Bridging the Rural/Urban Divide: Lessons in Collaboration

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BUFFALO CREEK WATERSHED DISTRICT

What is BCWD?
- Formed in 1969
- 422 sq. miles
- 6 cities and 28 townships
- Largest City – Glencoe

What does BCWD administer?
- Stormwater and drainage rules
- State drainage law

General Purposes:
- Flood control
- Water quality
- Drainage systems
DISTRICT PRIORITIES

- Efficiency and stability of Buffalo Creek
- Preserving storage on landscape
- Minimizing downstream impact from drainage/stormwater decision
RECENT BCWD ACTIVITIES

- Eagle Lake Outlet Restoration
- 3/8-inch drainage coefficient
- Collaboration with the City of Glencoe
CITY – DISTRICT PARTNERSHIP

....To This
ISSUES - FLOODING

2012

2014
ISSUES - ACCESS
ISSUES – BUFFALO CREEK
INITIAL SOLUTION – BIGGER PIPES!

- Expensive
- Relocates problem downstream
- Not permissible under BCWD rules
A BETTER SOLUTION....BASIC WATER MANAGEMENT PROJECT

- BCWD uniquely situated to implement a multi-jurisdictional solution
- Petition from City creates buy-in and additional funding source
- Multi-purpose solution needed
  - Flood control
  - Municipal stormwater management
  - Water quality
  - Drainage
BASIC WATER MANAGEMENT PROJECT - TWO EXAMPLES

- Marsh Water Project
- Glencoe East and Central
### Petition

The petion of the City of Glencoe for a Basic Water Management Project to address stormwater management and flooding within the City of Glencoe (Related to the previously established BCWD “Marsh Water Project”)

Petitioner City of Glencoe, upon authority given by resolution of the City Council, for its petition to the Board of Managers of the Buffalo Creek Watershed District and request the following:

1. The Board of Managers (Board) of the Buffalo Creek Watershed District (BCWD) has initiated the Marsh Water Project by unanimous resolution of the Board under Minnesota Statutes Section 103D.701.

2. The Board has received an engineer’s report (Report) for the project and the Report has been qualified to contain an eligible project plan for Clean Water Act (319, Federal) and Clean Water Partnership (103F, State) competitive grants.

3. The project is described in the Report dated August 13, 2012.

4. The Report indicates the project purpose(s) as: (1) the reduction of sediment and nutrient loading to Buffalo Creek; (2) the reduction of peak flows in Buffalo Creek; (3) the reduction of flood damages in areas along the Marsh Ditch and Buffalo Creek; and (4) the improvement of predictable function and maintenance of Marsh Ditch as a primary conveyance of stormwater passing into and through the City of Glencoe (the City).
HOW TO DO IT....

- Broad stakeholder engagement
  - City
  - Road Authorities
  - Regulatory
  - Landowners
    - Public
    - Commercial
    - Private

[Images of logos for Glencoe District, McLeod County, and SWCD]
HOW TO DO IT...

- Define Success

Mandatory Design Criteria

1) No increase in discharge on East Ditch, downstream from railroad. (2-, 10-, and 100-year)
2) No increase in discharge leaving North-Central Ponds to the south. (2-, 10-, and 100-year)
3) No increase in 2-year peak flood elevation in wetlands adjacent to the High School.
4) School wetland has 1-foot of freeboard, plus water surface gradient, to low floor of structures.
5) North and Central Ponds have 1 foot of free board to lowest adjacent opening during 100-year event.

Non-Mandatory Design Criteria

1) Capacity for 2-year event through entire open channel drainage system.
2) Create a minimum of 1’ of freeboard to low floor of structures where less than 1’ exists.
3) Provide wetland banking credits at a cost that is less than 50% of market cost.
4) Reduce phosphorous/sediment delivery to Buffalo Creek.
HOW TO DO IT...

- "Who Pays" is one of the last decisions
  - No “one-size fits all” solution
  - Establish a technical link between project components and benefit

<table>
<thead>
<tr>
<th>Project Feature</th>
<th>Total Cost</th>
<th>Ad Valorem</th>
<th>City of Glencoe</th>
<th>WMD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland</td>
<td>$ 427,500</td>
<td>$ 359,100</td>
<td>$ 68,400</td>
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<td>Repairs</td>
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<td>Private Culvert</td>
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<tr>
<td>Total</td>
<td>$ 929,000</td>
<td>$ 485,264</td>
<td>$ 156,960</td>
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WHAT SUCCESS LOOKS LIKE

- Access

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**EASEMENT AGREEMENT**

This Agreement is made and entered into this ___ day of __________, 2016, by and between the Buffalo Creek Watershed District ("District") and First Evangelical Lutheran Cemetery Association ("Owner"), (the District and Owner collectively “Parties”).

WHEREAS, Owner is the owner of property in McLeod County described in Exhibit A ("Association Property").

WHEREAS, the District is completing a multi-component basic water management project under Minnesota Statute §103D.705 collectively referred to as the Marsh Water Project. Part of the Marsh Water Project comprises of work within an existing waterway (the “Ditch”) that will include some land and culvert alteration and repairs and the establishment and preservation of Best Management Practices (“BMPs”) such as vegetative buffer strips.

WHEREAS, the purpose of this agreement is to provide the District with formal easement rights to maintain and reconstruct the Ditch and construct and maintain BMPs within the easement area on the Association Property (“Easement”) as legally described in Exhibit B and depicted in Exhibit C.

NOW, THEREFORE, the undersigned parties do hereby agree as follows:

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WHAT SUCCESS LOOKS LIKE

- Flood Reduction
WHAT SUCCESS LOOKS LIKE

- Predictability of stormwater management/drainage

<table>
<thead>
<tr>
<th>Location</th>
<th>Elevation Under Existing Conditions</th>
<th>Elevation Resulting from Proposed Projects</th>
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<tbody>
<tr>
<td>Seneca Foods</td>
<td>1002.15</td>
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<tr>
<td>Upstream of Railroad</td>
<td>1006.52</td>
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<td>Upstream of County Road 3</td>
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<td>Upstream of State Hwy. 22</td>
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WHAT SUCCESS LOOKS LIKE

- Improved water quality
WHAT SUCCESS LOOKS LIKE

- Establishing a tenor of collaboration
FOLLOWING SUCCESS COMES…

“What’s Next?”