# Indiana's Annex 4 Domestic Action Plan (DAP) Advisory Committee Meeting Western Lake Erie Basin (WLEB) April 28, 2017

Next Meeting: TBD

# 1. Attendees (12)

Jessica D'Ambrosio, Jessica Faust, Jeff Frey, Julie Harrold, Allen Haynes, Greg Lake, Janel Meyer, Marylou Renshaw, Jill Reinhart, Kate Sanders, AnneMarie Smrcheck, and Sandy Voglewede

# Attended by Conference Call (2)

Dick Miller and Bowden Quinn

#### 2. Discussion

# a. Point contact for the Advisory Committee

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

## b. Stakeholder interest

- i. The Nature Conservancy (TNC) working with Purdue University (PU) to host a workshop regarding all things drainage for County Surveyors in June.
  - 1. Starting with 10-12 individuals in the City of Kokomo with a special invitation to counties within the WLEB.
  - **2.** Dekalb County Surveyor and Maumee River Basin Commission interested in attending.
  - **3.** TNC will share workshop agenda once developed.

# ii. ErieStat webinar

- **1.** Coalition of environmental groups on Lake Erie participated in webinar to review Ontario, Canada's plan and ErieStat.
- **2.** <u>ErieStat</u> is a platform to report progress toward WLEB phosphorus reduction targets.
- **3.** Indiana's lead is Jordan Seger, Indiana State Department of Agricultural (ISDA).
- iii. Load calculation meeting in Ann Arbor, Michigan
  - 1. Showcased Blue Accounting and ISDA WLEB story map.
  - **2.** Indiana notes that:
    - When calculating loads a tool needs to be used that has the ability to equate loadings found within Indiana receiving streams to best management practices (BMPs) on land, as well as to identify which conservation practices are needed to achieve water quality (WQ) targets.
    - 2. Achieving the spring-time flow weighted mean concentration target of 0.23 mg/l for total phosphorus (TP) will take time.
      - i. Interim measures are needed to track progress.
- iv. The US Geological Survey (USGS) Great Lakes Restoration Initiative (GLRI) edge-of-field studies
  - 1. Indiana's representative is Jeff Frey, USGS.
  - 2. Currently, sediment source tracking is being completed.
    - 1. Samples are taken in-stream, along the bank, and from agricultural fields.
  - 3. PU is performing soil sampling.

- v. Agricultural Research Services (ARS) is completing an edge-of-field study at a site within Dekalb County and Steuben County.
  - **1.** Currently, collecting data for baseline.
  - **2.** Have not yet chose BMP for which to monitor for.
  - 3. Dekalb County SWCD will provide information within DAP Milestone table.
- vi. Nonpoint Source (NPS) Regional Managers meeting
  - 1. Current, proposed fiscal year (FY) 2018 federal budget removes funding for GLRI and 319(h) programs.
  - 2. Indiana Conservation Partnership (ICP) is stressing optimization of resources for the purpose of conservation and the importance of all conservation efforts and/or programs.
- vii. ISDA summer intern exploring how to model Dissolved Reactive Phosphorus (DRP) loads.
- viii. ARS presentation at Dekalb County meeting
  - 1. Regarding urban and agricultural practices for landowners.
  - 2. Presentation parallels DAP well.
  - **3.** ARS will also be presenting at the Agronomy Field Day hosted by the Andersons, Inc. on July 19<sup>th</sup>.
  - **4.** Dekalb County SWCD will share information regarding Agronomy Field Day.
- ix. Annex 4 Subcommittee meeting hosted by National Oceanic Atmospheric Administration (NOAA) in Ann Arbor, MI on May 9<sup>th</sup>-10<sup>th</sup>.
  - **1.** IDEM will provide a summary to the Committee.

## c. Summer meeting in Fort Wayne, Indiana

- i. Meet at the Old Gas House in Fort Wayne, IN for morning meeting and lunch.
  - 1. Located at the confluence of the St. Marys River and the St. Joseph River to form the Maumee River.
- ii. River tour in the afternoon.
- **iii.** IDEM will develop and share Doodle poll regarding the meeting with committee members.
- iv. The Allen County Soil and Water Conservation District (SWCD) will assist in coordinating the meeting and river tour.

