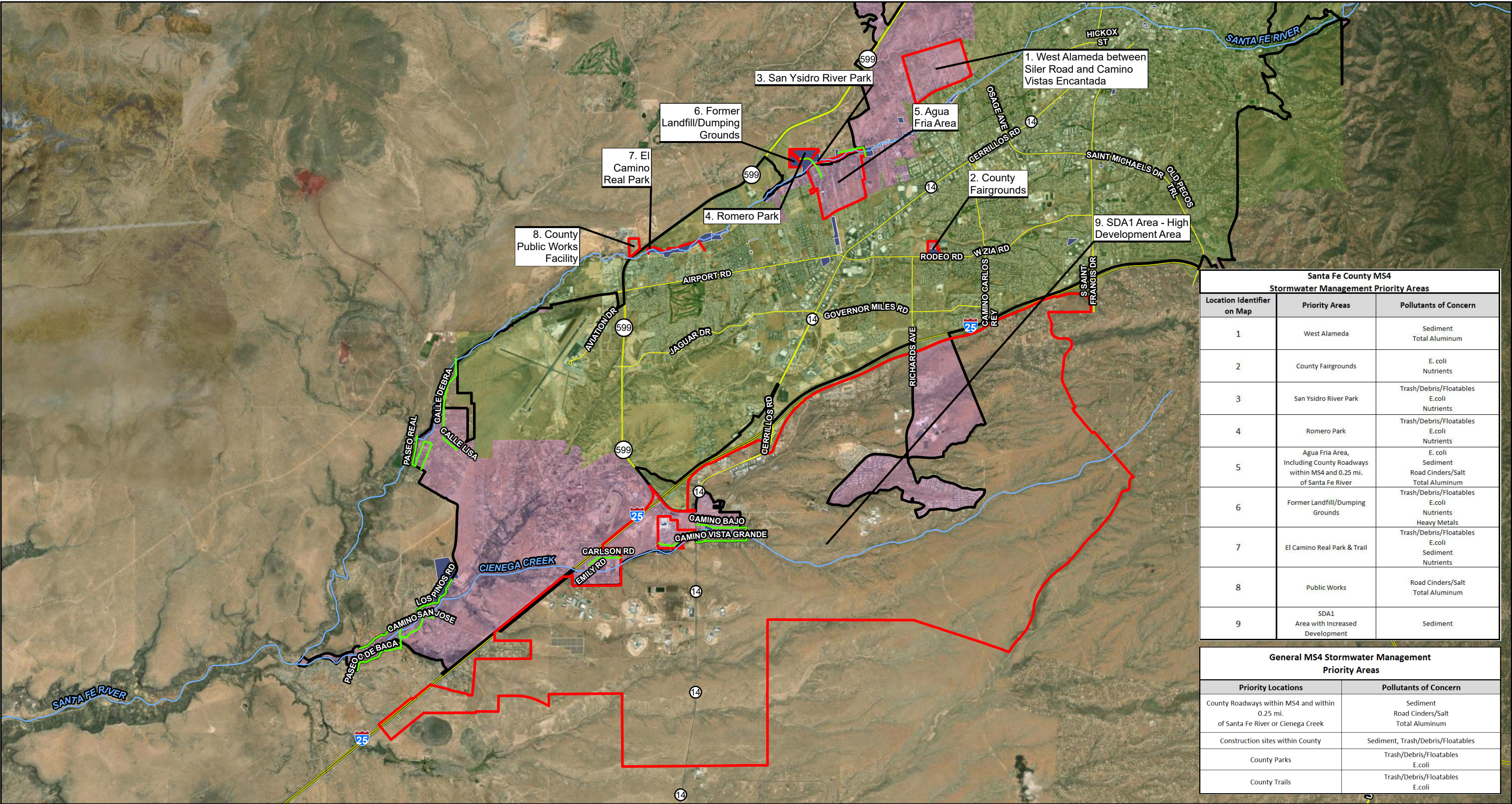


Santa Fe County MS4 Pollutants of Concern and Probable Sources						
Purpose: This list identifies potential significant sources of the pollutants of concern entering the County MS4. This list is intended to assist the County with identifying stormwater management priority areas and focusing MS4 programs on target pollutants and probable sources.						
