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Process Report

#	Item	Progress
1	Pre-planning	BHRC (covering Jo Daviess, Stephenson, Carroll, Ogle, Whiteside, and Lee counties) contacted planning organizations within the study area for support. Specifically, we solicited assistance from Bi-State Regional Commission (Rock Island and Henry counties), North Central Illinois Council of Governments (Bureau County), and Region 1 Planning Council (Winnebago and Boone counties). Additionally, BHRC created outreach material (including a participation invite letter) and began to develop stakeholder lists.
2	Stakeholder assembly & invites	Each planning organization created stakeholder lists and provided sector-by-sector names, addresses, etc. BHRC used this information to contact stakeholders (and would-be participants) by mail and email. Partner planning organizations followed up with their own calls and emails to stakeholders and reported on outreach progress to BHRC.
3	Kick-off meetings	BHRC advertised kick-off meetings in a northern paper (The Journal Standard), southern papers (Sauk Valley Media and WNS Publications), and on our website. We also distributed information about the kick-off meetings on Facebook (through posts and targeted ads). Furthermore, our partners distributed information about the events within their respective regions. With BHRC facilitating, the kick-off meetings featured IDNR and ISWS presenting in both Deer Grove (Deer Valley Country Club) and Freeport (Stephenson County Farm Bureau). IDNR and ISWS representatives provided information that included historical and process background, as well as region-specific water data. At both events, attendees discussed regional water demand and supply strengths and weaknesses. Other topics included water quality (on the mind of attendees), so-called next steps, and stakeholder committee selection. The Deer Grove meeting took place on April 9, 2018, and the Freeport one on April 12, 2018. At the Freeport gathering, representatives from Boone County, who were invited to and attending the event, asked to be included in the process. Following a discussion among IDNR, ISWS, and BHRC staff, IDNR opted to extend the study area to



		include Boone County (increasing the overall number of study counties to eleven, up from ten). Strengths and weaknesses (of the region's water supply, use characteristics, and other qualities) enumerated by meeting participants are attached. In addition, some speculative goals and objectives from Deer Grove are included.* *Note: for the sake of time and focus – and given participant feedback in Deer Grove – BHRC chose not to discuss goals/objectives at the Freeport meeting).
4	Stakeholder committee meeting	The stakeholder committee met at the Lake Carroll Clubhouse (near Lanark, IL) on May 30, 2018. At the meeting, the ISWS presented its draft demand report for Northwest Illinois. Lecture and Q&A consumed the first 1.5 hours. For the remainder of the meeting, Q&A continued and the group began to discuss future steps. The committee decided to meet during Phase II of the study at the Lake Carroll location again. Before the meeting concluded, BHRC asked participants to provide supplementary written comments and questions.
5	Stakeholder comments & questions	The following comments and questions were recorded at or after the first meeting of the Stakeholder Committee meeting at the Lake Carroll Clubhouse: • Question about IDPH's population projections, used in the ISWS Water Demand Report, which predict population increases in Northwest Illinois. The most recent American Community Survey (2016) shows stagnant or decreasing population for most of the planning area (Table 2.2) • Concern about an assumed increase in employment (especially in light of present day workforce shortages) • Concerns about the exclusion of/reduced emphasis on surface water, recreational uses, and water quality • Desire to see error bars included with illustrations (and questions about the statistical methods used) • Request for a map of all the aquifers contained in or intersecting with the eleven-county region • Query about peaking power plants (both in Lee County) excluded from the demand report • Curiosity about whether or not the hydroelectric plants in Rockton, Dixon, Rock Falls, and Rock Island should be considered



