Work Plan Progress

- Finalized Implementation Plan
- Draft of Final Plan Sections including:
  - Targeted Implementation Schedule
  - Plan Implementation Programs
  - Plan Administration and Coordination
## Implementation Plan

### 1.1.1-C-1
One ($250,000 worth) streambank stabilization project completed every two years on Tier One impaired streams with known problems.

**Pollutant Impaired Streams**

10% reduction in the number of TSS samples exceeding the water quality standard (10 mg/L for coldwater, 65 mg/L for warmwater streams) at high (storm event) flows and no increase in the number of nitrate samples exceeding the water quality standard (10 mg/L) at low (baseflows) in the Tier One impaired streams.

### 1.1.1-C-3
Utilize past and current assessment and prioritization efforts in Etter Creek Watershed in coordination with the Vermillion River Joint Powers Organization in an effort to install voluntary BMPs providing upland storage which achieve reduction goals.

**Agricultural Runoff and Leaching Loss**

Achieve Nutrient Reduction Strategy goals of 12 percent reduction in phosphorus in the Tier One impaired lake drainage areas and 20 percent reduction in nitrogen pollution from cropland from baseline conditions (mid-1990s) in the Tier One impaired stream drainage areas in the next 10 years (by 2029).

### 1.1.2-A-1
Utilize PTMApp to identify sites in the priority drainage areas within the Upper Cannon HUC10 and Chub Creek HUC10 (or elsewhere in the subwatershed as needed) then market, implement, and promote projects to meet the wetland restoration goal.

**Wetland Restoration**

Net gain of 29 acres in the Upper Cannon HUC10 and 23 acres in the Chub Creek HUC10 of restored wetland pool and buffer area per the 2016 WRAPS goal for restored wetlands.

### 1.1.3-A-3
In areas within an existing DWSMA, but outside of the city jurisdiction, assist with well location and inventory, and sealing of unused wells that pose a risk to the public water supply wells.

**Drinking Water Protection**

In partnership with public water suppliers, provide annual education/outreach opportunities to all communities with MDH approved Wellhead Protection Plans, and BMP technical assistance for all moderate and high vulnerable public water suppliers.

### 1.1.3-A-8
Create a specific well sealing program for residents who wish to voluntarily seal wells using a priority process. Start by conducting an unused-well inventory by mailing a homeowner survey asking people if they have an unused well on their property that they would like assistance sealing.

**Drinking Water Protection**

Nitrate reduction goal.
## Implementation Plan

### Schedule for the Next 10 Years (2019-2028)

<table>
<thead>
<tr>
<th>ID</th>
<th>Implementation Activity</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>10-yr Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.1-C-1</td>
<td>One ($250,000 worth) streambank stabilization project completed every two years on Tier One impaired streams with known problems</td>
<td>$ -</td>
<td>$ 250K</td>
<td>$ -</td>
<td>$ 250K</td>
<td>$ -</td>
<td>$ 250K</td>
<td>$ -</td>
<td>$ 250K</td>
<td>$ -</td>
<td>$ 250K</td>
<td>$ 1,250K</td>
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<tr>
<td>1.1.1-C-3</td>
<td>Utilize past and current assessment and prioritization efforts in Etter Creek Watershed in coordination with the Vermillion River Joint Powers Organization in an effort to install voluntary BMPs providing upland storage which achieve reduction goals</td>
<td>$ -</td>
<td>$ 40K</td>
<td>$ -</td>
<td>$ 40K</td>
<td>$ -</td>
<td>$ 40K</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 120K</td>
</tr>
<tr>
<td>1.1.2-A-1</td>
<td>Utilize PTMApp to identify sites in the priority drainage areas within the Upper Cannon HUC10 and Chub Creek HUC10 (or elsewhere in the subwatershed as needed) then market, implement, and promote projects to meet the wetland restoration goal.</td>
<td>$ 30K</td>
<td>$100K</td>
<td>$ 5K</td>
<td>$100K</td>
<td>$ 5K</td>
<td>$100K</td>
<td>$ 5K</td>
<td>$ 5K</td>
<td>$ 5K</td>
<td>$ 5K</td>
<td>$ 360K</td>
</tr>
<tr>
<td>1.1.3-A-3</td>
<td>In areas within an existing DWSMA, but outside of the city jurisdiction, assist with well location and inventory, and sealing of unused wells that pose a risk to the public water supply wells.</td>
<td>$ 10K</td>
<td>$10K</td>
<td>$ 10K</td>
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<td>$ 10K</td>
<td>$ 10K</td>
<td>$ 10K</td>
<td>$ 10K</td>
<td>$ 10K</td>
<td>$ 10K</td>
<td>$ 105K</td>
</tr>
<tr>
<td>1.1.3-A-8</td>
<td>Create a specific well sealing program for residents who wish to voluntarily seal wells using a priority process. Start by conducting an unused-well inventory by mailing a homeowner survey asking people if they have an unused well on their property that they would like assistance sealing.</td>
<td>$ 30K</td>
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<td>$ 300K</td>
</tr>
</tbody>
</table>
# Implementation Plan

