

St. Joseph River 319 Project

Summary of Findings from Interview Process (Round I)

Twelve interviews (21 interviewees) were conducted from December 2003 to January 2004 by KIESER & ASSOCIATES. The Round I interviews focused on county Conservation District representatives and NPDES Phase II Community contacts. Interviews of Conservation Districts conducted covered 13 of the 15 counties in the St. Joseph River Watershed. The DeKalb County, IN Conservation District was not interviewed because only a very small portion of the county lies within the watershed. The Berrien County, MI Conservation District is divided into two districts named for the watersheds lying in that county: Galien River and the St. Joseph River. It was indicated by Ms. Leslie Weatherford that little work was conducted in the St. Joseph River Watershed. Therefore, no interview was conducted. The Conservation District's Resource Assessment was reviewed in lieu of the interview.

Representatives from two NPDES Phase II communities were interviewed: Mr. Allen Butchbaker of Cass County, MI and Mr. Mark Salee and Mr. Joe Foe of the City of Elkhart. Municipalities regulated by USEPA Phase II Stormwater Regulations fall within the mapped Urban Areas (as defined by the 2000 U.S. Census) of South Bend, IN, Elkhart, IN, St. Joseph/Benton Harbor, MI and Kalamazoo/Portage, MI. Buchanan and Niles (in Berrien County). Portions of three townships in Cass County are included in the South Bend Urban Area. The South Bend Urban Area also includes many municipalities and universities in Indiana. The St. Joseph/Benton Harbor Urban Area includes several municipalities in Berrien County. Therefore, there are several potential interviewees to discuss PII community issues.

It was not feasible within the scope of the interview process to interview contacts for each of these. Therefore, a few representative contacts were chosen. The City of Elkhart is managing a grant to model water quality as it relates to *E. coli* in the St. Joseph River. This project, the Watershed Initiative for a Safer Environment (WISE) is joint effort among the Cities of Mishawaka, Elkhart and South Bend. The City of Elkhart was contacted to discuss issues in Northern Indiana Urban Areas. Mr. Butchbaker was chosen to discuss Cass County issues, as he is the County Drain Commissioner and is a member of the Road-Stream Crossing Subcommittee for the St. Joseph River Watershed Management Planning Project. The consulting firm of Fishbeck, Thompson, Carr & Huber (FTC&H) is assisting the Berrien and Cass County communities with their permits. A representative from FTC&H will attend the next Steering Committee meeting, and it is proposed that she serve as an interviewee.

Interviewees with an urban perspective and with a land conservation perspective should be considered for a second round, as agricultural interests were largely covered, in a geographic sense, during the first round. However, it may be necessary to follow up with the Conservation District interviewees to seek more quantitative information, such as the acres of agricultural land managed by conservation tillage.

In general, watershed information derived from the current interview process was divided into programs/improvements and needs/concerns. The major findings are summarized here in each of these categories.

Programs/improvements

- Properly managed confined animal feeding operations are viewed as beneficial to water quality because animals are removed from the fields where they can denude the land and erode streambanks. It was noted that many confined operations spread their manure according to Comprehensive Nutrient Management Plans. In particular, the change to confined hog production in Cass County greatly improved water quality. However, in most counties, the impacts and numbers of animal operations are unknown.
- Preservation of agricultural lands is occurring through land use zoning in a few regions of the watershed. St. Joseph County, IN allows only one residence to be constructed on every 20 acres of land sold in prime agricultural areas. In Wayne and Calvin Townships (Cass County) forty acres are required for each residence, in certain areas. The remaining acreage is used for equine farms, leased for cropping, or preserved as habitat.
- Sewering projects have improved lake water quality in many areas and resulted in decreased nitrate levels in groundwater. These areas include several lakes in Cass County and Steuben County. When connection to regional wastewater treatment plants is not available, clustered treatment operations are being established.
- Section 319, 205(j), 104(b)3 and LARE projects have occurred on several subwatersheds and lakes. Many LARE projects in Indiana are in response to 305(b) listings.
- A 319 grant was utilized to hire an individual to encourage Amish farmers to plant buffer strips and exclude cattle from stream in the six counties (excluding DeKalb) in the Indiana portion of the watershed.
- Townships in Michigan exhibiting land use planning and zoning that protect water quality include Calvin and Wayne in Cass County and Fabius in St. Joseph, MI. Fabius Township recently updated their Master Plan, and Sarah VanDelfzijl of the Rocky River Watershed Management Planning Project will provide a copy when it is finalized.
- An idea for distributing new homeowner packets to Realtors and neighborhood organizations was shared by Sarah VanDelfzijl. Packets can include information on watershed stewardship and can be tailored to septic systems, riparian lands, rural areas and urban properties. MACOG distributed videos on proper septic system maintenance to title companies to be shared with purchasers of homes with septic systems. Focusing educational messages on targeted groups that can then distribute such messages was identified as a successful method of watershed education.
- Habitat protection efforts have been identified in the Paw Paw River Watershed through The Nature Conservancy (TNC) and in agricultural areas in Indiana through the Wood-Land-Lakes RC&D. The RC&D purchases conservation easements. TNC has recently acquired 139 acres of prairie fen habitat, which supports the federally endangered Mitchell satyr butterfly, in the Paw Paw River Subwatershed.
- Indiana has an award program to recognize River Friendly Farmers. Michigan has a certification program (MAEAPs) to promote manure management and crop production techniques. Irrigation tracking was identified as a positive program to protect farmers' water use rights and to assure that aquifers are not overtaxed.
- Drainage funds in some counties in Indiana must be spent in the watershed in which they were collected. For example, in St. Joseph County, the Juday Creek Watershed contains affluent neighborhoods. Therefore, drain fees collected and spent in that watershed allow the funding of habitat protection projects within the creek. Protection of Juday Creek was also identified as being