## d. Draft DAP

- i. Received comments from NRCS (Jill Reinhart), ISDA (Julie Harrold), Adams County SWCD (Sandy Voglewede), Sierra Club (Dick Miller), and Dekalb County (Allen Havnes).
- ii. Additional comments due to IDEM by May 15<sup>th</sup>.
- **iii.** IDEM will revise DAP incorporating comments and share with Advisory Committee within one (1) to two (2) weeks.
- iv. Review of comments submitted thus far:
  - **1.** Sierra Club developed language for use within the DAP regarding the *Guiding Principles for Achieving Water Quality Improvements* section.
  - 2. NRCS commented on and struck language within the *Land Use in the WLEB* section in which runoff from agricultural land drained by subsurface tile is equated to behaving in the same manner as impervious surfaces.
    - 1. Revise section with information found within comment.
    - **2.** Refer to WLEB story map and State Nutrient Management Plan for language.
    - 3. Identify soil types and infiltration rates of those soils.
  - 3. NRCS commented that the discussion within the urban/rural subsection, located on page 11, includes specific action items, but the agricultural subsection seems to include general action items.

- **4.** Allen County SWCD commented there is an emphasis on crop and tillage conservation practices within the agricultural subsection, located on page 11, however livestock has a large impact as well.
  - **1.** There is much growth in the WLEB regarding animal feeding operations (AFOs).
  - **2.** Allen County SWCD will provide language regarding livestock operations for the DAP.
  - **3.** IDEM will verify AFO information currently cited within DAP with applicable counties.
- **5.** The first bullet list on page 15 regarding flood control and flood management should be listed within the *ICP* section on page 16.
- **6.** There is a gap within the *Partners and Areas of Authority/Responsibility* and *Programs to Address Nutrient Reduction* section as the Conservation Reserve Program (CRP) through the Farm Services Agency (FSA) is not discussed.
  - 1. Incorporate larger scale projects such as buffers, tree plantings, and wetland restoration.
- 7. ISDA has begun analysis of WQ monitoring results utilizing graphs.
  - 1. Plot of WQ data as a reporting mechanism.
  - 2. Antwerp baseline being calculated over the past one (1) to three (3) years by USGS.
  - 3. ISDA and USGS will discuss and collaborate.
- **8.** Further discussion is needed as to adaptive management on pages 1 and 2.
  - **1.** Develop an adaptive management section.
  - Clarify what is meant by adaptive management and how it will be used to meet WQ targets and requirements pertaining to the DAP.
- **9.** Clarification is needed as to development of nutrient criteria for Indiana within page 11.
  - 1. Numeric criteria for total phosphorus for lakes and streams by 2019.
  - 2. Include within Milestone Table.
- **10.** City of Fort Wayne Utilities inquired as to how the DAP TP target of 0.23 mg/l would affect the Tri-state TMDL TP target of 0.30 mg/l.
  - 1. The Long Term Control Plan (LTCP) will be used as the control in terms of meeting limits.
- 11. City of Fort Wayne Utilities commented on first bullet on page 11.
  - 1. Better define and/or clarify "optimization techniques".
- **12.** City of Fort Wayne Utilities acknowledged the difference between legal drains and natural drains.
  - 1. Suggested use of "regulated" versus "unregulated" terminology regarding drains in place of what is currently stated within the last bullet on page 10 and the second bullet within the *Counties* subsection on page 13.
  - 2. The City of Fort Wayne is installing two-stage ditches within drains.
- **13.** City of Fort Wayne Utilities commented rain gardens implemented as an urban BMP are not always practical conservation practice.
  - **1.** City of Fort Wayne Utilities will comment and give examples for *Urban/Rural Sector* section on page 11.
- **14.** USGS and TNC stressed the need to discuss toxic algae and the impact of nitrogen.
  - 1. Nitrogen can act as a larger stressor to tributaries.
  - 2. USGS and TNC will develop discussion for the DAP.

