

Indiana's Annex 4 Domestic Action Plan (DAP) Advisory Committee Meeting

Western Lake Erie Basin (WLEB)

November 17, 2016

Next Meeting: Thursday, January 26, 2017 at 10:00 a.m.

IDEM Shadeland Office, 2525 N Shadeland Avenue, Indianapolis, IN 46219

1. Attendees (14)

Sarah Delbecq, Jessica Faust, Jeff Frey, Tim Graf, Julie Harrold, Allen Haynes, Greg Lake, Dick Miller, Doug Nusbaum, Bowden Quinn, Marylou Renshaw, Wendy Reust, and Ben Wicker

Attended by Conference Call (2)

Jill Reinhart and Rick Duff

2. Discussion

a. Point contact for the Advisory Committee

- i. Jessica Faust, Indiana Department of Environmental Management (IDEM), jfaust@idem.in.gov.
- ii. Contact for distribution of shared information.

b. Presentation template and summary of Indiana's Annex 4 DAP Advisory Committee

- i. Bowden gave a presentation on Indiana's DAP development to the Save the Maumee organization. This highlighted the need to develop a PowerPoint presentation and updated summary that could be used by committee members who are updating partners and/or the public.
- ii. Identify those interested in development of summary/presentation template.

c. Proposed monitoring sites

- i. A conference call including IDEM, Ohio EPA, USGS from Indiana and Ohio, as well as U.S. EPA Region 5 was held in September to discuss monitoring sites to optimize resources and establish a regional network. IN and OH submitted applications for Great Lakes Restoration Initiative (GLRI) funds to contract with USGS to do the sampling and analyses. The following sites and equipment were included in those applications:

1. IN, place an auto-sampler on the St. Mary's River prior to its confluence with the St. Joseph River to form the Maumee River. IN requested \$200,000 for term of up to 3 years.
2. OH, place an auto-sampler on the St. Mary's River at the OH/IN border in Wilshire, OH.
3. OH, place an auto-sampler on the St. Joseph River at the OH/IN border (check if in OH or IN).
4. OH, install a supergage at the site on the Maumee River in Antwerp, OH where IN will be using the existing USGS auto-sampler data to determine its progress in meeting the Annex 4 P targets.

The U.S. EPA expects to have a decision on the applications by mid-December.

- ii. Once the GLRI award is granted, IDEM will execute a contract with USGS.
- iii. IDEM has secured funding through its State laboratory account to acquire analytical equipment for the Indiana State Department of Health (ISDH) for dissolved reactive phosphorus (DRP) that meets the detectable and reporting limits required for the target values.
- iv. IDEM is in the process of executing a Memorandum of Understanding (MOU) with the ISDH for the equipment and analytical services.

d. Portions of the WLEB listed as impaired

- i. Michigan listed its portion of the near shore of Lake Erie as impaired and will use the Annex 4 process rather than a Total Maximum Daily Load (TMDL) for its restoration.

- ii. Ohio and the U.S.EPA have also agreed that the Annex 4 process and the other planning/implementation projects occurring in OH are the appropriate instruments for water quality restoration.
 - iii. A TMDL is being developed for the St. Joseph watershed within Indiana, Ohio, and Michigan.
- e. Critical/priority areas**
- i. Strive to develop and complete this portion of the DAP prior to public notice.
 - 1. IDEM is continuing to map critical areas identified within Watershed Management Plans (WMPs) located within Indiana's portion of the WLEB.
 - 2. Natural Resources Conservation Service (NRCS) is running a model for prioritizing watersheds found within Indiana's portion of the WLEB.
 - 3. A decision is needed regarding whether there is a difference between a critical and priority area.
 - ii. Will overlay information obtained from different partners/sources regarding Indiana's portion of the WLEB to identify priority/critical areas where efforts should be directed.
 - 1. Focus on water quality through soil health, nutrient management, optimization at point sources, and Best Management Practices (BMPs).
 - 2. Use of Surface Water Assessment Tool (SWAT) model to determine success of conservation BMP.
 - 3. Consider Regional Conservation Partnership Program (RCPP), Maumee River Basin Commission, and The Nature Conservancy (TNC) priority areas.
 - 4. Consider septic information from counties as well as construction stormwater controls from Multiple Separate Storm Sewer Systems (MS4s)/Soil Water Conservation Districts (SWCDs).
 - 5. Consider areas of erosion.
 - iii. Priority areas could incorporate areas with the greatest phosphorus transport data, worst water quality, and interest level/potential for improvement.
 - 1. Consider public land where opportunity for improvement.
- f. Gaps within DAP**
- i. Septic systems and failure rates.
 - 1. Health department participation on advisory committee (need to send invitation).
 - 2. Information from counties.
 - 3. Ordinances or formalized county plans to address.
 - ii. Drainage issues/problems.
 - 1. Drainage board participation on DAP or attendance at drainage board meetings.
 - 2. County policies to adopt conservation practices.
 - 3. Contact state-wide County Surveyor association.
 - 4. Follow-up with organizations/groups associated with stormwater/wetlands.
 - iii. Impact of agricultural tiling.
 - 1. Acquire edge-of-field monitoring data and highlight findings.
 - iv. Erosion issues.
 - 1. Needed buffers and two-stage ditches.
 - v. Removal of riparian corridors from forested and/or wetland to agriculture.
 - 1. Determine source of information, manner of measurement, and goals.
 - vi. Land use.
 - 1. Light Detection and Ranging (LiDAR), tillage transect, cover crop transect, small livestock operations, and septic systems data as well as data within WMPs.
 - vii. Identify wetland restoration areas.
 - 1. Maumee River Basin Commission and TNC restoration areas.
 - 2. Determine interest level and success rate.

