Background

The water level in the wetlands surrounding the intersection of County State Aid Highway 12 (CSAH 12) and Kimbro Avenue North in Grant, MN has caused closure of both roads this summer. BCWD staff have been working with Washington County to understand the hydrology of this area and assess options for maintaining safe passage along the roadway.

The resident living closest to the wetland reported water in the basement during the last week of June due to heavy rains (lack of positive drainage away from structure) and potentially due to subsurface lateral seepage from the wetland.

In November of 2019, Washington County conducted a topographical survey around the natural overflow for the wetland as well as the culvert beneath the trolley line, and at Lake Elmo Avenue.

EOR and the Administrator met with some of the landowners around the wetland and along the discharge flow path on June 29, 2020. It was observed that the wetland water elevation points downstream of CSAH 12 and Kimbro Avenue are no longer valid (the wetland water has increased since November). Also, there are undulations in the landscape along the flow path that are not accurately depicted by LiDAR or the point survey by Washington County that may act to trap water prior to discharge from the CSAH 12 basin as well as before discharging beneath Lake Elmo Avenue.

Proposed Scope

Washington County has begun implementing a plan to temporarily raise CSAH 12 to provide safe passage of vehicular traffic for as long as water levels remain high. While water levels are at all-time high in all of the wetlands in the area, there remains significant storage downstream of the CSAH 12 and Kimbro wetlands before water will discharge beneath the trolley line, thence beneath Lake Elmo Avenue, and out of the White Oak Savannah development. We believe the first step to conceptualizing a long-term plan for managing water in this landlocked area is to fill in the data gaps for a better understanding of the topography and system capacity. The annotations on the attached map include the areas where we propose to collect topographical survey data.

The BCWD Hydrologic & Hydraulic (H&H) model has been updated in conjunction with working through scenarios that Washington County has proposed. The new topographical data will be added to the model to refine the event-based water elevations to both assist in recommending short-term flood proofing preparation as well as informing long-term drainage planning for this area.

The following table provides the estimated cost to provide these services.
<table>
<thead>
<tr>
<th>Task</th>
<th>Hours</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Landowner Coordination, Site Topographic Survey &amp; Base Map</td>
<td>16</td>
<td>$2,096</td>
</tr>
<tr>
<td>2. H&amp;H Model Update &amp; Technical Documentation</td>
<td>15</td>
<td>$1,784</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
<td><strong>$3,880</strong></td>
</tr>
</tbody>
</table>

**Action Item**

1. Authorize EOR to conduct the topographical survey and H&H model update for an amount not to exceed $3,880 from account 923-000 H&H Model Maintenance.