#### e. Milestone Table

- i. Currently received table from IDEM (Jessica Faust), ISDA (Julie Harrold), Allen County SWCD (Greg Lake), and Dekalb County SWCD (Allen Haynes).
- ii. Submit table with action items to IDEM by May 15th.
  - Target load reductions may be omitted for now.
- **iii.** IDEM will incorporate action items and share with Advisory Committee within one (1) to two (2) weeks.
- iv. Review of table and action items thus far:
  - 1. IDEM clarified table for programs and projects assisting to meet WQ targets that began or will begin within the period of 2015-2020.
    - 1. Obtain information from ICP as partners meet twice a year.
    - **2.** Note the number of individuals reached regarding the *Education* and *Outreach* section of the table.
    - **3.** Include monitoring being performed as data should be assessed and discussed.
  - **2.** City of Fort Wayne acknowledged difficulty in anticipating stormwater actions implemented versus planned.
    - 1. Do not want to include within table and commit when may not be able to deliver.
  - 3. Allen County SWCD included target load reductions.
    - 1. Estimated by using the Web Soil Survey.
    - 2. Considered BMPs that producers will install regarding the Phosphorus-Risk Reduction Pilot project.
      - i. Considered funds saved from reduction of loads to determine BMPs.
  - **4.** TNC commented the Regional Conservation Partnership Program (RCPP) is pushing to report load reductions per amount of funding spent.
    - **1.** That is, funding spent to reduce pounds of pollutant per year.
  - **5.** IDEM commented an adaptive management process and projection of action items is needed to determine progress in meeting targets.
    - 1. If don't meet projected action items than note why.
    - A comparison of what was planned versus what occurred is needed.
    - 3. The DAP and Milestone Table are fluid/dynamic documents.
  - **6.** City of Fort Wayne Utilities will reach out to Surveyors Office regarding septic elimination to include within table.

## f. Additional discussion

- i. Priority/focus areas
  - 1. Committee in agreement that should prioritize watersheds at 12-digit HUC.
  - 2. Overlay Watershed Management Plans (WMPs) critical areas, WQ monitoring data, and phosphorus migration.
  - **3.** TNC commented that clarification of what is meant by prioritization is needed.
  - **4.** ISDA commented as to the difference of what is a priority versus what is feasible as a priority.
  - **5.** Allen County SWCD suggested a two-pronged approach.
    - 1. WQ concern.
    - **2.** Willingness for adoption of conservation practices, i.e., the ability to spend funding.
  - **6.** NRCS suggested the need to differentiate between general funds used by all interested parties versus funds used for initiatives.
  - 7. TNC commented as to the need to have flexibility of funding opportunities.
    - 1. TNC will revisit prioritization language and make suggestions.

# g. DAP public notice (PN) and inclusion of questions

- i. The DAP will be PN by posting to IDEM's website.
  - 1. Include map of the basin with PN.
  - 2. Include an introductory paragraph prior to questions.
  - 3. Open-ended format as to not limit commenting.
- **ii.** NRCS expressed the need to simply ask what is missing that should be included within the DAP and what is present that should be omitted from the DAP.
  - 1. Also suggested should inquire as to what the significant barriers to reducing phosphorus loading within the Lake Erie basin are, as well as suggestions to overcoming those barriers.
- **iii.** City of Fort Wayne Utilities suggested inquiring as to actions undertaken by other organizations/communities as part of the DAP.
- **iv.** May be helpful to have demographic as to who is commenting during the PN period.
  - 1. Urban versus rural.
  - 2. Residence within basin.
  - 3. Guidelines as to inquiry of demographics.
- v. There is no legal obligation to respond to comments.
  - 1. IDEM will identify expectations.
  - 2. Formal PN requires response to comments.

## h. Public meetings

- i. Number of events.
  - 1. One event in Indianapolis.
  - 2. Two to three additional events within the basin.
    - **1.** Auburn, Decatur, and/or Fort Wayne.
    - 2. Possibly partner to present at county SWCD Board meetings.
      - i. Adams County meets the 4<sup>th</sup> Thursday of the month at 6:00 nm
  - 3. July and August is good time for producers.
- ii. PowerPoint presentation and outreach materials should be consistent.
- iii. Presentation to Governor's Office.
  - 1. IDEM will verify whether required.

## i. Timeframe

- i. Committee submit DAP comments and completed Milestone Table aside from target load reductions to IDEM by May 15<sup>th</sup>.
- **ii.** DAP will be revised per comments and the Milestone Table will be developed per action items submitted.
  - 1. Both will be resent to Committee members by May 26th.
  - 2. Share with IDEM OWQ AC the week of June 5<sup>th</sup>.
- iii. Committee submit additional PN questions to IDEM June 2<sup>nd</sup>.
  - 1. PN mid-June to July.
    - **1.** 60 day comment period.
- iv. Develop presentation and outreach materials.
  - 1. Hold public meetings in July and August.