		 Suggestion that the ISWS report writers consider trends in industry, such as the introduction of automation and sustainability measures, as well as growing vs. shrinking sectors Question about whether or not the region is too reliant on ground water, especially those communities next to the Mississippi and Rock rivers (is diversification possible?) Question about whether or not the irrigation systems monitored actually pump from river water or from ground water at certain locations; a related question about whether or not center-pivot irrigation systems can pump at variable rates (and the impact of variable rate pumping) Question about whether or not water quality is related to the types of agriculture widely in use (and about whether or not new practices or crops adopted by the next generation of farmers will address concerns) Question about whether or not to include the decommissioning of the two nuclear generating stations in Cordova and Byron (likely to occur following the expiration of the incentives associated with in the Illinois Future Energy Jobs Act or the projected end of life at each station) in demand projections; these stations consume substantial quantities of water Question about whether or not there are any governmental water authorities within the study area Question about whether or not there are any governmental water authorities within the study area Question about bow private lake communities on centralized systems are classified Desire to see a withdrawal capacity and risk map Desire to address how to respond to requests for withdrawals Question/discussion about water systems and price elasticity
6	Survey	BHRC distributed an online and paper survey, built using Google Forms. 159 respondents participated. For details, please see the supplemental survey documents, including the narrative and illustrated responses.
7	Other outreach	Daniel Payette presented to an Illinois Association of Groundwater Professionals continuing education class (100+ participants) at Kishwaukee Community College in Malta, IL, on April 14, 2018. BHRC staff also promoted related events



	and the aforementioned survey during its regular meetings with local officials (e.g., county board chairs, county staff, Soil and Water Conservation Districts, etc.).



Attachment A – Outreach Materials

Dear Northwest Illinois Water User:

In early 2006, the Illinois Governor's Office, responding to statewide drought conditions, directed the Illinois Department of Natural Resources (IDNR) to develop a comprehensive program for state and regional water supply planning. That program, which has implications for community and economic development, has reached northwest Illinois.

Although more abundant than elsewhere in the United States, local water resources are not unlimited. Northwest Illinois has already grappled with important water supply issues, including:

- Serving current manufacturing, food processing, and energy production needs
- Trends requiring year-round agricultural production (e.g., tomatoes or medical cannabis grown indoors on an industrial scale)
- · Aging municipal systems that hemorrhage millions of gallons of water per year
- Radium and other contaminants in municipal water supplies, requiring expensive treatment or new sourcing
- · Residential restrictions on outdoor water use, especially during extremely dry weather or drought
- · Dry wells reported at local recreational communities and agricultural homesteads
- Development proposals to extract and ship millions of gallons of water away from local aquifers

To kick off the study in northwest Illinois, the partners invite you to attend one of two informational meetings:

- Southern meeting: April 9, 6-8 pm, Deer Valley Golf Club, 3298 Hoover Rd, Deer Grove
- Northern meeting: April 12, 6-8 pm, Stephenson County Farm Bureau, 210 W Spring St, Freeport

Please RSVP online at www.blackhawkhills.com/water or via phone (815-625-3854) by April 5. Governments, private businesses, the agricultural community, local residents, and other water users are invited, and we encourage you to invite others to attend. We believe your participation is vitally important and will ensure a future where water remains plentiful for all of the region's users.

Sincerely,

The Representatives of:











Water Study Local Contact:

Daniel Payette, Blackhawk Hills Regional Council 309 1st Ave, Rock Falls 815.625.3854 daniel.payette@blackhawkhills.com





In early 2006, the Illinois Governor's Office, responding to statewide drought conditions, directed the Illinois Department of Natural Resources (IDNR) to develop a comprehensive program for state and regional water supply planning. That program, which has implications for community and economic development, has reached northwest Illinois.

To kick off the study in northwest Illinois, the partners invite you to attend one of two informational meetings:

SOUTHERN MEETING:

April 9, 6-8 pm

Deer Valley Golf Club | 3298 Hoover Rd. | Deer Grove

NORTHERN MEETING:

April 12, 6-8 pm

Stephenson County Farm Bureau | 210 W. Spring St. | Freeport

Please RSVP online at www.blackhawkhills.com/water or via phone (815-625-3854) by April 5.

