## What is iSWM<sup>™</sup>?

The *integrated* Stormwater Management (iSWM) Program is a cooperative initiative that assists cities and counties in achieving their water quality protection, streambank protection and flood mitigation goals, while also helping communities meet their construction and post-construction obligations under state stormwater permits. The iSWM Criteria Manual and iSWM's other tools and technical materials provide information cities and counties can use to implement their own stormwater management programs.

#### How Does a City Implement iSWM?

The iSWM Criteria Manual contains the design standards addressing a city or county's stormwater management efforts. Communities may use the iSWM Criteria Manual or their own ordinances to meet a minimum level of "iSWM Outcomes" and be recognized as iSWM Communities through a review process. The other three iSWM components are provided as guidance for the design of stormwater facilities and implementation and training information.

iSWM implementation information and the "iSWM Program Implementation Tiered Measurement" form can be found at iswm.nctcog.org under iSWM Program Guidance.



For more information, please visit: iswm.nctcog.org

## How Was iSWM<sup>™</sup> Created?

Development of the iSWM Program began in 2002 in an effort to create a comprehensive Stormwater manual for the North Central Texas region. Local government representatives worked with NCTCOG and Freese and Nichols, Inc. to develop a regional document that would establish consistent stormwater design standards and methodology as well as provide guidance in meeting EPA and TCEQ regulations.





The Benefits of *i*SWM<sup>™</sup> In Your Community



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## Why Adopt iSWM<sup>™</sup>?

#### iSWM<sup>™</sup> Helps Keep Residents Safe

Texas has had the most flood-related deaths in the nation over the past 36 years. Flooding causes more economic loss in Texas than any other natural disaster.

Designs based on the iSWM program mean that a community can handle stormwater more effectively and with fewer flooding impacts.

#### 2. iSWM<sup>™</sup> Protects Property Value

Increased runoff causes erosion along the banks of creeks and rivers that carry runoff. The result is damage to adjacent infrastructure, such as water and sewer lines and actual loss of property where banks have caved in. The impacts of erosion reduce the value of adjacent properties.

iSWM reduces the potential for erosion by addressing streambank protection during design. It protects the value of properties and infrastructure investments along a community's creeks and rivers.



#### 3. iSWM<sup>™</sup> Improves Water Quality

Each of the major rivers in North Texas has segments that don't meet water quality standards. Low water quality means higher costs for water treatment and fewer recreational opportunities on streams, rivers and lakes.

iSWM techniques give a community new tools to improve water quality, thereby reducing costs and protecting residents.

# 4. iSWM<sup>™</sup> Helps Meet State and Federal Regulations

EPA and TCEQ regulations currently require that certain cities and counties address stormwater quality in their communities. NCTCOG has worked to make iSWM compatible with existing state and federal regulations and will continue to update the iSWM Program as new regulations are issued. Using iSWM helps cities comply with these regulations.



#### iSWM<sup>™</sup> Design Focus Areas

- 1. Water Quality
- 2. Streambank Protection
- 3. Flood Mitigation



### What are the Benefits of iSWM<sup>™</sup>?

Benefits to residents, businesses, and property owners:

- iSWM designs emphasize open space development and preserve natural features that create livable communities with character and access to nature.
- Reduced flooding saves lives and property.
- Reduced erosion means fewer concerns about property damage or decreases in property value.
- Developers will work with the same technical standards and methodology for all jurisdictions using iSWM.

#### Benefits to local governments:

- Natural systems can reduce on-going operation and maintenance costs.
- Consistent stormwater approaches across jurisdictions that share a watershed will be more effective in managing stormwater.
- A community with more natural features is likely to be more sustainable – and more desirable – over time.
- NCTCOG provides technical information, continuing education classes and other assistance to participating jurisdictions.
- The program may be customized by each city to meet its unique needs.
- May achieve credits toward a lower FEMA Community Rating System (CRS) rating.