

Roadway To Implementation: How a Small Oklahoma Community Adopted a Successful Stormwater Program

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Over the past 20 years, the City of Owasso - a suburban community of 25,000, located in northeast Oklahoma - has grown from a small farming community to a thriving suburban city. Since 1990, housing starts have grown over 500% and commercial development has more than doubled. Today, new subdivisions projected to house over 1,500 residents are under construction or are scheduled for construction in the next two years. Other development includes a public vocational-technical school, two hospital complexes, three commercial shopping centers and the redevelopment of the Owasso Downtown District. In addition, this unprecedented growth is not scheduled to stop any time soon. This transformation from a small rural community to a suburban city, in such a short time, has not come without a price tag.



Illustration above represents an area affected by the 100-year storm event. Red indicates structural flooding. This was used to facilitate the communication of technical information to the public.

As a result of increased flooding caused by rapid growth, seven years ago, Owasso aggressively undertook the development and implementation of a long-range, comprehensive stormwater management plan to include:

- Development of a Master Drainage Plan
- Establishment of a secure funding mechanism
- Improvements to priority infrastructure and essential public services
- Compliance with Phase II of the National Pollutant Discharge Elimination System (NPDES)

This case study details the steps taken by the City of Owasso to implement such a program. It outlines the steps taken by City staff to enable the deployment of a Stormwater Fee - and the subsequent Stormwater Utility Department. Next, it showcases the community's successful plea for public support and the public/private partnerships that emerged thereafter. As part of this work, the City's first Quantitative Prioritization Criteria was developed and implemented - with support and approval by the public. This mathematical model enabled the methodical, unbiased ranking of numerous projects - giving way to the development and adoption of the City's Five-Year Stormwater Project Implementation Plan.



Map identifies problem areas and prioritized improvement projects. This is one of many illustrations used to summarize findings and recommendations for program.

The program also funded a Master Drainage Plan, not only guiding future development of the City's commercial and residential growth, but also enabling responsible and valuable growth. Lastly, but as important, the program also enabled the City's current compliance with environmental regulations [EPA's Phase II program] by funding additional staff and equipment to perform necessary compliance activities - protecting the welfare of its environment for years to come.

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