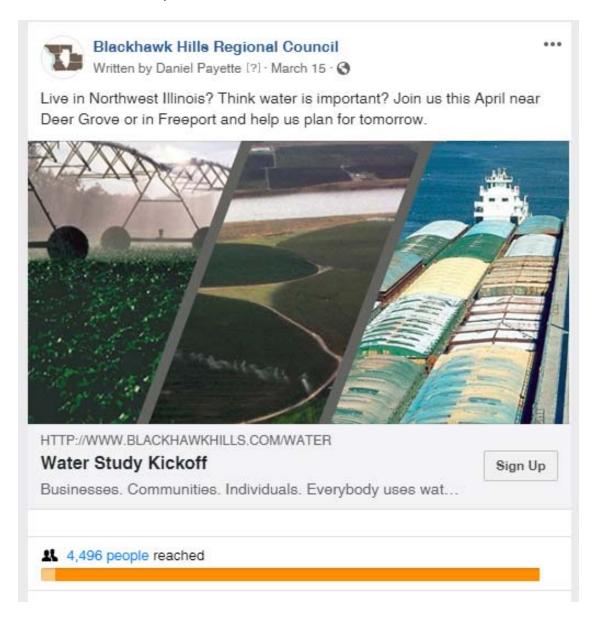
Governments, private businesses, the agricultural community, local residents, and other water users/stakeholders are invited, and we encourage you to invite others to attend.

Partners:

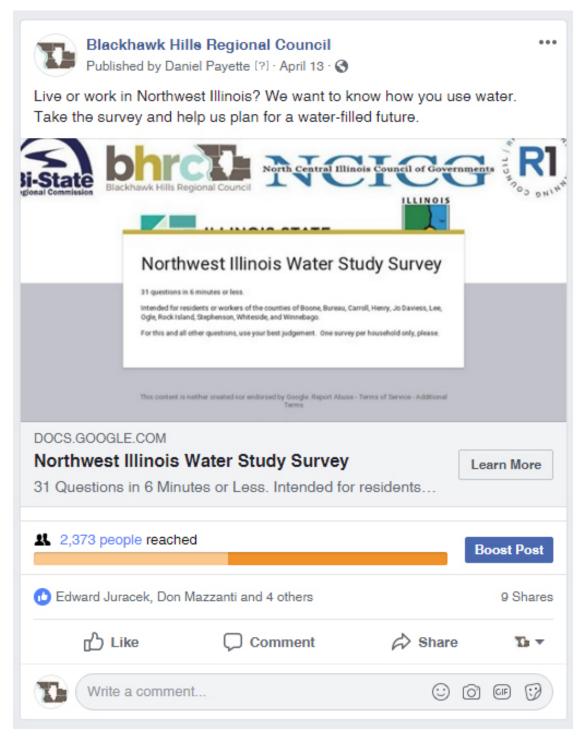
Blackhawk Hills Regional Council
Illinois Department of Natural Resources
Illinois State Water Survey
Region 1 Planning Council
Bi-State Regional Commission
North Central Illinois Council of Governments

www.blackhawkhills.com/water



















AGENDA

WHAT? Northwest Illinois Water Study Kickoff Meetings

DATE: April 9, 2018 (Deer Grove)

April 12, 2018 (Freeport)

TIME: 6 p.m. - 8 p.m.

LOCATION: Deer Valley Golf Club, 3298 Hoover Rd, Deer Grove (April 9)

Stephenson County Farm Bureau, 210 W Spring St, Freeport (April 12)

Preparation or Notes Topic

TIME: 6 p.m. (food and beverages available at this point) PURPOSE: allow for introductions

LEADER: BHRC

2. Water Demand/Supply Planning Overview

TIME: 6:15 p.m.

