

EPA Minimum Elements	Clarification	Examples
<p>a. An identification of the causes and sources or groups of similar sources that will need to be controlled to achieve the load reductions estimated in this watershed-based plan (and to achieve any other watershed goals identified in the watershed-based plan).</p>	<p>Sources that need to be controlled should be identified at the significant subcategory level with estimates of the extent to which they are present in the watershed. Information can be based on a watershed inventory, extrapolated from a sub watershed inventory, aerial photos, GIS data, and other sources.</p>	<p>X numbers of dairy cattle feedlots needing upgrading, including a rough estimate of the number of cattle per facility.</p> <p>Y acres of parking lots needing improved run off management.</p> <p>Z linear miles of eroded streambank needing remediation.</p>
<p>b. An estimate of the load reductions expected for the management measures described in element (c) below.</p>	<p>This can be done using the “Pollutants Controlled Manual” and technical resources on the web such as: http://www.bmpdatabase.org/</p> <p>Percent reductions can be used only in conjunction with a current or known load.</p>	<p>PDR on X acres would prevent Y additional in put during development and y input annually.</p> <p>Y miles of grassed swales would reduce sediments to Z% of the 2002 loadings from the subwatershed.</p>
<p>c. A description of the NPS management measures that will need to be implemented to achieve the load reductions estimated in element (b) above, and an identification (using a map or a description) of the critical areas in which those measures will be needed to implement this plan.</p>	<p>EPA defines management measures as including BMPs and measure needed to institutionalize changes (i.e. I&E tasks, land use tasks)</p> <p>A critical area should be determined for each combination of source and BMP. Designating the entire watershed for all BMPs is not acceptable.</p>	<p>X acres of wetlands will be restored (or protected) below the 585 foot topological contour.</p> <p>A downspout disconnection program will be implemented in all neighborhoods built prior to 1960.</p> <p>Management support targeting producers adopting nutrient management.</p>
<p>d. An estimate of the amounts of technical and financial assistance needed, associated costs, and/or the sources and authorities that will be relied upon, to implement this plan.</p>	<p>“Authorities” are the specific state or local legislation which allows, prohibits, or requires an activity.</p> <p>BMP costs are available on-line.</p>	<p>Michigan Wetland Protection Act for protecting wetlands > 5 acres. Local Wetland Protection Ordinance for wetlands 1 to 5 acres. Need technical assistance to delineate wetlands and \$250,000 CMI funds for an easement program.</p> <p>1/X FTE technical assistance for crop residue management for each Y acres or Z producers.</p>

<p>e. An information/education component that will be used to enhance public understanding of the project and encourage their early and continued participation in selecting, designing, and implementing the NPS management measures that will be implemented.</p>	<p>Blue book guidance is acceptable.</p>	
<p>f. A schedule for implementing the NPS management measures identified in this plan that is reasonably expeditious.</p>	<p>Blue book guidance is generally acceptable. Specific dates are not required. However if terms such as "short-term" are used they must be defined.</p>	<p>short-term = 1 to 3 years Mid-term = 3 to 7 years Long-term = 7 to 15 years</p>
<p>g. A description of interim, measurable milestones for determining whether NPS management measures or other control actions are being implemented.</p>	<p>Milestones should be tied to the progress of the plan to determine if it is moving in the right direction.</p>	<p>Reduce soil erosion by X tons per year by 2008 Reduce peak flows by Y% by 2010. Complete I&E efforts by year 6</p>
<p>h. A set of criteria that can be used to determine whether loading reductions are being achieved over time and substantial progress is being made towards attaining water quality standards and, if not, the criteria for determining whether this watershed-based plan needs to be revised.</p>	<p>The criteria for loading reductions <u>do not</u> have to be based on analytical water quality monitoring results. Rather, indicators of overall water quality from other programs can be used. The criteria for the plan needing revision should be based on the milestones (g. above) and water quality changes.</p>	<p>Increased time between dredging a river mouth as an indication of reduced sediment rates. Fewer beach closings as an indication of reduced <i>e. coli</i> levels. Student monitoring results Improved fishery as demonstrated by creel survey</p>
<p>i. A monitoring component to evaluate the effectiveness of the implementation efforts over time, measured against the criteria established under item (h) immediately above.</p>	<p>The monitoring component should include required project specific needs, the criteria in h. above, local monitoring efforts and it should also be tied to the State water quality monitoring efforts (i.e. environmental, social, administrative, and water quality elements).</p>	<p>Social surveys (and follow up) for homeowners, officials, students, and farmers. # of grants received, \$ committed. Water quality and ecological trend results (both ambient monitoring and indicators).</p>