

Minnesota Pollution Control Agency

Watershed Planning

Goal: *To assist Watershed Management Organizations in developing and implementing a proactive management plan which will sustain or restore, where feasible, beneficial uses of the water resource.*

Strategy Summary

- Inventory all lakes, stream and wetland resources
- Classify the uses for each (swimming, fishing, wildlife, storm water pond, etc.)
- Identify drainage areas to each
- List goals for each resource
- Monitoring plan to determine if prevention/restoration goals are being met (trends)
- Prioritize resources
- Preventive activities to meet goals and resolve problems for each resource
- Identify who does what (watershed management organization or cities)
- Annually report progress of meeting goals and preventive activities

Over Arching Goal For All Resources

- No direct discharge without a minimum of sediment removal (capital improvement or through local street renewal programs)
- All visible deltas from drainage ways be removed
- Identify appropriate Best Management Practices and who maintains them

Lakes: Goal – protect and restore where possible

- Inventory all lakes
Discussion: A table should be provided listing all lake resources with surface area, mean and maximum depth, watershed area, watershed to surface area ratio and use classification (e.g. swimming, fishing, aesthetic, wildlife). A map should also be provided that shows the location and watershed of each lake resource.
- List goals
Discussion: Lake goals should be based on phosphorus, chlorophyll or secchi. The procedure used for establishing the goal should be discussed. Determine if each lake is meeting the established goal. For lakes where data does not exist or is insufficient to evaluate meeting the goal, define the monitoring activity which will permit such an assessment.
- For lakes not meeting goal, establish a timeline and strategy for restoring to meet goal
- For lakes meeting goal, establish a strategy for sustaining the goal

- Develop monitoring program so that trends can be updated annually

Wetlands: Goal –No net loss and protect & restore where possible

- Develop goal for number of acres within watershed
- Develop sensitivity and/or function classification with management goals to protect and restore where possible. Classification should consider threatened and/or endangered species Management goals should include stormwater treatment, buffers, mitigation standards and hydrology guidelines (example provided)
- For wetlands not meeting goal, establish a timeline and strategy for restoring to meet goal
- For wetlands meeting goal, establish a strategy for sustaining the goal
- Develop monitoring program so that trends can be updated annually

Streams/Rivers: Goal – protect and restore where possible

- Identify if there are any established basin goals
- Identify if there are any impaired waters from MPCA. If standards are violated, the watershed organization will be asked to develop a total maximum daily load (TMDL) for the impairment and implement a plan to restore compliance with water quality standards.
- Determine whether the stream is stable (bank-full flow via Rosgen) and if not, develop a restoration plan to stabilize.
- Identify opportunities to stabilize stream banks
- Identify goals for the resource to sustain the beneficial uses
- Monitor to determine if goals are being met.
- For streams not meeting goal, establish a timeline and strategy for restoring to meet goal
- For streams meeting goal, establish a strategy for sustaining the goal
- Develop monitoring program to determine if goal is being met and update trends annually

Items to consider for Incorporated Areas

1. Inventory of existing drainage systems (ditches, storm sewers, etc.) and their outlets (BMPs).
2. Identify provisions for Local Units of Government to incorporate by Ordinance to meet the goals of the watershed.
 - a) Erosion Control Ordinance
 - b) Building Permit Erosion Control Provision
 - c) BMP's for new construction (rate and volume)
 - d) BMP's for redevelopment (rate and volume)
 - e) ISTS requirements/maintenance (if by pumper)

- f) Fertilizer applications (commercial/residential)
 - g) Septage or other biosolids management
 - h) Buffers from waterways/floodplains (new and redevelopment)
3. Identify Management Goals for the Local Unit of Government
- a). BMP inspection/maintenance frequency
 - b). Street sweeping frequency
 - c). Salt pile BMP's
 - d). Elimination of direct discharges without a minimum of sediment removal consideration of tying to street renewal programs
 - e). Ditch maintenance and soil restabilization
4. Source identification and opportunities to eliminate
- a). Oil recycling receptors
 - b). Solid waste transfer stations
 - c). Commercial/industrial dumpsters (covers)
 - d). Feedlots
 - e). Floor drain inspections (commercial/industrial point of sale)
 - f). Highly erosive soils
 - g). Previously drained wetlands releasing high phosphorus
5. Source identification for agricultural: pastures in waterways, soil loss, crop residual, buffers, drain tile inlets...