PURPOSE: provide project background, address the need for planning, summarize next steps, allow for Q&A

LEADERS:

*Wes Cattoor, Illinois Department of Natural Resources

*Walt Kelly, Illinois State Water Survey

3. Pre-Planning Activities

TIME: 7 p.m.

PURPOSE: discuss the region's general strengths and weaknesses, consider planning process goals/objectives, undertake mapping and survey exercises, allow for Q&A

LEADERS: *BHRC

*Meeting attendees

Consider the following prompts:

*What is my greatest concern re: water supply?

Find an example of an Illinois-based water

supply plan here (link to executive

summary).

*What is the region's greatest opportunity

re: water supply? *What is the region's greatest challenge re:

water supply?

*What do I, my community, or my business want out of this planning process or addressed in the final report?

4. Next Steps & Adjournment

TIME: 7:45 p.m.

PURPOSE: review timeline, recruit stakeholder

committee members, adjourn

LEADER: BHRC

CONTACT:

• Daniel Payette, Blackhawk Hills Regional Council, Executive Director, 815-625-3854, daniel.payette@blackhawkhills.com















AGENDA

WHAT? Northwest Illinois Water Study - Stakeholder Committee Meeting

DATE: May 30, 2018 TIME: 2 p.m. - 4 p.m.

LOCATION: Sunrise Room, Lake Carroll Clubhouse, 29-11 Ironwood Dr, Lanark, IL

Topic Preparation or Notes

1. Welcome	
TIME: 2 p.m.	
PURPOSE: allow for introductions	
LEAD: BHRC	
2. Draft Rock River Demand Report Overview	Review draft report, updated tables, and
TIME: 2:05 p.m.	appendices
PURPOSE: provide attendees with a high-level overview	
of the draft demand report	
LEAD: Walt Kelly, Illinois State Water Survey	
3. Draft Rock River Demand Report Discussion	
TIME: 3 p.m.	
PURPOSE: discuss the draft demand report presented by	
ISWS	
LEAD: Attendees	
4. Next Steps & Adjournment	
TIME: 3:55 p.m.	
PURPOSE: discuss phase two meeting schedule	
LEAD: BHRC	

CONTACT:

 Daniel Payette, Blackhawk Hills Regional Council, Executive Director, 815-625-3854, daniel.payette@blackhawkhills.com



Attachment B – Participants

NW IL Water Study Kickoff Meeting Deer Grove – April 9, 2018

Name	Organization	Email
Alex Stuedemann	TPC Deere Run	
Amy Allen	Village of Manlius	
Beth Baranski	League of Women Voters	
Bruce Black	University of Illinois Extension	
David Dyer	City of Galva	
Don Bixby	Chamlin & Associates, Inc	
Doug Mitchell	Tampico	
Eric L. Epps	Sauk Valley Community College, BHRC	
Glen Kuhlemier	City of Rock Falls, BHRC	
Gregg Pearson	Nutrient Stewardship of Northern Illinois	
Jack Novotney	IMEG Corp	
Janice McCoy	University of Illinois Extension	
John Espinoza	Whiteside County Board, BHRC	
Larry Pearson	Nutrient Stewardship of Northern Illinois	
Lisa Bergeron	NIU Center for Governmental Studies	
Lorali Heintzelman	USDA Rural Development	
Mark Kaiser	USDA NRCS	
Mary Latwesen		
Matt Floming	Neumiller Farms	
Matt Hansen	Willett, Hofmann & Associates, Inc.	
Ted Padilla	City of Rock Falls Water Department	
Tony Loete	City of Moline Department of Public Works	
Vern Latwesen	Whiteside County SWCD	
Andrew Shaw	BHRC	
Daniel Payette	BHRC	
Julie Jacobs	BHRC	
Sarah Gardner	Bi State Regional Commission	
Austin Taylor	NCICG	
Kevin Lindeman	NCICG	
Walt Kelly	ISWS	
Wes Cattoor	IDNR	



