Executive Summary

The Indiana Water Monitoring Council (InWMC) was created when more than 50 Indiana water professionals from both the private and public sectors met in November 2007 and came to a consensus that such an organization was needed in Indiana to enhance and support water monitoring efforts throughout the state. Since the initial planning that led to the passage of the Council's first set of bylaws by the General Members in 2008, the organization's structure and scope have evolved. The Council's achievements include: hosting field days to demonstrate monitoring methods, organizing symposia that bring professionals and citizens together to discuss timely water-resource issues, building a website that acts as an outreach hub for the Council, and developing a database for sharing member contact information and expertise. With these accomplishments, the InWMC Board of Directors decided at its October 2013 Board meeting that a strategic plan was needed to further refine the Council's scope and direction and to guide its efforts going forward.

The Board held a series of strategic planning sessions in conjunction with its regular board meetings between February and May 2014. The Board's objectives were to: 1) clarify the mission and vision of the InWMC, 2) develop 3-5 year goals, 3) identify specific activities to meet goals, and 4) establish guidelines for measuring success.

The result of that planning effort is presented here in a series of tables that together establish new direction for the Indiana Water Monitoring Council. This strategic plan is presented to the InWMC General Membership in 2015 with implementation to begin in January 2015.

Vision Statement

The Indiana Water Monitoring Council leads the way in improving the ability to address the full scope of water resource issues in Indiana now and in the future.

Mission Statement

The Indiana Water Monitoring Council is a network of water professionals and volunteers dedicated to communication, coordination, and sharing of monitoring information to support the stewardship of Indiana waters.

Goals

The Board identified three primary goals for the Council. Each is presented in this document as a table including the strategies needed to reach the goal and associated timelines for completion.

Improve data sharing, accessibility, quality, and standardization (Table 1)

Foster communication among water professionals (Table 2)

Be a strong organization that provides future-focused leadership (Table 3)

Table 1. Plan for improving data sharing, accessibility, quality, and standardization

Strategies	Now (Yr 1)	Yr1 (Qrt1)	Yr1 (Qrt2)	Yr1 (Qrt3)	Yr1 (Qrt4)	Soon (Yrs 2-3)	Later (Yrs 4-5)	Committee	Leader(s)	Resources Needed
GOAL #1 = Improve Data Sharing, Accessibility, Quality, and Standardization										
Adjust current programs protocols (LARE, 319, etc.) to help keep Purdue's data clearinghouse/inventory up to date	X							N/A	Haviland, Arthur	Links and procedures for posting
Create a list of major data repositories and provide tutorials/instructions (e.g., how to get data out of each repository, doing analyses via simple Excel functions)	X							N/A	Arthur	Design place on webpage; Jody has contact/info
Use social media to post/announce when new data is posted somewhere or a new group is collecting, etc.	X							N/A	Haviland & Bright	Get updates from Purdue inventory
Identify gaps in water quality data sampling	X							Opt. Committee	Frey	
ID and post good reference sites				X				Opt. Committee	Frey	
Teach data documentation sessions (at symposium or via field days)						X		N/A	Arthur	
Write white paper on why data documentation matters and what are the most important elements						X		N/A	Arthur	
Teach data comparability sessions (at symposium or via field days)						X		N/A	Frey	
Write white paper on comparability						X		N/A	Frey	
ID where water quantity data are missing/measured							X	GW Focus Committee	Naylor	Drought Task Force work; plot precip, soil moisture, ET monitoring
ID where ground water data are missing							X	GW Focus Committee	Randy Bayless; Jim Sullivan	
Host data 'mingle' events - get people in the various regions together to talk about water monitoring							X	Outreach	?	