## 3. Accomplishments

- **a.** Shared current activities underway in the WLEB to reduce sediment and nutrient loss and to improve water quality.
- **b.** Reviewed available WQ monitoring data as well as committee members' knowledge of the WLEB watershed. Preliminarily determined 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. Use existing programs and optimize partnerships.
  - ii. Effect the most change with least cost.
  - iii. Prioritize resources to areas with the most potential for TP and DRP reduction.
  - iv. Employ social indicators.
- d. Established a webpage on ISDA's WLEB website.
- **e.** Agreed on a methodology to determine "watersheds of focus" for the allocation of resources. This includes mapping critical areas from WMPs and NRCS modeled areas with the greatest phosphorus (P) export potential 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 P 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 (2) 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. OEPA received GLRI funding for a site at Willshire, OH.
  - **ii.** On the St. Joseph at the Ohio/Indiana border. OEPA received GLRI funding for a site at Newville, OH.
  - **iii.** At the confluence of the St. Joseph and St. Marys where the Maumee forms. IDEM received GLRI funding for an auto sampler near the Ferguson Bridge.
  - iv. A conference call was held on September 28, 2016 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 Advisory Committee meeting. Efforts by agencies and the TNC have been sent for inclusion in the draft.
- **k.** Developed *Indiana's GLWQA DAP* presentation for outreach purposes.
- **I.** DAP status and presentation given to Nutrients Annex (Annex 4) subcommittee on February 8, 2017.
- m. DAP status updates given to various environmental organizations on March 8, 2017.
- n. Development of DAP including the Milestones and Action Items table is on-going.

## 4. Next Steps

- **a.** Committee members complete *Indiana's Domestic Action Plan, Milestones and Action Items* with pertinent information dating back to and including 2016.
- **b.** IDEM will revise draft DAP and distribute to committee for additional review by Friday, May 26<sup>th</sup>.
- **c.** Consider the questions for inclusion with the DAP for PN.
- **d.** Schedule and coordinate logistics for June meeting.
  - i. Develop and share Doodle poll as to date of meeting.
  - ii. Consider Old Gas House restaurant as a venue for morning meeting and lunch.
  - iii. River tour in the afternoon.

# 5. Advisory Committee To Do List

- **a.** Allen Haynes, Dekalb County SWCD, will provide information within the DAP Milestone table regarding the ARCS edge-of-field study in Dekalb and Steuben Counties.
- **b.** AnneMarie Smrcheck, City of Fort Wayne Utilities, will comment and give examples for *Urban/Rural Sector* section on page 11.

- **c.** AnneMarie Smrcheck, City of Fort Wayne Utilities, will reach out to Fort Wayne Surveyors Office regarding septic elimination to include information within table.
- **d.** Greg Lake, Allen County SWCD, will provide language for incorporation into the DAP regarding livestock operations within the WLEB.
- **e.** Jeff Frey, USGS, will work with Julie Harrold, ISDA, regarding analysis of WQ monitoring results and graphing those.
- **f.** Jeff Frey, USGS, and Jessica D'Ambrosio, TNC, will develop language concerning toxic algae and impact of nitrogen for the DAP.
- **g.** Jessica D'Ambrosio, TNC, will share County Survey workshop (all things drainage) agenda once developed.
- h. Jessica D'Ambrosio, TNC, will revisit prioritization language and make suggestions,
- i. Marylou Renshaw, IDEM, will provide a summary of the Annex 4 Subcommittee meeting held on May 9<sup>th</sup> and May 10<sup>th</sup> to the Committee.
- **j.** Marylou Renshaw, IDEM, will revise DAP incorporating comments and share with Advisory Committee by May 26<sup>th</sup>.
- **k.** Marylou Renshaw, IDEM, will verify AFO information currently cited within DAP with applicable counties.
- I. Marylou Renshaw, IDEM, will incorporate action items into the Milestone Table and share with Advisory Committee within one (1) to two (2) weeks.
- **m.** Marylou Renshaw, IDEM, will verify expectations of PN and response to comments submitted during PN.
- n. Marylou Renshaw, IDEM, will verify whether presentation of DAP to the Governor's Office is required.
- **o.** Marylou Renshaw, IDEM, will present DAP to OWQ AC the week of June 5<sup>th</sup>.