

This presentation premiered at WaterSmart Innovations

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Managing Stormwater at a Residential Level

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Santa Fe, New Mexico

- Founded: 1610
- Population: ~84,000
- Elevation: ~ 7,500
- City: ~ 37 square miles
- Annual Precipitation: 12" – 15"
- Temperature Range
 - Average High 86°
 - Average Low 17°
- Unique mixture of old and new



Santa Fe River



- River runs from Santa Fe Watershed to the Rio Grande
- No dedicated stormwater runoff system, the river is the system
- City growth has impacted water flows into the river
- City growth with associated hardscapes has had negative impact on the river
- City now dedicates water from watershed to keep the river flowing

Santa Fe

- About 30,000 households
- Average lot size ~ 100' x 150' ~ 15,000 square feet
- Average 1" rain = 9,345 gallons of rain
- University of CO found only 5% of runoff gets to a river
- Assume 10%
- $30,000 \times 9,345 \text{ gallons} \times 10\% =$

28,000,000 GALLONS



Santa Fe Developing Stormwater Plan

- In California it effects the economy
 - Beach closures and health risks
 - LA area developed stormwater holding requirements for new construction
- Several states have instituted a rainwater tax – Maryland, West Virginia
- EPA has new construction Best Management Practices
- Some locales have a Stormwater Management Impact fee for new Commercial developments



Questions for YOU!

- Does your community regulate Residential Runoff
 - Don't
 - Land Use Code - What
 - Have a Rainwater Tax?
 - Recommendation of Best Practices
 - Other

Questions for YOU!

- Do you have different requirements for Commercial and Residential
 - Yes
 - No



Questions for YOU!

- Are you considering implementing a Stormwater Runoff Requirement
 - Yes
 - No



Questions for YOU!

- Do you have requirements for new construction versus existing homes?
 - Yes
 - No



Questions for YOU!

- In a perfect world what would you do?



Questions for YOU!

- With Harvey and Irma and Maria how do we turn a negative (too much stormwater) into a positive?

A large, curling blue wave with white foam, set against a dark blue background. The wave is the central focus, with its crest curling over. The water is a vibrant blue, and the foam is white. The background is a solid, dark blue gradient.

Questions?

Santa Fe



- Typical southwest city with high density sections
- Mixed with lower density sections
- City has a mixture of dirt and paved roads
- Dirt roads slow the runoff but increase the sediment put into the river