Table 2. Plan for fostering communication among water professionals

Strategies	Now (Yr 1)	Yr1 (Qrt1)	Yr1 (Qrt2)	Yr1 (Qrt3)	Yr1 (Qrt4)	Soon (Yrs 2-3)	Later (Yrs 4-5)	Committee	Leader(s)	Resources Needed
GOAL #2 = Foster Communication Among Water Professionals										
Ensure Web lists and links are all functional and content is current	X							Comm. Committee		
Develop "issues" or "white paper" Web pages to highlight water-resource issues and key contacts doing related work	X							N/A	Naylor	Website posting
Assign "issues" task forces to keep the content current, add new info., etc.	X							N/A	Naylor	
Funnel updates to social media	X					X	X	N/A	Naylor	
Do regular update to members (monthly) – "Council blasts" / water in the news	X					X	X	Comm. Committee	Haviland, Bright, Garner	E-news template
Post snippets with links from these to social media	X					X	X	Comm. Committee	Haviland, Bright	
Send updates to partner organizations' newsletter editors for inclusion (include E-news sign-up for InWMC)	X					X	X	Comm. Committee	Jody, Laura Esman	E-news sign-up link
Host annual symposium in early December (open to public, broad topics)	X					X	X	Symposium Committee	Executive Secretary	Topic chosen by GM, membership table at event, offer free 1-yr membership, symposium
Develop ways to elevate issues within current channels (Directors, Legislators)						X		Board		Regular committee reports, completed issues papers
Host topical "issue focused" seminars that include social events						X		Board		
Engage more with National Water Monitoring Council to share InWMC work							X	N/A	President	

Table 3. Plan for establishing InWMC as a strong organization that provides future-focused leadership

Strategies	Now (Yr1)	Yr1 (Qrt1)	Yr1 (Qrt2)	Yr1 (Qrt3)	Yr1 (Qrt4)	Soon (Yrs 2-3)	Later (Yrs 4-5)	Committee	Leader	Resources Needed
GOAL #3 = Be a Strong Organization that Provides Future-Focused Leadership										
Create list of deliverables and membership benefits we already have	X								Board	
Reach out to Riverwatch volunteers/instructors (get them signed up for E-news, social media)	X								Jody	
Identify current topical work (e.g., groundwater); determine subject gaps	X									
Establish issue-focused task forces and establish regular reporting mechanisms for their activities	X								Naylor	Need issue task force team lead and primary point of contact for reporting
ID and engage university water groups	X							Comm. Committee		Round up contacts and push out one-page solicitation for involvement to them
Send personal invitations to key people to join Council and/or task forces	X								Board	Draft invite email with links to membership and E-news sign-up
Develop work plans for issue task forces (timelines, leaders, etc.)	X							All committees & task forces	Chairs & Hoffmann	
Assign responsible party for issue task force oversight & communications as well as overall strategic plan tracking	X							N/A	Board & Naylor	Summary reporting structure and plan for sharing updates
Market organization through other group's newsletters, list serves, conferences	X					X				
Funnel task force reporting to social media lead	X					X	X			
Identify what and where are water quality 'hot spots'						X		Opt. Committee	Frey	Trend reports
Increase membership participation opps.						X		Outreach		
Find or fund 'staff' position to keep things moving						X		Board		
Review goals and strategies to determine answers to big questions (e.g., non-profit / organizational status, grant mgmt.)						X		Board		

Appendix A

Board of Directors and Committee Work Plans

InWMC 2015-2020 Board of Directors Work Plan

PROJECTS	Now (Yr1)	Yr1 (Qtr1)	Yr1 (Qtr2)	Yr1 (Qtr3)	Yr1 (Qtr4)	Soon (Yrs 2-3)	Later (Yrs 4-5)	Committee Leader	Notes/Resources Needed
Create list of existing deliverables and membership benefits to support membership growth	X			X	X			All	
Send personal invitations to key people to join Council and/or task forces	X			X	X			President	Draft invite email with links to membership and E-news sign-up
Encourage and promote Council's water-resource "issues" work and the development of associated task forces	X			X	X			President	Summary reporting structure and plan for sharing updates is needed
Ensure organizational stability (SOPs documented, file archives, etc.) and products/projects maintained	X					X	X	Executive Secretary	If InWMC moves away from Wild Apricot, all files stored on the system will need to be archived
Ensure that member benefits are growing and increase opportunities for member participation						X		All	Survey members about needs
Review goals and strategies to determine answers to big questions (e.g., non-profit / organizational status, grant mgmt.)						X		All	
Establish volunteer or funded staff positions to maintain momentum						X	X	All	Find retired water-resource professionals that are willing to contribute substantial volunteer time to helping the Council
Promote/market organization, grow reputation, participate in various state or local initiatives						X	X	All	Better understand ongoing and upcoming initiatives
Promote InWMC efforts through the National Water Monitoring Council						X	X	President	
Develop white papers addressing data documentation and comparability						X		TBD	See Table 1 for details
Host events to teach data documentation and comparability methods						X		TBD	
Take action to support and enhance existing data repositories	X					X		All	
Conduct annual review of Council activities as they relate to and support the strategic plan	X					X	X	President	This should be done at each annual General Membership meeting

