Panama Drive Drainage preliminary
- Upper Littles Creek Drainage Study preliminary

## Projects in Construction Phase

- Arapahoe Plaza Storm Sewer
- Easter/Verbena Storm Inlets
- Orchard Valley Overflow (completed)
- Southwood Village/Greenwood Manor Storm Sewer (completed)
- Windmill Creek Pond W - 4

# Master Planning

## 2008 Master Planning Projects...



▪ WILLOW CREEK, LITTLE DRY CREEK & GREENWOOD GULCH OUTFALL SYSTEMS PLAN



▪ LOWER COTTONWOOD CREEK OUTFALL SYSTEMS PLAN UPDATE



▪ LONE TREE, WINDMILL, AND DOVE MASTER DRAINAGEWAY PLANNING AND FLOOD HAZARD AREA DELINEATION STUDY

# Water Quality

## 2008 Water Quality Outreach...



### SEMSWA MS4 Permit Programs 1 & 2

- Over **20** educational outreach events in 2008, including SPLASH (Stormwater Permittees for Local Awareness of Stream Health) sponsored events and Cherry Creek Stewardship Partners EdKit activities that SEMSWA sponsors:
  - Raptor Walk @ Cottonwood Creek
  - Volunteer Clean ups
  - Western Welcome Week Booth
  - World Monitoring Day
  - WEED Network Meetings
  - Run for the Cherry Creek Watershed
  - Science Fairs
  - Biology Teacher Workshop
  - Cherry Creek Annual Conference
- Eagle Scout projects: Inlet labeling
- Monthly 'stormwater message' ads in CO Community Newspapers
- Public Meetings for all capital projects

## 2008 Illicit Discharge Elimination...



### SEMSWA MS4 Permit Program 3



- 51 IDDE concerns investigated in 2008
- 12 were illicit discharges (defined as potential for discharge to pipe, pond, waterway)
  - Typical: concrete washout, power washing, sediment
  - Educational materials sent out to homeowners
- 123 letters sent re: Grass Clipping disposal
- Curbside, Inc. provides curb-side recycling services
  - Curbside provides the supplies, makes an appointment, and collects a \$20 co-pay directly from resident
  - SEMSWA picks up the remaining \$90/each pickup
- During 2008
  - 520 stops and 42,000 pounds of waste collected
  - Approximately 270 gallons of used oil & antifreeze, 3,200 gallons of paint collected and recycled

## Construction & Post-construction Pollution Control...



Grading,  
Erosion &  
Sediment  
Control (GESC)



SEMSWA MS4 Permit Programs 4 & 5

- Active grading, erosion control permits: **110**
- Active Public Improvement Permits **72**
- Active public capital projects: **15**
- Collateral on hand to enforce 'in place and functioning' controls: over **\$4 million**

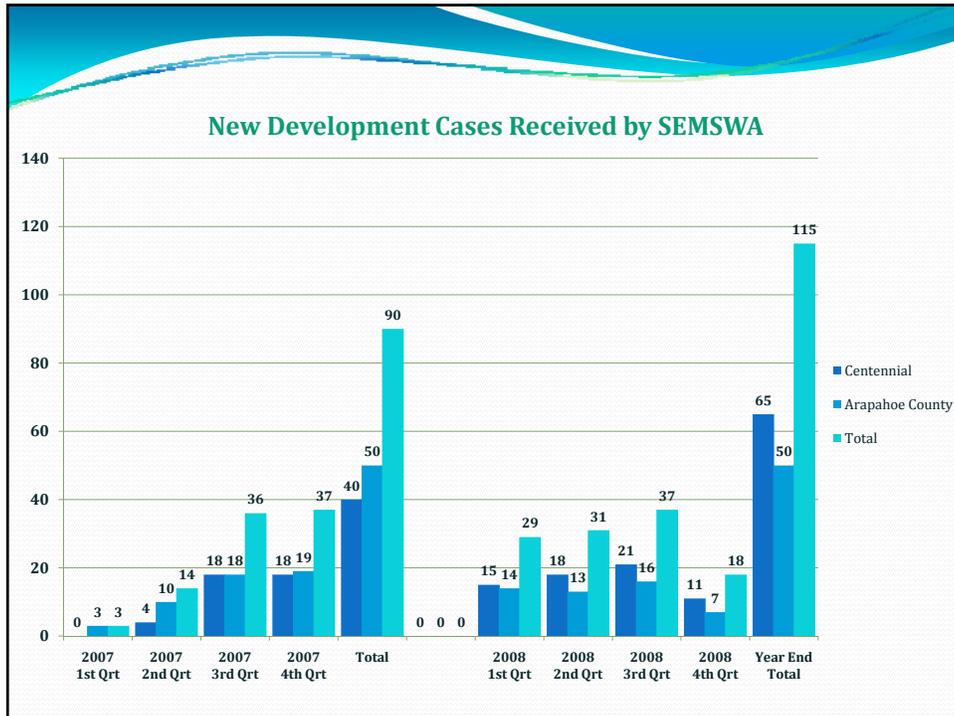


Permanent Water  
Quality Public  
Improvements



- Approximately **200** sites being inspected for GESC , Permanent WQ BMP controls (primarily Extended Detention Ponds, Sand Filter Basins and Grass Buffers/Swales) or other Public Improvements (storm sewers, inlets, manholes, outfalls) by Water Quality staff

# Land Development



- Established an in-house GIS Program
- Documented & continued mapping (GPS) the Drainage Inventory System
- Assessed and Re-designed the GIS Database
- Participated in the citywide LIDAR Project
- Commenced GIS & Asset Management System (CarteGraph) Integration



# Administration

Revenue: **\$9,285,550**  
 Expenses: **\$7,463,602**




Customer Service: **600+** Calls

Staffing: from **27** to **31**

Checks Written: 2007-**665**; 2008-**863**

## Customer Service Statistics

Stormwater Fees on Parcels

Parcels	Billed	Collected	Percentage
2007	58,056	57,554	99.14%
2008	58,740	58,163	99.02%
Amount	Billed	Collected	Percentage
2007	\$7,554,730	\$7,490,544	99.15%
2008	\$7,800,830	\$7,713,236	98.88%

**Permit and Review Fees Collected in 2008 : \$199,741**  
 Floodplain; GESC; Other