

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. Evaluation will allow for the assessment of actions that are working and actions that need to be changed or updated, and will aid in efficient use of resources.

Two entities will take primary responsibility for the evaluation of the Alum Creek action plan: the Friends of Alum Creek & Tributaries (FACT), and the Alum Creek Action Plan Steering Committee (please see Section II for more information on these organizations). However, the plan is designed to include the entire watershed community plan implementation and evaluation.

FACT will initiate an annual review process through convening the steering committee. Individual actions will be compared against their performance indicators, and the achievement of overall goals will be evaluated. Information provided by FACT will allow for the evaluation of administrative goals on an annual basis. Water quality goals may be more difficult and require more time to evaluate. A water quality monitoring program stated in the plan (to be implemented by FACT and OSU Extension) will provide some information, although improvements are not expected on a short term (1-3 year) basis. Water quality goals are generally set on a five or ten year time frame in the action plan; a more in-depth evaluation will take place at five years (2010), or as water quality data are made available by further studies of the Ohio EPA (through their rotating basin approach or TMDL program). Formal revisions to the plan will be made at that time as necessary.

A comprehensive database of community stakeholders that was developed by FACT for planning purposes will be used to mail updates of plan implementation progress on an annual or biannual basis and invite stakeholders to participate in the evaluation process. This database includes interested residents, government officials, agency representatives, etc, many of whom helped create the plan. Press releases to local media will also be used periodically to inform the general public of progress, as will the FACT newsletter.

The following table condenses some of the information provided in the plan that will be necessary to complete an evaluation. Organized by stream segment, it states causes of impairment and goals for each segment, as well as goal for some major groups of actions.

Lower Alum Creek Action Plan Causes of Impairment, Goals, and Major Actions

Italicized causes of impairment are not included in 2003 TSD, but rather were inferred through action planning. Priority stream segments are numbered 1-3. Major actions shown in bold are priority actions. Numbers in parentheses are the percentile against background levels for chemical parameters.

Upper subwatershed - 1	
Causes of impairment <ul style="list-style-type: none"> • <i>Pathogens</i> • <i>Nutrients</i> • <i>Sediment</i> • <i>General urban runoff/ stormwater goals</i> 	Stream segment goals <ul style="list-style-type: none"> • Maintain full attainment status • Substrate scores of 14 or better • 2000 fecal coliform (per 100 ml) or less (TMDL target)
Major actions <ul style="list-style-type: none"> • HSTS actions • Construction site sediment • NPS pollution awareness • Post construction stormwater BMP's • Land use education • Land use recommendations per municipality • Riparian corridor preservation • Increase boat access 	Major action goals <ul style="list-style-type: none"> • 30% load reduction for pathogens by 2015 Upgrade 25 systems by 2006 Extend sewer lines by 2015 • 30% load reduction for sediment by 2010 • • • • • Protect five riparian properties by 2010 (through acquisition or easement, upper and lower watershed) • 1 access point by 2008, 2 by 2010
Unnamed Tributary at 25.50	
Cause of impairment <ul style="list-style-type: none"> • <i>Ammonia</i> • <i>Nutrients</i> • <i>Pathogens</i> 	Stream segment goals <ul style="list-style-type: none"> • Maintain full attainment status • Install livestock BMP in cooperation with landowner • Fecal coliform: 2000 (per 100 ml) or less (TMDL target)
Major actions <ul style="list-style-type: none"> • Restrict livestock from stream 	Major action goals <ul style="list-style-type: none"> • Implement BMP's to limit livestock access
Lower subwatershed -3	
Cause of impairment <ul style="list-style-type: none"> • Pathogens • Organic enrichment • Ammonia • Siltation • Direct habitat alteration • Flow alteration • Cadmium/ Priority organics 	Stream segment goals <ul style="list-style-type: none"> • Ten miles in full use attainment by 2010; 19 miles by 2020 • TMDL Habitat Target – score of 3 or better • QHEI Substrate scores of 14 or better by 2010
Major actions <ul style="list-style-type: none"> • HSTS actions • Construction site sediment • Litter • General NPS education • Post construction stormwater • Land use education 	Major action goals <ul style="list-style-type: none"> • 30% load reduction of pathogens - Upgrade 50% of systems by 2015; - Sewer lines to three problem areas by 2015 • 30% load reduction of sediment by 2010 • • Conduct 1 drain labeling event per year • •

<ul style="list-style-type: none"> • Land use regulations per municipality • Riparian corridor preservation 	<ul style="list-style-type: none"> • • Protect five riparian properties by 2010 (through acquisition or easement, upper and lower watershed) • Remove one dam by 2010, bring reach into full/partial attainment
Spring Run -2	
Cause of impairment <ul style="list-style-type: none"> • Pathogens • Ammonia (95) • Organic enrichment (95) • Habitat Alterations • Siltation (95) 	Stream segment goals <ul style="list-style-type: none"> • 45 QHEI at Walnut Street / 60 QHEI at Buenos Aires Drive by 2010 • Fecal coliform: 2000(per 100 ml) or less (TMDL target) • Improve from partial/non attainment to partial/full attainment by 2010
Major actions <ul style="list-style-type: none"> • HSTS • NPS education • Stream morphology 	Major action goals <ul style="list-style-type: none"> • • Make contact w/ 100 residents by 2007 • Develop assessment to inform future restoration actions by 2007
West Spring Run	
Cause of impairment <ul style="list-style-type: none"> • Habitat alteration • Flow alteration • <i>Organic enrichment (95)</i> • <i>Sediment (95)</i> • <i>Ammonia (95)</i> • <i>Pathogens</i> 	Goals for stream segment <ul style="list-style-type: none"> • Fecal coliform: 2000 (per 100 ml) or less (TMDL target) • Partial/full use attainment by 2010
Major actions <ul style="list-style-type: none"> • Stream morphology assessment 	Major action goals <ul style="list-style-type: none"> •
Kilbourne Run	
Cause of impairment <ul style="list-style-type: none"> • Organic Enrichment (95) • Pathogens • Siltation (95) • <i>Nutrients (90)</i> 	Goals for stream segment <ul style="list-style-type: none"> • Fecal coliform: 2000 (per 100 ml) or less (TMDL target) • Partial/full use attainment by 2010
Major actions <ul style="list-style-type: none"> • Stream morphology assessment 	Major action goals <ul style="list-style-type: none"> •
Bliss Run	
Cause of impairment <ul style="list-style-type: none"> • <i>Pathogens:</i> • <i>Organic enrichment (90)</i> • <i>Nutrient enrichment (90)</i> 	Goals for stream segment <ul style="list-style-type: none"> • Fecal coliform: 2000 (per 100 ml) or less (TMDL target)
Major actions <ul style="list-style-type: none"> • Stream morphology assessment • DOSD I/I study 	Major action goals <ul style="list-style-type: none"> • •