InWMC 2015-2016 Groundwater Focus Committee Work Plan

PROJECTS	TIMELINE							NOTES	
	Now (Yr1)	Yr1 (Qtr1)	Yr1 (Qtr2)	Yr1 (Qtr3)	Yr1 (Qtr4)	Soon (Yrs 2-3)	Later (Yrs 4-5)	Committee Leader	Notes/Resources Needed
Regular communication between groundwater professionals in Indiana - Groundwater Committee Meetings	X	X	X	X	X	X		Shared responsibilities determined by GWFC	Ongoing
Communicate with InWMC Board	X	X	X	X	X	X	X	Scott, Bruns, Seger	Schedule will follow board meetings; currently bimonthly in odd-numbered months
Advocate for expanded groundwater and soil-moisture monitoring networks in Indiana	X	X	X	X	X	X	X	Korinek, Seger, Bayless	Ongoing
Volunteer Groundwater Monitoring Network	X	X	X					Lampe	January, March, and May of 2015
Educate groundwater professionals at monthly meetings and special events	X	X	X		X			Lampe	March, April, June, and November of 2015
Advance understanding of arsenic in Indiana's groundwater; post results to website	X		X	X				Korinek, Letsinger	April – August of 2015
Advocate for improved understanding of groundwater & surface-water interactions in Indiana	X		X	X	X			Sullivan, Letsinger	June – December of 2015
Attract new members	X	X	X	X	X			All	Presentations at other water organization meetings; personal contacts. March, June, July and October of 2015
Determine groundwater information needs of private sector and public-water providers; support state water planning efforts				X	X			Bayless	Presentations at other water organization meetings; personal contacts. September and October of 2015.
Examine the occurrence of nitrate/nitrite in Indiana's groundwater	X			X	X			Seger, Sullivan	
Nitrate/nitrite educational outreach						X		Seger, Korinek, Scott	

InWMC 2015-2016 Network Optimization Committee Work Plan

PROJECTS	TIMELINE							NOTES	
	Now (Yr1)	Yr1 (Qtr1)	Yr1 (Qtr2)	Yr1 (Qtr3)	Yr1 (Qtr4)	Soon (Yrs 2-3)	Later (Yrs 4-5)	Committee Leader	Notes/Resources Needed
Optimization Committee Meetings	X	X	X	X		Bi-monthly		Frey	
Identify gaps in water quality data sampling	X	X						All	January – March of 2015
ID and post good reference sites	X	X	X					All	Staci Sobat has been tasked by IDEM to assess potential reference sites in IN. January – April of 2015
Identify water quality 'hot spots'	X	X	X					All	These sites include sites that document loads coming into and leaving Indiana as well as those sites that have the highest existing loads to document improvements in the future. January – May of 2015
Create maps of current sampling efforts	X	X	X					All	Jeremy Webber has created all the maps and incorporated feedback to improve them from the committee. January – April of 2015
Write white paper summarizing sampling efforts, including gaps and duplications	X	X	X					All	Bottleneck has been to identify sampling sites with streamgages collocated or close enough to use for load calculation. Jeff, Bert, and Ben Sperl have worked on this and Ben is close to finishing this assessment. January – May of 2015
Develop work plan for issue task forces and review annually			X					All	
Compile table of reporting limits from each agency				x	X			All	
Update Board of Directors quarterly	X	X	X	X	X	Quarterly		Frey	
Convert White Paper to active website	X		X	X	X			All	May – December of 2015

