



A joint effort of the City of Albuquerque, Albuquerque Metropolitan Arroyo and Flood Control Authority, University of New Mexico, New Mexico Department of Transportation, Ciudad Soil and Water Conservation District, South Sandoval County Flood Control District, Bernalillo County

History

- Clean Water Act of the mid to late 70s (to ensure that surface waters of the USA would be suitable for human sports and recreation by 1983. The CWA required permits from the **N**ational **P**ollution **D**ischarge **E**limination **S**ystem (NPDES).
- Water Quality Act of 1987 required industrial and municipal stormwater discharges to apply for and receive permits to discharge to “waters of the US.” This program is called the **M**unicipal **S**eparate **S**torm **S**ewer **S**ystem (MS4).
- The first permit priority (Phase 1) was cities with populations over 100,000. Later, smaller counties and cities would be covered by Phase 2 permits which are being implemented.
- Albuquerque applied for its first permit in 1991 but it was put on hold by EPA’s Region 6. They wanted to concentrate their efforts on larger cities in other states they cover (Texas, Oklahoma, Arkansas).
- Albuquerque received its first, five-year permit in 2003. Our partners in this effort are AMAFCA, UNM and the New Mexico DOT. The EPA is working on the draft of our second, five-year permit.
- The first permit was very general with few specifics. It mostly involved a program for collecting chemical tests at our major outfalls. .
- The EPA tells us that the next permit will contain more specific requirements. We must develop a program, staff and ordinance to comply. We must also develop a fee system to support these requirements.

Albuquerque area storm drainage system facts

<u>ITEM</u>	<u>City of Albuquerque</u>	<u>AMAFCA</u>
Area in square miles	188.6	
Miles of Storm drains & CBC boxes	722	6
Number of Storm drain inlets	16,100	

Miles of Lined drainage channels	33	36
Miles of Unlined arroyos	18	31
Number of Drainage Ponds	104	18
Number of Flood Control Dams	11	34

City gets 8.7 inches of rain per year resulting in about 3.3 billion gallons of runoff each year to the Rio Grande. It is estimated that rain which falls at Montgomery and Tramway will be in the Rio Grande within 45 minutes. No chemical or biological treatment is performed.

Challenges to our Stormwater Quality

- Mammalian Bacteria (*fecal coliform or e-coli*)
- Pollution from cars (oil drippings, tire wear, antifreeze & trace metals)
- Household chemicals (cleaners, degreasers, pesticides)
- Lawn chemicals (fertilizers, herbicides, phosphates)
- Industrial Chemicals (PCBs, heavy metals, copper)
- Volatile organics (poly-aromatic hydrocarbons from parking lots)
- Silt and sediment from poorly-managed construction sites

What you can do to help

- Don't put **anything** down the storm drain inlets. ***"ONLY RAIN DOWN THE DRAIN"*** is our motto. Make it yours.
- Pick up after your pet when walking them on public property and don't let them off leash. Properly dispose of dog waste in trash containers. If you see others leaving pet waste on the ground, take an opportunity to educate them on good citizenship. *It is estimated that over 1,000 tons of uncollected dog waste ends up in the Rio Grande each year. That's an average of 3 tons per day!*
- Use lawn fertilizers and chemicals in accordance with the labels. Don't guess how much you need to use.
- Properly store and dispose of household chemicals. Use the city's free service operated by the Rinchem Company at 6133 Edith Blvd NE. Open Mon, Wed & Fri 8:30-4:30 & Sat 8-3. Household Hazardous Waste Hotline: 345-1650
- Properly maintain your vehicle to eliminate or minimize oil leaks. Properly dispose of used motor oil.
- Wash your car on your lawn or at a professional car wash that recycles their water.