Pollutant of Concern	Reason for Concern	Potential/Probable Sources for Pollutants of Concern in MS4s	Possible Control Strategies to Address Pollutants of Concern in MS4s	Potential Collaboration Opportunities	Stormwater Management Priority Areas	Documentation on Priority Area Decisions
Sediment, Total Suspended Solids (TSS), Total Dissolved Solids (TDS), Turbidity	Sediment is a pollutant and sediment carries pollutants (PCBs, Aluminum, etc.). The Santa Fe River, from Santa Fe wastewater treatment plant (WWTP) to Cochiti Pueblo (downstream of MS4), has a TMDL for stream bottom deposits (SBD), though not directly associated with MS4 areas. MS4s should also focus on addressing this pollutant of concern.	Construction activities. Wind blown dust. Erosion (destabilization on vegetation) from urban areas and post-construction sites and streambank erosion. SDA1 development is one area to focus on as a potential, growing source. Road Maintenance: New Mexico Environment Department (NMED) identifies road maintenance runoff as a source for sediment.	Implement and enforce practices to retain sediment within construction project areas. Institute a County program for dust control for windblown pollutants. EPA information for Best Management Practices (BMPs): https://www.epa.gov/system/files/documents/2021-11/bmp-dust-control.pdf and NMDOT has a new dust brochure that can be used as a resource: https://dustmitigation.nmdotprojects.org/wp-content/uploads/sites/38/2023/05/2023-05-15-Digital-Dust-Control-Brochure_FINAL.pdf Slope stabilization with improved vegetation management and minimizing exposed soil using native vegetation. Street sweeping. Road maintenance procedures that focus on awareness of sediment control. Green Stormwater Infrastructure (GSI) - Infiltration practices are structural BMPs designed to capture stormwater runoff and allow the captured water to infiltrate into soils underlying the BMP. Vegetation in GSI will assist with reducing erosion.	City of Santa Fe has efforts started related to sediment concerns at West Alameda. NMDOT has created a dust mitigation brochure (targeted at safety) that could be shared/used with the County. City of Santa Fe has dust control requirements for construction, including requiring Fugitive Dust Mitigation and Control Plan. Perhaps the County could follow a similar fugitive dust control program.	All construction sites greater than 1 acre (per Construction General Permit). West Alameda between Siler Road and Camino Vistas Encantada (City annexed area, that County has agreed to assist with). High sediment loading areas identified in <i>City of Santa Fe Compendium to the Stormwater Management Strategic Plan</i> report (Tetra Tech, 2018). El Camino Real Park and County Open Space in this area lie within the high sediment load area simulated in this report. County roads that are in or adjacent to the MS4 area and are near to and drain to the Santa Fe River or Cienega Creek.	Construction sites are one of the largest contributor to sediment (and wind blown dust) into MS4s, and inspecting these throughout the County is a regulatory requirement and should be a priority based on pollutant source. West Alameda has been identify by the County and City as an area with historic erosion issues that is impacting the Santa Fe River. As per the Memorandum of Agreement (MOA) between the City and Santa Fe County dated Feb. 15, 2018, the County has committed to cost sharing of design and construction for needed drainage improvements on West Alameda between Print Farm Road and Siler Road. The MOA expired on December 31, 2021. The <i>City of Santa Fe Compendium to the Stormwater Management Strategic Plan</i> (Tetra Tech, July 2018): GIS map identifying areas of potential high sediment loading areas. County roadways prioritized based on proximity to Santa Fe River and Cienega Creek.