InWMC 2015-2016 Communications Committee Work Plan

PROJECTS	TIMELINE							Committee Leader	NOTES / Notes/Resources Needed
	Now (Yr1)	Yr1 (Qtr1)	Yr1 (Qtr2)	Yr1 (Qtr3)	Yr1 (Qtr4)	Soon (Yrs 2-3)	Later (Yrs 4-5)	Committee Leader	Notes/Resources Needed
Committee Organization and Processes									
Coordinate Communications Committee Meetings	X	X	X	X	X	Ongoing	Ongoing	Jody Arthur	Monthly in short term to get through website revisions and other priority work, then bimonthly.
Identify convention for funneling information up to communications committee for posting content to website	X		X					All committee members	Points of Contact Content for newsletter (Water in the News) → Ashlee Social media → Ashlee Content for the "Have you heard?" section → Matt Event notices → Matt Information to forward via email → Jody
Develop a contact page to direct members to appropriate contact when sending information/content to the InWMC	X		X					Jody Arthur & Matt Worland	Jody to develop page content and Matt to post to site.
Newsletter and Social Media Communications									
Establish communication mechanism w/Purdue to find out when new monitoring projects are added to the Monitoring Inventory	X		X					Jody Arthur	Pending discussion with Laura Esman: Purdue has a new grant that will allow another three years of support but Laura may or may not be the person who will maintain the inventory going forward. Need to speak with her to find out who we should work with on this.
Post information on new monitoring projects added to the Monitoring Inventory on through Social Media channels and in InWMC newsletter	X			X	X	Ongoing	Ongoing	Greg Bright	Ongoing once mechanism for getting this information from Purdue is developed (see #2.1).
Develop a template or list of all the information and preferred format we need for newsletter submissions	X		X					Ashlee Haviland	The purpose of this is to facilitate getting content that is more newsletter-ready so we have to spend less time editing; Can also send this out with content solicitations we do via email (see #2.4).
Set up a bimonthly recurring email in Wild Apricot for soliciting content for the InWMC newsletter	X		X					Jody Arthur	
Publish bi-monthly newsletter	X	X	X	X	X	Ongoing	Ongoing	Ashlee Haviland, Jody Arthur, Matt Worland, InWMC President	Process 1. Ashlee to work with newsletter-ready content and to send any rough content to Jody for drafting into newsletter article 2. Ashlee to combine all content and do layout of newsletter, then send draft to Jody and current president for review 3. Jody to do final revisions, convert file to PDF and upload to site, and email link to members and/or attachment 4. Matt to post link to newsletter on the Water in the News Section of website

	Now (Yr1)	Yr1 (Qtr1)	Yr1 (Qtr2)	Yr1 (Qtr3)	Yr1 (Qtr4)	Soon (Yrs 2-3)	Later (Yrs 4-5)	Committee Leader	Notes/Resources Needed
Explore Wild Apricot's (WA) capabilities for email marketing and other services if WA doesn't provide this functionality	X			X				Jody Arthur	Original planning effort identified the following resources that would be necessary to support activities described in #2.8, 3.1: • E-news sign-up link • Reliable database / list serve software Jody thinks MailChimp would be a good option (free for orgs w/less than 2,000 subscribers and less than 12,000 emails per month. Also easy to use.
Develop a list of partner organizations to whom we'd like to send updates	X		X					Jody Arthur	Jody to solicit board members to identify organizations and contacts to work with
Send updates to partner organizations' newsletter editors for inclusion (include E-news sign-up for InWMC)				X	X	Ongoing	Ongoing	Jody Arthur	Still need to define what these updates will consist of (e.g. council Blasts? InWMC events?) Frequency of updates will depend on type of content we decide to include. In addition, getting an e-news service set up so we can include a subscription link in our updates requires we complete #2.7 and #2.8.
Provide regular (bimonthly) updates to members - "Council Blasts"	X		X	X	X	Ongoing	Ongoing	Jody Arthur	Jody to compile and send. As currently envisioned, the "Council Blast" will be an email sent out bimonthly in the months between board meetings. Council Blasts will contain: • A link to the InWMC newsletter with a bulleted list of the stories featured • A bulleted list of board activities (not all, just the highlights), summarized from the minutes of the previous meetings • Possibly a digest of the links included in the "Have You Heard?" Section of the website Originally planned to send out monthly blasts; Committee will reevaluate frequency in early 2016 to determine feasibility and potential benefit.
Post snippets of content from "Council Blasts" with links to social media channels	X		X	X	X	Ongoing	Ongoing	Ashlee Haviland & Greg Bright	