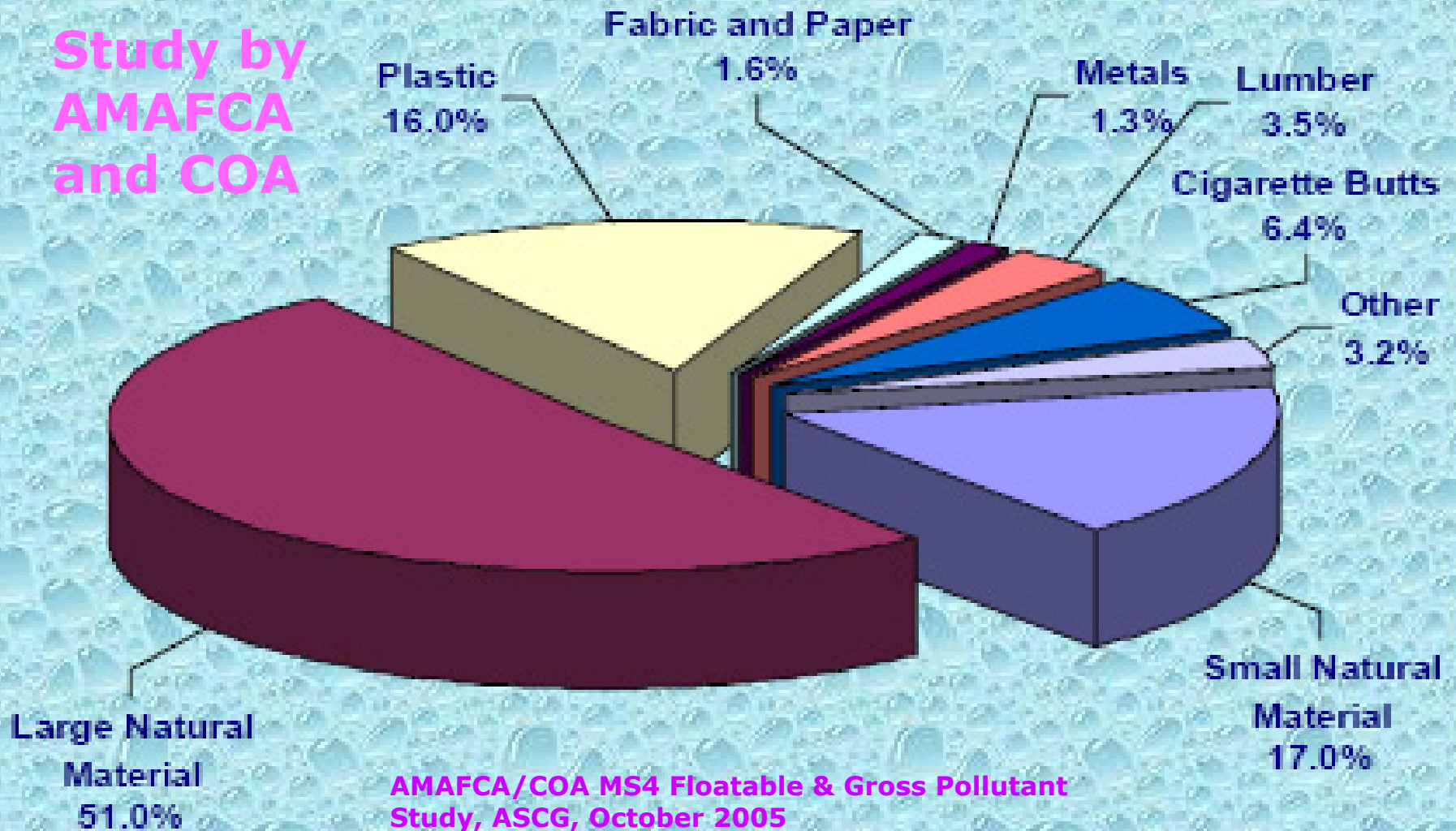
- Don't hose down your driveway or sidewalk into the street. That material will end up in the Rio Grande. Besides, it's a waste of our precious water.
- Talk to your children and neighbors about stormwater quality.
- Call 311 to report any violation of "Only Rain Down the Drain."
- Visit www.keeptheriogrand.org for more information.
- Support a Stormwater Quality City Ordinance which makes dumping things into the system against the law and sets fines and penalties.