- viii. Education and outreach component to bring about behavioral changes.
 1. Determine and/or make the economics' case for what is best for environment and human health.
 2. Need for social indicator studies to measure success of education and outreach.
- ix. Partnership with academia for research and social indicator studies.
 1. Determine need and location of flow gauges on a large-scale and create a network of information.
- x. Enforcement of current regulations to assure compliance.
 1. Development of fertilizer application certification program.
- xi. Needed policy changes, i.e., ban on phosphorus lawn fertilizers.
- g. Level of detail needed when determining whether Indiana's DAP is progressing successfully**
 - i. Need to identify goals and how those will be measured.
 1. Track milestones accomplished, number of events held, number of participants, etc.
 2. Relate conservation practices to water quality monitoring.
 3. Long-term analysis can be accomplished with transect (tillage and cover crop) data.
 4. Note partner's efforts and action plans.
- h. Review of the DAP**
 - i. Identify those interested in reviewing DAP prior to public notice (PN).
 - ii. Considering a document of 50 pages or less.
- i. PN period of the DAP**
 - i. Occur in the first quarter of 2017.
 - ii. Public feedback suggests the length of the comment period regarding the DAP should be 90 days, but at a minimum 60 days.

3. Accomplishments

- a. Shared current activities underway in the WLEB to reduce sediment and nutrient loss and to improve water quality.
- b. Reviewed available water quality monitoring data as well as committee members' knowledge of the WLEB watershed. Preliminarily determined that the St. Mary's watershed is the highest priority for both point and NPS BMPs.
- c. Established criteria for evaluating the approaches that will be set forth in the DAP to reduce phosphorus loads. For example:
 - i. Effect the most change with least cost.
 - ii. Prioritize resources to areas with the most potential for TP and DRP reduction.
 - iii. Employ social indicators.
- d. Established a webpage on ISDA's WLEB website, <http://www.in.gov/isda/3432.htm>.
- e. Agreed on a methodology to determine "watersheds of focus" for the allocation of resources. This includes mapping critical areas from Watershed Management Plans (WMPs), and NRCS modeled "hotspots" and overlaying them with water quality data to identify the intersections. This process is underway.
- f. Determined the most representative site for monitoring Indiana's progress in meeting its phosphorus target loads on the Maumee is at Antwerp, Ohio. The USGS operates a stream-flow gage and an auto-sampler there and follows the recommended Annex 4 protocol collecting the necessary parameters.
- g. Completed two rounds of field reconnaissance for monitoring sites.

- h.** Agreed on additional monitoring sites to determine phosphorus loads including the following:
 - i.** On the St. Mary's at the Ohio/Indiana border. OH is seeking GLRI funding for a site at Wilshire, OH for USGS monitoring.
 - ii.** On the St. Mary's prior to its confluence with the St. Joseph to form the Maumee. IN is seeking GLRI funding for this site for USGS monitoring.
 - iii.** On the St. Joseph at the Ohio/Indiana border. OH seeking GLRI funding for this site.
 - iv.** On the St. Joseph prior to its confluence with the St. Mary's to form the Maumee. As of November, there is no plan for this site.
 - v.** A conference call was held on September 28 with participants from IDEM, IN USGS, Ohio EPA, Ohio DNR, OH USGS, and the U.S. EPA to discuss these monitoring sites to optimize resources and establish a regional network. IN and OH submitted their GLRI applications based on the decisions of this meeting. IN applied to secure GLRI funding of \$200,000 for a term of up to three years.
- i.** Reviewed the collaborative Implementation Plans of Michigan and Ohio, as well as the Expectations for the DAPs by the NGOs
- j.** Commenced drafting the DAP by populating the outline. Draft outline was reviewed at the October meeting. As of November 14th, efforts by agencies and the TNC have been sent for inclusion in the draft.

4. Next Steps

- a.** Continue mapping critical areas and run NRCS hot spot model.
- b.** Lou draft DAP and distribute to committee for editing by December 16th.
- c.** Consider the questions we would like asked regarding the DAP (in addition to its review) for public comment
- d.** Set meeting for January.