

DRAFT

Table 1. Watershed Concerns

This table was developed following the May 15, 2003 Steering Committee meeting. The Steering Committee identified Watershed Concerns and Subconcerns within those broader categories. During the May 15th meeting, the State Designated Uses which those concerns could impair were identified. Table 1 therefore links concerns noted in the St. Joseph River Watershed with their potential to impair designated uses. “Public water supply (surface water supply)”, was identified as a designated use that was being non-applicable in most cases, as all water supplies within the watershed are withdrawn from groundwater sources. However, surface water supplies exist in Lake Michigan and have the potential to be impacted by waters entering the lake from the St. Joseph River. Therefore, this designated use may need to be considered. Groundwater protection was added as a Desired Use (See Table 3), as this is the source of drinking water in the watershed and has been identified as being impaired in some areas. The Concerns listed in Table 1 have not been prioritized and are not presented in any particular order.

Table 1. Draft Watershed Concerns		agricultural water supply	industrial water supply	public water supply	navigation	fisheries	indigenous aquatic wildlife	partial body contact	full body contact	groundwater (desired use)
Concern	Subconcern									
Sedimentation										
	agricultural runoff				x	x	x	x	x	
	construction site runoff				x	x	x	x	x	
	stormwater runoff				x	x	x	x	x	
	streambank erosion				x	x	x	x	x	
	golf course runoff				x	x	x	x	x	
	road-stream crossings				x	x	x	x	x	
	livestock in water bodies				x	x	x	x	x	
	ditch/drain construction and maintenance				x	x	x	x	x	
	gravel road grading runoff				x	x	x	x	x	
Habitat Loss										
	urbanizing natural areas	x	x		x	x	x	x	x	x
	loss of corridors					x	x			
	lack of river set backs					x	x			
	removal of snags					x	x			
	maximum clearance of natural stream blockages					x	x			
	loss of meanders				x	x	x			
	loss of riparian corridors/wetlands					x	x			
	deforestation/fragmentation					x	x			
	trash & litter				x	x	x			
Combined Sewer Overflows										
	overloaded municipal system					x	x	x	x	
	impervious surface runoff overwhelms capacity					x	x			
	lack of separation of stormwater and waste water					x	x	x	x	
	outdated and failing systems					x	x	x	x	
	reduced DO in water bodies					x	x			
	dry weather overflows					x	x	x	x	
Nutrients										
	lack of buffer strips in agricultural fields					x	x	x	x	
	failing or insufficiently sized septic systems					x	x	x	x	
	gravel road maintenance and bridge crossings					x	x	x	x	
	concentrated feeding of wildlife (geese)					x	x	x	x	
	agricultural waste discharge (feedlots, silage, milk house)					x	x	x	x	
	livestock access to surface waters					x	x	x	x	
	improper fertilization & drain maintenance					x	x	x	x	
Biota										
	exotic (invasive) flora & fauna	x	x		x	x	x	x	x	x
	nuisance level native flora & fauna				x	x	x	x	x	
	decreasing biodiversity					x	x			
	urban sprawl, poor land use planning	x				x	x			

Table 1 continued. Draft Watershed Concerns		agricultural water supply	industrial water supply	public water supply	navigation	fisheries	indigenous aquatic wildlife	partial body contact	full body contact	groundwater (desired use)
Concern	Subconcern									
Pathogens										
	livestock in streams	x				x	x	x	x	
	agricultural waste discharge (feedlots, silage, milk house)				x	x	x	x	x	
	CSO's	x				x	x	x	x	
	failing or undersized septic systems	x				x	x	x	x	
	wildlife contributions to the waste stream	x				x	x	x	x	
	incomplete treatment of wastewater	x				x	x	x	x	
Hydrologic Modification										
	impervious surfaces	x			x	x	x			
	floodplain development	x			x	x	x			
	stream channelization	x			x	x	x			
	wetland destruction/construction	x			x	x	x			
	stream flow reductions/blockages	x			x	x	x			
	dam operations	x	x		x	x	x			
	new designated drains	x				x	x			
	loss of riparian buffers					x	x			
Landfills										
	poor placement	x				x	x	x	x	x
	lacking oversight	x				x	x	x	x	x
	ineffective clay liners	x				x	x	x	x	x
	groundwater and surface water contamination	x				x	x	x	x	x
Pesticides										
	high atrazine levels					x	x			x
	destruction of aquatic plants by lake associations					x	x			
	rural, suburban, urban runoff					x	x			x
	golf course, cemetery, park runoff					x	x	x	x	x
	groundwater contamination	x				x	x			x
	road & stream side spraying	x				x	x	x	x	x
Wetlands										
	development loss or impairment					x	x			x
	insufficient mitigation measures					x	x			
	loss to public works projects					x	x			
	loss of fish & wildlife habitat					x	x			
	impairment of water quality	x				x	x			x
	loss of flood protection	x				x	x			
Litter										
	dumping into water bodies				x	x	x	x	x	
	road-stream crossings a special problem				x	x	x	x	x	

Table 1 concluded. Draft Watershed Concerns		agricultural water supply	industrial water supply	public water supply	navigation	fisheries	indigenous aquatic wildlife	partial body contact	full body contact	groundwater (desired use)
Concern	Subconcern									
Urbanization & Land Use										
	industrial pollutants to waterways					x	x	x	x	
	accidental spills into surface and groundwaters					x	x	x	x	
	infrastructure overwhelmed					x	x	x	x	x
	reduced public access to waters of state							x	x	
	loss of recreational opportunities							x	x	
	increased urban stormwater runoff				x	x	x	x	x	
	floodplain development					x	x	x	x	
	illegal fencing				x			x	x	
Animal Waste										
	pet waste				x	x	x	x		
	livestock access to surface waters				x	x	x	x		
	improperly applied manure				x	x	x	x		
	wildlife in nuisance numbers	x			x	x	x	x		
	agricultural waste discharge (feedlots, silage, milk house)				x	x	x	x		