	Now (Yr1)	Yr1 (Qtr1)	Yr1 (Qtr2)	Yr1 (Qtr3)	Yr1 (Qtr4)	Soon (Yrs 2-3)	Later (Yrs 4-5)	Committee Leader	Notes/Resources Needed
Membership Building Activities & Tasks									
Reach out to Riverwatch volunteers/instructors (get them signed up for E-news and social media)	X		X					Jody Arthur	Jody to discuss w/new HRW coordinator, Carol Newhouse; Need to complete #2.6 in order to provide email sign-up link.
Market the organization through other organizations' newsletters, listservs, conferences, etc. (eg., IWRA)	X	X	X	X	X	Ongoing	Ongoing	All Committee Members + Board Members	This work requires the list developed for #2.7 and materials developed for #3.3.
Develop a member benefits flyer and post a download link on the member benefits page				X				Jody Arthur	Posting a link to download will allow InWMC members to print and distribute at different events they attend.
Contact organizers for water-related events and conferences to ask if we can put flyers out at event	X	X	X	X	X	Ongoing	Ongoing	All Committee Members + Board Members	See #3.3; Requires that someone be in attendance to deliver flyers unless organizer is willing to do it for us. Can also check our events calendar for contacts to ask.
Identify and engage university water groups by rounding up our contacts and sending them the student benefits flyer to encourage student involvement	X			X				Greg Bright & Jody Arthur	Greg has a number of contacts that he will provide. Also need to remind the board to send me their contacts. Once we compile a list and decide on an email marketing service (see #2.6), we need to include a link to subscribe in the email we use to send the flyer. All email marketing services include a database, so this is a built in way to maintain an active contact list for universities. Greg to compile list and Jody to draft and send email.
Draft an invitation email with links to membership and an E-news sign-up for Board members to use in sending personal invitations to key people to join the council and/or committees	X		X					Jody Arthur	
Website Updates & Maintenance									
Figure out how to maintain website	X		X					Matt Worland & Jody Arthur	Jody to take the lead on new content development and updates to existing content and Matt will handle the mechanics of posting content to site.
Break out the "Water in the News" section of the website into two sections	X		X					Matt Worland	One section will be for the InWMC bimonthly newsletter ("Water in the News") and the other for links to water-related news and other information of interest to our members ("Have You Heard?")
Update the board List on the website	X		X					Jody Arthur & Matt Worland	Current board updated in May just prior to election; Will update again after election in June. Jody to develop content. Matt to post to site.

	Now (Yr1)	Yr1 (Qtr1)	Yr1 (Qtr2)	Yr1 (Qtr3)	Yr1 (Qtr4)	Soon (Yrs 2-3)	Later (Yrs 4-5)	Committee Leader	Notes/Resources Needed
Ensure all links and lists on website are functional and current	X		X					Jody Arthur	Pending discussion w/Sara Peel: At January 2015 board meeting, Sara Peel said she would check the links and send the correct links for any that are broken to Jody.
Reorganize the resources on the website and check to make sure all the links are active	X				X			All Committee Members	Need to decide if the materials on this page need to be reorganized (e.g. grouped by different types of users?).
Create a list of major data repositories and provide tutorials/instructions for how to get data out of each +/- analyzing data w/simple MS Excel functions	X				X			Jody Arthur & Matt Worland	Jody to pull together a list to start from (use D.J. Case material) and Matt will post material to website; Once initial set of resources is online, ask board for any additional resources members might know of.