E. coli	Impaired parameter & TMDL for Santa Fe River from Nichols reservoir to Cienega Creek.	Pet/animal waste. Litter/trash. Failing septic systems. Former landfill/dumping grounds facility south of Romero Park.	Pet waste: public education and available pet-waste stations/maintenance of stations. Litter/trash: source control and preemptive activities such as street sweeping, cleaning up illegally dumped materials, and public education campaigns for litter. Septic systems: permitting system, financial assistance programs for aging septic systems. County fairgrounds, improvements to wash stations for animals. GSI practices that infiltrate and evapotranspire runoff, such as bioretention, can help to reduce the frequency and magnitude of E. coli loads discharged to the MS4.	Both NMDOT and City of Santa Fe are promoting GSI and developing resources that could be shared with the County.	Agua Fria and Riverside de Santa Fe Mobile Home Park areas, potential septic system sources. County-led improvements are underway in this area. County fairgrounds, potential animal waste source. County parks, potential pet waste source. River trail system, potential pet waste and horse waste sources.	Septic: Discussions with Michelle Hunter and Caitlin Weber - Agua Fria and Riverside de Santa Fe Mobile Home Park (this mobile home park looks to be in City jurisdiction) areas have septic tanks/mobile home parks. County handles systems with liquid waste permit that does not need to be renewed or inspected. These areas are close to the river and aging/non-functional systems could be a source of pollution. County-led improvements are underway in this area. County fairgrounds: Site inspection with Bohannon Huston, Inc. (BHI) & County in 2023 brought up questions on where animal wash area drains outfall to (sanitary sewer or open discharge to surface flows?). This area is not near the river, but pollutants from animal sources are a large contributor for E. coli/bacteria pollutants. Fairgrounds are often a target for EPA inspections, due to animal waste pollutant sources. Former landfill/dumping grounds facility south of Romero Park: unsure of all dumped materials at the legacy dumping ground - E. coli is one likely pollutant.
Road Cinders/Salt	Salt is soluble, can be toxic to some biota/aquatic life, and is environmentally persistent. Once present in water, there is no easy way to remove chlorides. No existing stormwater treatment system exists to capture and retain salts or chlorides.	Road Cinders/Salt (a ratio of 3 parts cinders:1 part salt) (NaCl - rock salt - is used by County).	Good housekeeping practices for storage, transport, and application of road cinders/salt. EPA information for BMPs: https://www.epa.gov/system/files/documents/2021-11/bmp-deicing-material-application-and-storage.pdf The best way to reduce road salt in the environment is to reduce the amount used, which is why many municipalities are investing in training maintenance staff and private contractors on the most efficient use of road salts.	NMDOT also uses road salt/cinders - there may be an opportunity for shared employee training and discussion of BMPs.	County Public Works Facility. County roads that are near to and drain to the Santa Fe River or Cienega Creek.	County Public Works Facility is located with 0.16 mi (850 feet) of the Santa Fe River, though not located within the MS4 boundary, and all drainage flows to a retention pond. Distance measured from the fuel station curb outfall point.
Trash/Debris/Floatables	Potential E. coli, PCB and Aluminum of other heavy metals pollutant sources. Floatables are an EPA MS4 concern (current & draft statewide small MS4 permit). EPA suggests maintenance activities, maintenance schedules, and long-term inspection procedures for controls to reduce floatables and other pollutants to the small MS4. The floatables control program should include source controls and, where necessary, structural controls.	Litter/trash: People (litter and illegal dumping), trash roll-offs/bins, wind, and construction sites. Former landfill/dumping grounds facility south of Romero Park.	Litter/trash: Source control and preemptive activities such as street sweeping, cleaning up illegally dumped materials, construction sites, and public education campaigns for litter. For the former landfill/dumping grounds, continue to maintain a good cover over any exposed dumped materials. Education and awareness programs are intended to help modify human behavior to reduce the amount of trash-related pollution that is introduced into the MS4 system.	NMDOT has litter pick-up contracts, coordinating could improve coverage within the MS4 areas. Volunteer groups/community groups for litter pickup efforts.	County parks, potential litter source. River Trail system, potential litter source. Former landfill/dumping grounds is a potential litter source if the cap over the dumped materials degrades. Uncovered trash roll-off bins (including at construction sites), potential litter source.	The County should assess if there are areas where litter and illegal dumping are an issue or continual concern. Construction sites. Former landfill/dumping grounds facility south of Romero Park: unsure of all dumped materials at the legacy dumping ground -- uncovered materials could lead to trash/debris/litter.
Polychlorinated Biphenyls (PCBs)	Impaired parameter for Santa Fe River from Nichols reservoir to Guadalupe Street. NMED stormwater sampling, 2016, City of Santa Fe stormwater outlet #2 into Santa Fe River downstream of Sandoval St. (northside & southside) PCB test exceeded water quality standards (WQS).	PCBs are found in electrical equipment: "legacy sources" (transformers, capacitors, voltage regulators, fluorescent light ballasts), motor oil (motors, parts), thermal insulation. PCBs "current sources" in by-products from inks and pigments, and adhesives. PCBs are non-polar and are insoluble in water. PCBs are typically transferred into aquatic environments on the surfaces of particulates (sediment).	Source control (may not be possible for County if specific sources are not within the County). Sediment control strategies since PCBs are typically transferred into aquatic environments on the surfaces of particulates (sediment). Litter pick-up (inks/pigments - trash containing printed materials) and public education campaigns for litter.	PCBs are likely to be part of stormwater monitoring requirements and cooperative monitoring is suggested.	None identified. EPA Regulated PCB Transformer database revised and no areas with County MS4 area were identified.	None identified.
