

WRAPS Watershed Plan Suggested Workflow

Recently, KDHE Watershed Management and Watershed Planning staff held a meeting to discuss a hypothetical “start to finish” process regarding data/information compilation needed for a watershed plan to meet EPA’s Nine Elements. Listed below is the information that was produced from this meeting. This template for data/information compilation is not required; rather it should be viewed as a guide to assist WRAPS Projects in the watershed plan development process.

1. Statement of a Goal
 - a. All watershed plans should state that meeting of applicable water quality standards is a goal or objective of the plan.
 - b. Information regarding status of impaired waters can be obtained by utilizing TMDL documents.
 - i. Load reduction information as stated in TMDL should be used as the reductions needed to achieve goal

KDHE is available to provide this information to WRAPS Projects.

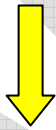


2. Identification of sources and causes of impairment
 - a. Quantification of sources and causes of impairment within watershed
 - b. Recognition of sources and causes of impairment within watershed
 - i. Cropland
 - ii. Livestock Operations
 - iii. Urban areas (currently developed and future if possible)
 - iv. Other sources
 - c. Identification of pollutants associated with sources
 - i. Nitrogen
 - ii. Phosphorus
 - iii. Sediment
 - iv. Bacteria
 - v. Other (e.g. Atrazine)

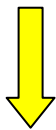
KDHE is available to provide this information to WRAPS Projects. Once this information is obtained by the WRAPS Project, the WRAPS Project and SLT should review this information to develop a better understanding of the sources and causes of impairment within the watershed.



3. BMP needs within WRAPS Project Area
- a. Information regarding the BMP needs for the watershed as related to water quality impairments should be identified. This information should be compiled for the entire watershed and/or portions where BMP implementation will occur.
 - b. Sources of information that can be utilized for development of BMP needs for watershed include:
 - i. KDHE County Non Point Source Needs Inventory
 - ii. State Conservation Commission TMDL Needs Inventory
 - iii. KDHE Source Water Assessments
 - iv. Other more recent assessment information
- KDHE is available to provide this information to WRAPS Projects. Once this information is compiled, WRAPS Projects should consult with applicable Service Providers potential locations of BMP implementation as well as adoptability rates for identified BMPs*

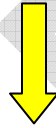


4. Identification of high priority targeted areas for BMP implementation
- a. Information should be at a HUC 12 level at minimum
 - b. Selection of high priority areas where BMP implementation efforts will be focused
 - i. What areas are contributing most to the problem? Information can be derived from:
 - 1. Modeling
 - 2. Land use maps
 - 3. Other assessment information
 - ii. What BMPs will be focused in the high priority areas?
 - iii. What are the associated load reductions from these BMPs?
 - c. Selection of intermediate priority areas
 - i. What BMPs will be focused in these areas?
 - ii. What are the associated load reductions from these BMPs?
 - d. Remainder of watershed
 - i. What efforts will be needed in these areas to reach overall reduction goal?
- KDHE and applicable Service Providers are available to provide this information to WRAPS Projects. Once SLT has a chance to review information, the SLT should relay information back to KDHE for concurrence.*



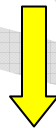
5. Selection of management measures needed to reach goal
 - a. Information regarding the overall needs should be finalized
 - b. Utilization of modeling information and other forms of assessment can be utilized to finalize targeted areas
 - c. Recognition of a reasonable time frame for reaching goal of watershed plan

WRAPS Projects and SLT should collaborate with applicable Service Providers to determine an appropriate timeframe for BMP implementation as specified in the watershed plan.



6. Development of milestones to track watershed plan progress

WRAPS Project and SLT members will determine milestones that will be utilized to evaluate implementation of BMPs associated with watershed plan. KDHE can provide examples of milestones upon request.



7. Development of criteria to evaluate effectiveness of watershed plan implementation

WRAPS Project and SLT member will develop criteria to evaluate load reductions obtained by implementation of the watershed plan. These criteria will be utilized to highlight progress being made towards attainment of water quality standards or load allocations as specified in applicable TMDLs. KDHE can provide assistance in development of criteria



8. Development of a monitoring plan to evaluate effectiveness of BMP implementation associated with watershed plan
 - a. Development of a monitoring plan does not reflect the need to establish a new monitoring network that is independent of existing monitoring within watershed.
 - b. Monitoring performed by WRAPS Projects can be used to supplement existing monitoring within watershed
 - i. Monitoring would require an approved QAPP
 - c. Monitoring efforts may already be underway in a watershed that can be utilized to help evaluate the overall effectiveness of BMP implementation include. Agencies that may be involved include:
 - i. KDHE
 - ii. KDWP
 - iii. USCOE
 - iv. USGS
 - v. KBS
 - vi. KSU
 - vii. Other service providers

WRAPS Project and SLT will determine monitoring networks or additional monitoring needed to evaluate BMPs implemented within watershed. KDHE can provide assistance in monitoring network evaluation.