<table>
<thead>
<tr>
<th>Source of Cost Information</th>
<th>Potential Funding Sources</th>
<th>Project Lead</th>
<th>Activity Outcome</th>
<th>Project Partners</th>
<th>Additional Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local estimate</td>
<td>LSOHC, RCPP, EQIP</td>
<td></td>
<td></td>
<td>SWCDs, DNR</td>
<td>5 streambank stabilizations projects</td>
</tr>
<tr>
<td>of installing 2 bmps each funding year with in GC of Etter Crk</td>
<td>sediment reduction, amount of structures installed</td>
<td></td>
<td></td>
<td>SWCDs, NRCS, BWSR, DNR</td>
<td>Wildlife habitat, recreation, aesthetics, Nitrogen reductions, Increase in watershed storage</td>
</tr>
<tr>
<td>Planning vs implementation? Otherwise #s okay</td>
<td>RIM, CREP, CRP</td>
<td>X X X X</td>
<td></td>
<td>PTMAApp findings, acres of wetlands restored</td>
<td>Have a more complete and prioritized inventory of wells, sealing potential contaminant sources for aquifers</td>
</tr>
<tr>
<td>10 PWSers: 1 inventory/yr @ 8 hrs ea = 0.004 FTE@$38/hr &amp; 2 well sealed/yr @$5,000 ea</td>
<td>MDH Source Water Protection Grants, Clean Water Fund Grants</td>
<td>JPB, Public Water Suppliers</td>
<td></td>
<td>Counties, MDH</td>
<td>10 inventoried DWSMA’s, 20 wells sealed</td>
</tr>
<tr>
<td>$2,500/well and 2 wells/county/year. Task will include staff time to collect information from residents an submit to MDH to include in County Well database.</td>
<td>Designate specific 1w1p pot of money where we prioritize which wells are sealed. Local water mgmt. Cost-share. Low-interest loan. MDH well sealing money. Capacity $</td>
<td>Individual counties</td>
<td></td>
<td>MDH</td>
<td>Unused-well inventory completed and number of total abandoned wells sealed in the Planning Area</td>
</tr>
</tbody>
</table>
Implementation Plan

- Identifies # of activities in priority areas to be undertaken by the planning partnership
- Most of the activities eligible for BWSR watershed based funding
- Implementation via existing programs - some programmatic changes may be necessary to achieve plan goals (e.g. prioritizing cost-share projects located in priority areas)
- Actual implementation of projects determined annually when staff uses PTMApp (or other tool) to identify specific locations on the landscape where there is landowner willingness
Summary by Activity Type

- 83% of total 10-year cost allocated to Projects
- 9% allocated to Feasibility Studies and Assessments
- 3% allocated to Monitoring
- 3% allocated to Education and Outreach
- 2% allocated to Administration, Meetings and Advisory Boards
- Summary of Local Funds
Summary by Activity Type: Resource Concerns

65% Projects
- Streambank Stabilization Projects, Wetland Restoration Projects, Well Sealing

25% Monitoring
- Monitoring Program Development, Groundwater Quantity, Citizen Monitoring Program, Lake and Stream Water Quality

7% Education and Outreach
- Education for Public Water Suppliers, Private Well Owners and Homeowners
Summary by Activity Type: Landscape Concerns

87% Projects

10% Feasibility Studies
- Manure Management Plans, Long-Term Flood Solution Study, SSTS Inventory, Modernization of Drainage Records
Summary by Activity Type: Socioeconomic Concerns

44% Education and Outreach
- Workshops, trainings, presentations, one-on-one communications with stakeholder groups, guidance

40% Projects
- Stormwater BMP demonstration, River Cleanup, Land Stewardship

12% Admin/Meetings
- 1W1P website, Regular working group meetings, Member Board updates
85% of total 10-year cost allocated to activities in the drainage area to priority resources

12% allocated to resource-specific activities

3% allocated to activities designed to change behavior, promote stewardship and make citizens active partners in watershed management
Measurable Goals: Priority Areas

Lakes Area
- Headwaters of Cannon River
- Confluence with Straight River
- Sites of biodiversity significance
- Lakes vulnerable to nutrient addition
- High recreational value
- Flooding
- Lakes close to water quality standards
- Sediment and phosphorus

Waseca Area Lakes
- Recreation
- Lakes of biological significance
- Stormwater management

Cannon/Mississippi River Bottoms
- Outstanding recreational value
- Flooding
- Little Cannon and Belle Creek trout streams (close to water quality standards)
- Bluffs and steep slopes (sediment)
- Ecological corridors

Legend
- Cannon River 1WIP
- HSPF Sub-Basin

* Watershed Protection Plans have not been completed for all communities. Public Water Systems in the Planning Area. There are 15 communities with plans in development or to be developed.
Next Steps

- Present Implementation Plan to the Policy Committee - June 27, 2018
- TAG/PWG to review DRAFT Cannon River 1W1P – July 2018
- Policy Committee to be provided with DRAFT Cannon River 1W1P for review – August 15, 2018
- Policy Committee to approve DRAFT Plan for 60-day review period – September 5, 2018
- Open House (optional) to review DRAFT Plan with the public, Policy Committee and PWG
- Public Hearing in December 2018 and approve revised Plan for 90-day review period
- Review and approval by BWSR by March 2019
Thank you!