Total Aluminum	Impaired parameter for Santa Fe River from Nichols reservoir to Santa Fe WWTP. NMED stormwater sampling, 2016, City of Santa Fe stormwater outlet #1 into Santa Fe River downstream of Sandoval St. (southside) Aluminum test exceeded water quality standards (WQS). Metals can accumulate in waterways and are harmful and even toxic to aquatic life, depending on the specific type and concentration.	Sources: Building materials, such as galvanized metal roofing and gutters, corrosion of aluminum metal surfaces, such as fences, and galvanic corrosion protection for equipment, such as boats and tanks. Erosion-prone areas and background sediment sources. Particulate bound and are mobilized with sediment. Litter. Roadway maintenance activities: Deicing, road repair areas.	Litter pick-up and public education campaigns for litter. Sediment control strategies since Aluminum is typically transferred into aquatic environments on the surfaces of particulates (sediment). Good housekeeping practices for storage, transport, and application of road cinders/salt. GSI practices use surface infiltration to manage stormwater runoff from areas where metals must be used.	City of Santa Fe has efforts started related to sediment concerns at West Alameda. NMDOT has litter pick-up contracts, coordinating could improve coverage within the MS4 areas. Volunteer groups/community groups for litter pickup efforts.	County Public Works Facility. County roads that are near to and drain to the Santa Fe River or Cienega Creek. All construction sites greater than 1 acre (per Construction General Permit). West Alameda between Siler Road and Camino Vistas Encantada (City annexed area, that County has agreed to assist with).	Similar priority areas to road cinders/salt and sediment pollutants of concern.
Nutrients	Impaired parameter for Santa Fe River from Santa Fe WWTP to Cochiti Pueblo (downstream of MS4).	Eroding riparian areas. Many efforts along the river have improved this and sediment concerns. Restoration efforts transformed the impaired reach of the Santa Fe River from an erosion-prone, barren area into a lush preserve with abundant riparian vegetation and wildlife. Cattle grazing. Pet/animal waste. Former landfill/dumping grounds facility south of Romero Park.	Restoration efforts along streambanks. Focus on native vegetation and invasive vegetation removal. Pet waste: Public education and available pet waste stations/maintenance of stations.	River restoration project opportunities with City of Santa Fe or non-profit organization.	County open space and restoration activities along the Santa Fe river.	County open space areas along Santa Fe River. Former landfill/dumping grounds facility south of Romero Park: unsure of all dumped materials at the legacy dumping ground -- degrading organics materials could lead to nutrient concerns.



Santa Fe County MS4 Stormwater Management Priority Areas		
Location Identifier on Map	Priority Areas	Pollutants of Concern
1	West Alameda	Sediment Total Aluminum
2	County Fairgrounds	E. coli Nutrients
3	San Ysidro River Park	Trash/Debris/Floatables E.coli Nutrients
4	Romero Park	Trash/Debris/Floatables E.coli Nutrients
5	Agua Fria Area, Including County Roadways within MS4 and 0.25 mi. of Santa Fe River	E. coli Sediment Road Cinders/Salt Total Aluminum
6	Former Landfill/Dumping Grounds	Trash/Debris/Floatables E.coli Nutrients Heavy Metals
7	El Camino Real Park & Trail	Trash/Debris/Floatables E.coli Sediment Nutrients
8	Public Works	Road Cinders/Salt Total Aluminum
9	SDA1 Area with Increased Development	Sediment

General MS4 Stormwater Management Priority Areas	
Priority Locations	Pollutants of Concern
County Roadways within MS4 and within 0.25 mi. of Santa Fe River or Cienega Creek	Sediment Road Cinders/Salt Total Aluminum
Construction sites within County	Sediment, Trash/Debris/Floatables
County Parks	Trash/Debris/Floatables E.coli
County Trails	Trash/Debris/Floatables E.coli