- enhanced by the volunteer Juday Creek Task Force.
- Indiana has an extensive volunteer monitoring effort ongoing through the Hoosier River Watch. They have identified, for example, that macroinvertebrate communities are in good condition in the South Bend area considering the urban nature of the drainage.
- Indiana designated certain forests as “classified forests” and certain rivers as Natural Rivers for the purpose of preservation efforts.
- Prioritization of watersheds and county-wide land management plans are occurring in Steuben and Noble Counties.
- Cities in Indiana having CSOs were required to submit Stream Reach Characterizations to IDEM. A Long Term Plan for eliminating CSOs is then developed based on the identification of water quality conditions. Potential solutions include separation of sewers, creation of underground reservoirs, upgrade of treatment plants and sewer systems. No new CSOs can be constructed. Therefore, new development can construct sanitary sewers to connect to the existing system, and must either directly discharge or detain stormwater.
- Stormwater and erosion control ordinances were developed in Noble County, and adopted by all but one township. It is expected that ordinances will be developed in many urban areas through the NPDES Phase II requirements.
- Conservation techniques and watershed management are being discussed on farms (during “farm walks”) in LaGrange County and with Legislator breakfasts in Indiana.
- Noble and LaGrange Counties are revising their county land use plans
- Trusting relationships are being developed with Amish farmers in LaGrange County in order to better address water quality concerns associated with agricultural practices.
- A mobile water quality education unit travels to schools and fairs in LaGrange County.

Needs/concerns

- Areas were noted where local volunteer groups are needed, such as Willow Creek in St. Joseph County, where the Highway 331 expansion threatens the watershed.
- Suburban growth is occurring rapidly in the South Bend Urban Area (Juday Creek and Southern Cass County).
- Agricultural participation in programs is low in the Baugo Creek Watershed.
- Wind breaks along farm fields are needed in Kalamazoo County.
- Diesel spills from riparian irrigation pumps were noted as a new public concern in St. Joseph County, MI. However, it was believed that public perception of the problem is much worse than the real impacts.
- The locations of historic agricultural tiled fields is not always known, resulting in accidental releases of manure to surface waters. The east side of Kalamazoo County and Hillsdale County were given as examples.
- More riparian buffers are needed, as many fields continue to be farmed close to the ditches.
- A network to connect agricultural landowners wishing to sell their land to conservation minded buyers is needed, or a type of incentive for protecting agricultural land being sold from suburban development should be adopted (such as the Purchase of Development Rights being examined in Kalamazoo County).
- It was noted that the Michigan Drain Code should undergo a Chapter 22 Revision to allow commissioners to conduct “on-the-land” projects to address erosion. It was noted that drains in some

parts of Indiana are not managed with habitat in mind. Dredging operations can result in the removal of vegetation from banks, exacerbating erosion problems. In Noble County, the surveyor can offer landowners free grass seed to promote the planting of buffers following a maintenance project.

- Geese were noted as a problem in park/beach settings. One drain with a ponded area in Cass County was supporting a large goose population. The flow was restored, eliminating the impoundment and, thus, eliminating the problem.
- Education is needed in urban settings regarding streambank vegetation and fertilizer/pesticide use.
- FEMA maps are often not accurate due to the process of developing the maps or because the development in the watershed frequently changes the hydrology.
- Protection of agriculture is important to maintaining the hydrological character in areas with sandy soils where streams are fed by groundwater, such as Cass County.
- Some landowners tend small herds of livestock by traditional techniques, primarily the Amish. These techniques do not always follow modern practices for watershed protection. There is also a reluctance to use cost-share funds.
- In Indiana, the stream bottom of non-navigable streams is owned by the adjacent landowner. The designation of whether a stream is navigable was made in the 1800s and based on needs at that time. Therefore, several deep streams are not considered navigable. Strong landowner rights issues are also tied to this.
- Standardized land/soil rental rates for CRP Programs across all counties in the watershed were proposed by Noble County.
- Many areas, especially lake communities, have problems with septic systems. However, many of these areas in need have no momentum for establishing sewers.
- Land use plans have been developed in some areas, but are not always followed because of their voluntary nature.
- Exotic species, such as purple loosestrife and zebra mussels, were noted in Branch and Hillsdale Counties.
- Habitat linkages and corridors to connect patches of prime habitats are needed in Hillsdale County.
- Road-stream crossing inventories and an update of the methods is needed in Hillsdale County.
- Sensitive lands and prime farmland need to be identified.
- Gravel pit erosion needs to be addressed in Noble County.
- Some areas in Indiana have a lot of tourism and summer residents, which overload septic systems and cause other watershed concerns.

Next Steps/Needs

The Designated Use Tables were also updated following the interviews. The primary change to the tables was to the designation of uses formerly identified as impaired to threatened. This occurred because it seemed unrepresentative to identify an entire River Valley Segment as impaired when a few to several impaired areas are known. In order to not lose the site-specific impairment information, the scope of Table 4 was changed to encompass site-specific impairments. Formerly, Table 4 was meant to only identify pollutants and sources of pollutants when the entire River Valley Segment was considered impaired for a particular designated use. It is expected that Table 4 will be broadened to become a comprehensive list of all 303(d) water, 305(b) waters, impairments identified in subwatershed reports/management plans and concerns/impairments identified through the interview process.

Interviewees for Round II will potentially include Karen Mackowiak (MACOG, SJRBC, Baugo Creek 319, NPDES PII Contact), Scott King (Friends of McCoy Creek), Jim Coury (Potawatami RC&D), FTC&H (Berrien and Cass County NPDES PII), The Nature Conservancy, Southwest Michigan Land Conservancy and Sarett Nature Center.