History of Stormwater Quality in the Albuquerque Area

- The Federal Clean Water Act of the late 70s was created to ensure that all surface waters of the USA would be suitable for human sports and recreation by 1983. The CWA required factories to obtain permits from the National Pollution Discharge Elimination System (NPDES).

- Amendments in 1987 to the CWA required municipal stormwater dischargers to apply for and receive permits to discharge to waters of the US. This program is called the Municipal Separate Storm Sewer System (MS4). The first permits were issued in 1991.

- EPA’s first priority (Phase 1 permits) was cities with populations over 100,000. That would include Albuquerque. Permits are for 5 years.

- Albuquerque applied for its first permit in 1991 but didn’t receive one until 2003. Our partners in this effort are AMAFCA, UNM and the District 3 New Mexico DOT. That first permit expired in late 2008, the EPA took four years to prepare a renewal permit that became effective on March 1, 2012 until March 22, 2015. Most recently, Albuquerque applied for a general Watershed Based Permit for the Middle Rio Grande on June 21, 2015.

- The first permit was very general with few specifics. It mostly involved a program for monitoring our outfalls to the Rio Grande and collecting chemical tests.

- The current MS4 permit contains much more specific requirements that may require new programs, staff and ordinances to comply. The City might also develop a new fee system to support these requirements.

- New, additional requirements are coming in the form of EPA’s Rule Making. A 2009 report made many suggestions to EPA for improving their effectiveness in protecting surface waters. These are expected in 2013.

- One suggestion was that all permits should be based on how rain runoff travels over the ground. Therefore stormwater quality efforts should be based on watersheds rather than political boundaries.

- The Albuquerque area was chosen by EPA to participate in a pilot experimental program for stormwater called the Watershed-Based Permit (WBP) program. There are three pilot WBPs. The other two are in Minnesota and Wisconsin. This new WBP permit would not just cover the city limits but extend along the Rio Grande from Cochiti Lake to Isleta; from Nine Mile Hill to the Sandia Crest and involve over twenty separate governmental agencies.
Albuquerque area storm drainage system facts

<table>
<thead>
<tr>
<th>STORM DRAINAGE FEATURE</th>
<th>City of Albuquerque</th>
<th>AMAFCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area in square miles</td>
<td>189</td>
<td></td>
</tr>
<tr>
<td>Miles of storm drain pipes &amp; culverts</td>
<td>720</td>
<td>6</td>
</tr>
<tr>
<td>Number of storm drain inlets</td>
<td>16,100</td>
<td></td>
</tr>
<tr>
<td>Miles of lined drainage channels</td>
<td>33</td>
<td>36</td>
</tr>
<tr>
<td>Miles of unlined, natural arroyos</td>
<td>18</td>
<td>31</td>
</tr>
<tr>
<td>Number of drainage ponds</td>
<td>114</td>
<td>18</td>
</tr>
<tr>
<td>Number of flood control dams</td>
<td>11</td>
<td>34</td>
</tr>
</tbody>
</table>

During an average year, the City gets 8.7 inches of rain resulting in about 5.9 billion gallons of runoff each year to the Rio Grande. It is estimated that rain which falls at Montgomery and Tramway will get to the Rio Grande in less than 45 minutes. **Stormwater does not receive any chemical or biological treatment.** Only some trash and sediment removal occurs.

### Challenges to our Stormwater Quality

- Enteric Bacteria from warm-blooded animals
- Pollution from cars (oil & gasoline spills, tire wear, anti-freeze and heavy metals)
- Household chemicals (paint, paint removers, household cleaners, degreasers, pesticides)
- Landscaping and lawn chemicals (fertilizers, herbicides, pesticides)
- Industrial Chemicals (solvents, PCBs, heavy metals, copper)
- Volatile organics (poly-aromatic hydrocarbons from parking lots)
- Silt and sediment from denuded ground and poorly-maintained construction sites
- Naturally occurring radiation in the soil
- Naturally dissolved metals in rocks and soil
What YOU can do to help

- Don’t put anything down the storm drain inlets on in arroyos or channels. Remember our motto of “ONLY RAIN DOWN THE DRAIN”. 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. Do not leave on the ground or throw into arroyos or channels. If you see others leaving pet waste on the ground, take an opportunity to educate them on good citizenship. Over 1,000 tons of 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.
- 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 minimize or eliminate oil leaks. Properly dispose of used motor oil and antifreeze. Never pour them in a street gutter or down a storm drain.
- Wash your car on your lawn or at a commercial car wash that recycles their water and sends very dirty water to the treatment plant.
- 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 Middle Rio Grande Stormwater Quality Team, contact the City’s Stormwater Quality Engineer, Kathy Verhage @ 768-3654.
Scoop the Poop
Keep the RIO Grand