For further information, or to schedule an educational talk from a member of the Mid Rio Grande Stormwater Quality Team, contact Kathy Verhage @ 768-3654 or Roland Penttila @ 768-2778.

What Makes up Gross Pollutants?

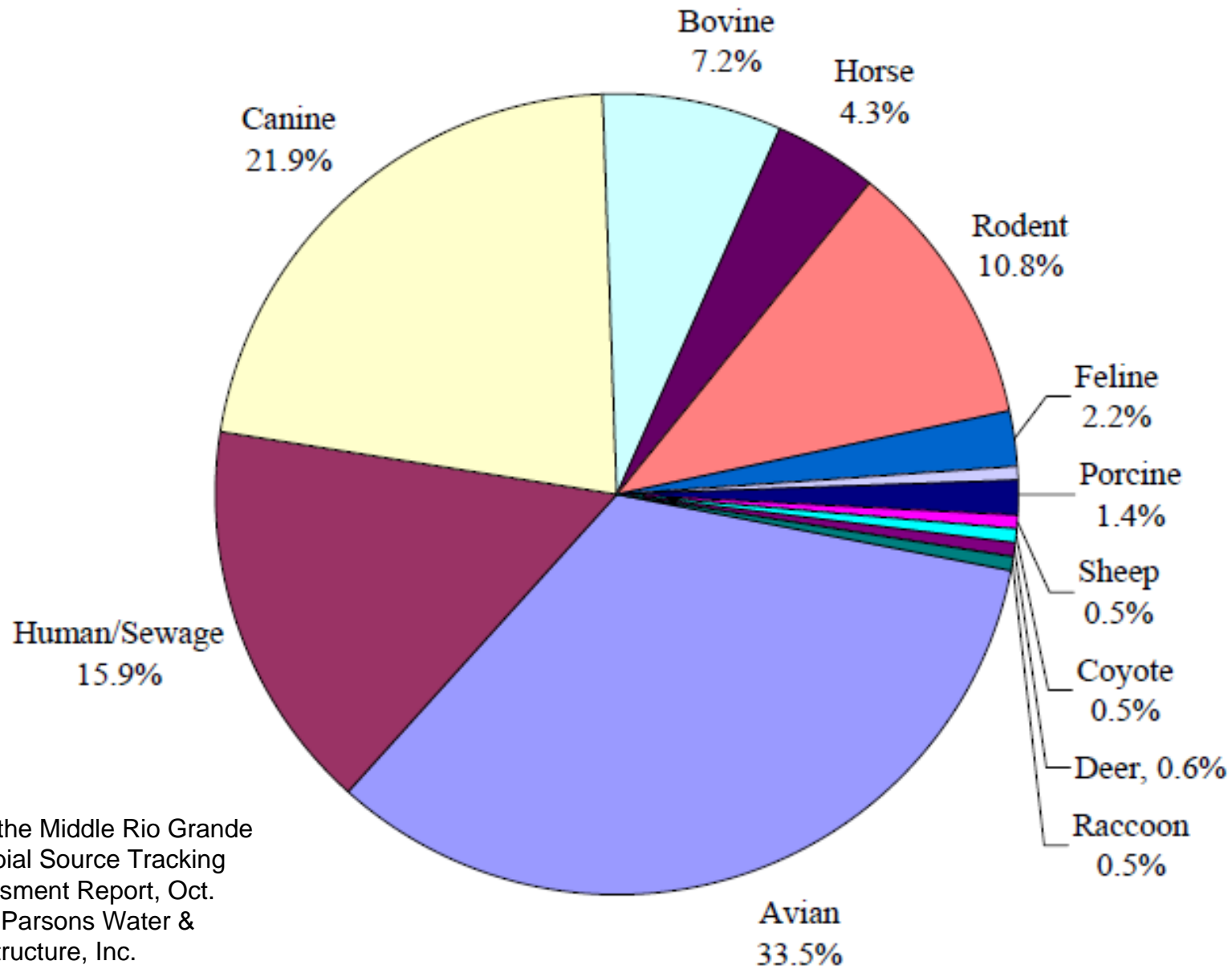
Debris Characterization by Volume

Study by
AMAFCA
and COA



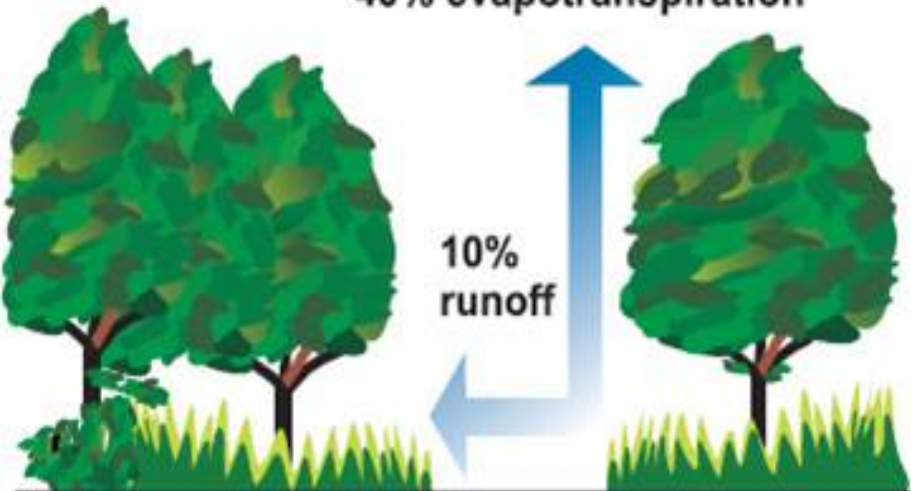
AMAFCA/COA MS4 Floatable & Gross Pollutant
Study, ASCG, October 2005

Sources of *E. coli* in the Middle Rio Grande



From the Middle Rio Grande
Microbial Source Tracking
Assessment Report, Oct.
2005, Parsons Water &
Infrastructure, Inc.

40% evapotranspiration



10% runoff

25% shallow infiltration

25% deep infiltration

Natural Ground Cover

30% evapotranspiration



55% runoff

10% shallow infiltration

5% deep infiltration

75%-100% Impervious Cover

10 Things YoU Can Do To Keep the R/O Grand



Did you know that polluted storm water runoff is the #1 cause of water pollution in New Mexico?

Here are 10 SIMPLE THINGS you can do to help keep our water clean.

- 1.** Fix your cars so they do not leak oil and other fluids. Be sure to wash your cars on the grass or at a car wash so the dirty soap doesn't flow into nearby storm drains.
- 2.** Do not over-fertilize your lawn. And don't apply fertilizers or pesticides before a heavy rain. If fertilizer falls onto driveways or sidewalks, sweep it up instead of hosing it away.
- 3.** Mulch leaves and grass clippings to keep them out of the gutter. Don't place them in the street.
- 4.** Turn your gutter downspouts away from hard surfaces (toward bushes, grass or trees) and fill bare spots in your yard to avoid erosion.
- 5.** If you have a septic system, maintain it properly by having it pumped out/emptied every three to five years. If it is an older system, be sure it can still handle the volume needed.

6.

Never put chemicals down septic systems because they can harm the system and seep into the groundwater.

7.

Pet owners should pick up after their pets and dispose of pet waste by wrapping it and placing it in the garbage.



8.

Keep lawn and household chemicals tightly sealed and in a place where rain cannot reach them. Dispose of old or unwanted chemicals at household hazardous waste collections sites or events.

9.

Never put anything in a storm drain.

10.

Don't litter . . . not even cigarette butts. They are not biodegradable.

**For more information,
visit www.keeptheriogrand.org.
*And, join our team to
keep the Rio Grand!***

A Message from Your Storm Water Team



AMAFCA - The Albuquerque Metropolitan Arroyo Flood Control Authority
COA - The City of Albuquerque
BC - Bernalillo County
UNM - The University of New Mexico
NMDOT - The New Mexico Department of Transportation