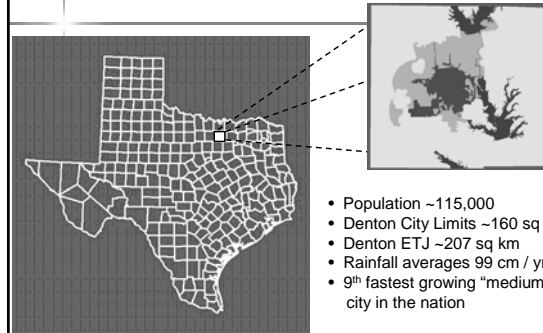


## Local Perspectives: Watershed Protection for Hickory Creek, Denton, Texas

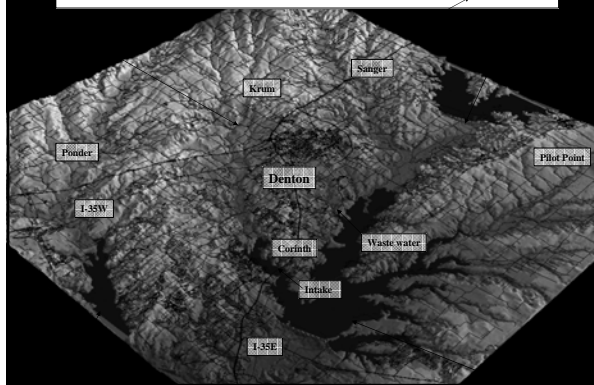
Kenneth Banks, Division of Environmental Quality, City of Denton



## Denton, Texas



## Denton's Location in Denton County



## Historical Perspectives

- History of water quality based research, both as a municipality and in conjunction with the University of North Texas
- Long standing support from utility management for watershed protection.
- Long term watershed monitoring program
- Innovative watershed protection strategies - ESAs



## Operational Perspectives

- City operates a waste water utility (that discharges into Lewisville),
- City has water rights in Lake Lewisville, and until recently Lewisville was the only source of drinking water for Denton. Still a major source
- The entire City drains into Lake Lewisville. The area that is most rapidly developing (Hickory Creek) drains into the arm of the Lake that supplies the intake.

	<b>Concerns for Denton Watersheds</b>
	<ul style="list-style-type: none"> <li>■ Designated uses are currently being met</li> <li>■ However, research demonstrated that population growth will lead to increased pollutant loadings in the absence of concerted management actions on the part of both private and public parties;</li> <li>■ No TMDL as an “outside” regulatory driver. Regulations must come from internal policies</li> </ul>

	<b>Tools available to municipalities</b>
	<ul style="list-style-type: none"> <li>■ Zoning authority</li> <li>■ Permits and associated enforcement tools <ul style="list-style-type: none"> <li>– Clearing &amp; Grading permits, Building permits, etc.</li> </ul> </li> <li>■ Development Code / Development review <ul style="list-style-type: none"> <li>– Local drainage code / storm water requirements</li> <li>– Environmentally Sensitive Areas (if available)</li> <li>– Tree preservation (if available)</li> </ul> </li> <li>■ Comprehensive Plans – Long term planning documents that serve as guidance documents for code (most munis have these ... they are the docs with all the pretty pictures)</li> </ul>

	<b>Denton’s Goals – City and Water / Wastewater Utility</b>
	<ul style="list-style-type: none"> <li>■ Meeting federal / state standards</li> <li>■ Protect / enhance water quality Lake Lewisville</li> <li>■ Implement cost-effective practices to manage pollutant loads as urbanization continues.</li> <li>■ Target and direct voluntary actions to priority locations.</li> <li>■ Continue to meet designated uses through expected full development scenarios.</li> </ul>

	<b>Denton’s Goals – Watershed</b>
	<ul style="list-style-type: none"> <li>■ Implement education and outreach activities that inform citizens about watershed issues, increase citizen desire to participate in political processes, and foster changes in behavior that support watershed management efforts</li> <li>■ Use the “lessons learned” to create an approach that can be adopted by other municipalities or similar regulatory authorities</li> </ul>

	<b>Ways to accomplish the goals</b>
	<ul style="list-style-type: none"> <li>■ Revise regulatory tools (such as development code) to better meet water quality goals</li> <li>■ Create prioritization tools to guide public and private investments in management practices, based on location, cost effectiveness, and opportunities</li> <li>■ Design tools to ensure the good returns on investments (in the form of reduced or avoided pollutant loads)</li> <li>■ Explore market-based approaches to incentivize private actions and leverage public resources</li> <li>■ Continually cultivate stakeholder input and support</li> </ul>

	<b>What is needed for a municipal WPP? Some observations</b>
	<ul style="list-style-type: none"> <li>■ <b>Political support:</b> We have spent many years interacting with our City Council on watershed issues. Most presentations about watershed protection / water quality have the potential to be well received by politicians (if they are presented correctly and you do your homework).</li> <li>■ <b>Mayoral support can be particularly helpful</b></li> </ul>

<b>What is needed for a municipal WPP? Some observations</b>
<ul style="list-style-type: none"> <li>■ <b><u>Support of municipal management at high levels (at least ACM):</u></b> Our program would not have a chance of success without support from upper levels of management. This is easier when you own and drink the receiving water, and have substantial additional interests in lake water quality from waste water discharge, habitat, recreation, and aesthetic standpoints</li> </ul>

<b>What is needed for a municipal WPP: Some observations</b>
<ul style="list-style-type: none"> <li>■ <b><u>Stakeholders:</u></b> A strong, politically active stakeholder group, representing a wide variety of interests, and not afraid to voice their opinions. Use your core stakeholder group to make connections in other organizations (civic groups like Rotary, Kiwanis, Lions Club, etc., church groups, master naturalists, gardeners, composters, environmental groups, school groups, Keep Texas Beautiful affiliates, associations of retired citizens, etc..</li> </ul>

<b>What is needed for a municipal WPP: Some observations</b>
<ul style="list-style-type: none"> <li>■ <b><u>Scientific Understanding:</u></b> A good scientific understanding of the challenges faced by your watershed is crucial. This involves understanding of the effects of land uses on receiving water quality, preferably as supported by a spatially and temporally dense monitoring network. However, while scientific information is key, it must be used in conjunction with political, stakeholder, and management support. All topics must be complimentary and must be applied simultaneously, or success will suffer.</li> </ul>

<b>What is needed for a municipal WPP: Some observations</b>
<ul style="list-style-type: none"> <li>■ <b>Additional needs:</b> <ul style="list-style-type: none"> <li>– Funding through grants, dedicated funding, and preferably both.</li> <li>– An overwhelmingly strong desire to spend long hours with other municipal staff members explaining how you are not trying to take their jobs or make more work for them.</li> <li>– An overwhelmingly strong desire to spend long hours with the development community explaining how you are not trying to take their jobs or make more work for them</li> <li>– A willingness to walk through the quagmire of local code revisions (over and over again)</li> </ul> </li> </ul>

<b>Contact Information</b>
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