

## V. EVALUATION

Evaluation is an essential component of any planning document, given that circumstances and attitudes of planning participants and watershed residents will change over time. The goal of evaluating the action plan will be to determine which actions are working and which need to be revised, and will aid in achieving efficient use of resources. Plan evaluation will be conducted at multiple levels (please see the table below for a summary):

- **Tier I:** Implementation of specific actions will be gauged with the performance indicators listed with actions in Section IV. These can be thought of as “short term goals,” and are generally more administrative.
- **Tier II:** Where appropriate, specific goals for the implementation of Best Management Practices (BMP’s) have also been included, and progress towards those goals can be assessed. For example, the plan states a goal of preserving 50 acres of riparian land by 2010, which can be compared to actual acres preserved. These can be thought of as “mid-term goals,” and also include interim attainment goals.
- **Tier III:** The plan also states “long term goals,” which for the most part correspond with TMDL targets (see Section IV for more information on TMDL’s). For instance, maintaining full attainment and achieving TMDL target scores for habitat, sediment, and fecal coliform are listed as goals for the upper (14 dig HUC) subwatershed. Progress towards these goals will be assessed through water quality monitoring, which is included as an action in Section IV to be implemented by FACT.

Tier I and Tier II evaluation will be conducted annually to determine if actions have been successfully completed. Tier III evaluation will allow stakeholders to determine if completing those actions have resulted in attaining water quality goals. While water quality data will be analyzed annually, a more thorough evaluation of data and goals will be conducted on a five-year basis, along with plan revision.

One potential challenge will be the long-term availability of water quality data. As of early 2005, FACT anticipates receiving an Ohio EPA 319 Implementation Grant to fund water quality monitoring for three years (2006 – 2009). FACT anticipates continuing monitoring efforts past that point, although funding is not guaranteed.

Another source of data will include Ohio EPA assessments, which occur on a rotating basin basis throughout the state every 5-10 years. The existence of a Total Maximum Daily Load (TMDL) report by the Ohio EPA for the Big Walnut Creek basin should ensure that assessments will be completed. Other data sources that could be utilized if necessary include the three universities located along the creek (Otterbein University, Ohio Dominican University, and Capital University), and the City of Columbus. The latter is currently collecting ambient data as well as data at stormwater and CSO discharge points.

Primary responsibility for evaluating the action plan will lie with the Friends of Alum Creek & Tributaries (FACT) and the Alum Creek Action Plan Steering Committee. FACT will initiate an annual review process through convening the steering committee. Through ongoing quarterly action plan meetings, stakeholders will also receive opportunities to evaluate actions and revise the plan. A more thorough effort to include stakeholders, FACT members, and other watershed residents will be made during five year evaluations.

The following table summarizes some of the information provided in the plan that will be necessary to complete an evaluation. Note that only actions to which quantified BMP implementation or load reductions could be ascribed are included below as mid-term targets.

<b>Upper subwatershed</b>	
<b>Long term goals (Tier I)</b>	
<ul style="list-style-type: none"> <li>• Maintain full attainment status</li> <li>• Achieve sediment TMDL scores of 33 or better</li> <li>• Achieve habitat TMDL score of 3</li> <li>• Achieve Fecal coliform: TMDL target - 1,000 fecal coliform colonies /100ml (30 day geometric mean), through:                             <ul style="list-style-type: none"> <li>- Reduce aerator loading by 56%</li> <li>- Reduce NPS (runoff) loading by 69%</li> <li>- Reduce cattle loading by 100%</li> </ul> </li> </ul>	
<b>Mid-term goals (Tier II)</b>	
General	<ul style="list-style-type: none"> <li>• Maintain full use attainment</li> </ul>
Organic Enrichment	<ul style="list-style-type: none"> <li>• Reduce pathogen loading from aerators 40% by 2015 through                             <ul style="list-style-type: none"> <li>- Upgrading 25 systems</li> <li>- Eliminating 40 systems through extension of sanitary sewer to two problem areas</li> </ul> </li> <li>• Reduce cattle pathogen loading by 100% by 2008 through applying BMP's at the one known cattle lot in the upper watershed, along unnamed tributary 25.5.</li> </ul>
Stormwater & Construction	<ul style="list-style-type: none"> <li>• Reduce sediment loading by 20% through implementing Phase II stormwater programs and through public education</li> </ul>
Habitat & Hydromodification	<ul style="list-style-type: none"> <li>• Preserve 50 acres, (or 10,000 by 200 linear feet) of riparian land by 2010 (in upper and lower watersheds combined)</li> </ul>
<b>Lower subwatershed</b>	
<b>Long term goals (Tier I)</b>	
<ul style="list-style-type: none"> <li>• Maintain full attainment status in reaches that are currently in attainment</li> <li>• Achieve sediment TMDL scores of 33 or better</li> <li>• Achieve habitat TMDL score of 3</li> <li>• Achieve Fecal coliform: TMDL target - 1,000 fecal coliform colonies /100ml (30 day geometric mean), through:                             <ul style="list-style-type: none"> <li>- Reduce aerator loading by 91%</li> <li>- Reduce NPS (runoff) loading by 44%</li> <li>- Reduce CSO loading by 91%</li> </ul> </li> </ul>	
<b>Mid-term goals (Tier II)</b>	
General	<ul style="list-style-type: none"> <li>• Maintain full use attainment in river reaches that are currently in attainment, and nonattainment reach (River Miles 8.6 and 7.5) to at least partial attainment.</li> </ul>
Organic Enrichment	<ul style="list-style-type: none"> <li>• Reduce pathogen loading from aerators 75% by 2025 through                             <ul style="list-style-type: none"> <li>- Upgrading 90 systems</li> <li>- Eliminating 20 systems through extension of sanitary sewer to problem areas by 2015</li> </ul> </li> </ul>
Stormwater & Construction	<ul style="list-style-type: none"> <li>• Reduce sediment loading by 20% through implementing Phase II stormwater programs and through public education</li> </ul>
Habitat & Hydromodification	<ul style="list-style-type: none"> <li>• Preserve 50 acres, (or 10,000 by 200 linear feet) of riparian land by 2010 (in upper and lower watersheds combined)</li> <li>• Remove two lowhead dams by 2008</li> </ul>