NW IL Water Study Kickoff Meeting Freeport – April 12, 2018

Name	Organization	Email
Beckie Maddox	Exelon Generation, LLC	
Bill Zink	Village of Mount Carroll Water & Sewer Department	
Bonnie Foust	Village of Shannon	
Brian Dockery	Riverstone Group	
Bruce Johnson	Stephenson County Farm Bureau	
Cory Law	Whiteside County Health Department	
Curt Dambman	Carroll County SWCD	
Dan Kane	Boone County Conservation District	
Dick Marsh	Swedish American Health System	
Doug Block	Hunter Haven Farm	
Jamie Rott	City of Rockford	
Joe Rush	Lake Carroll	
Kyle Saunders	City of Rockford	
Larry McFall	Rock River Water Reclamation District	
Laurel Bergren	ARC Perspectives, Inc	
Mark Rust	Village of Pecatonica Public Works	
Mark Stockman	City of Rockford	
Nick Thompson	Illinois Association of Groundwater Professionals	
Nicole Haas	Illinois Association of Groundwater Professionals	
Phil Crnkovich	East Dubuque Nitrogen Fertilizers, LLC	
Sandra Martell	Winnebago County Health Department	
Shawn Lyons	Lyons Well Drilling	
Steve Haring	MSA Professional Services, Inc	
Thomas A. Kopanski	City of Freeport Water & Sewer Department	
Todd Marshall	Winnebago County Health Department	
Tom Glendenning	Fehr-Graham Engineering & Environmental	
Tom Block	Hunter Haven Farm	
Ed Juracek	BHRC, Carroll County SWCD	
Greg Thoren	Landowner	
Robert Baker	Stephenson County EMA	
Tim Hanson	RRWRD	
Chris Baer	RRWRD	
Nick Hyde		
Dan Switzer		
Joe Ginger	Yellow Creek Partnership	
Dennis Bonnet		



Matt Keller	Farmer	
Ernst Nemeth	ARC Perspectives, Inc	
Ken Terrinoni	Boone County Government	
Sherry Branson	Boone County Board	
Andy Shaw	BHRC	
Dan Payette	BHRC	
Julie Jacobs	BHRC	
Ben Rohr	R1PC	
Jon Paul Diipla	R1PC	
Wes Cattoor	IDNR	
Daniel Abrams	ISWS	
Jason Zhang	ISWS	



NW IL Water Study - Stakeholder Committee Meeting Lake Carroll - May 30, 2018

Name	Organization	Email
Adam Holder	Fehr Graham	
Alex Stuedemann	TPC Deere Run	
Angela Freyermuth	US Army Corp of Engineers	
Beckie Maddox	Exelon	
Ben Adolph	Midwestern BioAg	
Beth Baranski	League of Women Voters of Jo Daviess County	
Bonnie Foust	Village of Shannon	
Bruce Black	Uofl Extension	
Dan Kane	Boone County Conservation District	
Gerry Pearson	Nutrient Stewardship	
Greg Thoren	Nutrient Stewardship	
Harold Albrecht	Albrecht Well	
Jamie Rott	City of Rockford	
Joe Rush	Lake Carroll Association	
Jon Phillips	Midwestern BioAg	
Kyle Saunders	City of Rockford	
Loralia Heitzleman	USDA RD	
Madan Maharjan	NIU	
Mike Reibel	Ogle County Planning & Zoning	
Nicole Hass	IAGP/Jo Daviess County SWCD	
Rick Vondra	CHS, Inc	
Sherry Branson	Boone County Board	
Tara Cullison	Resident	
Todd Marshall	Winnebago County Health Department	
Andrew Shaw	BHRC	
Daniel Payette	BHRC	
Julie Jacobs	BHRC	
Sarah Gardner	BSRC	
Austin Taylor	NCICG	
Branden Gaber	R1PC	
Colin Belle	R1PC	
Walt Kelly	ISWS	
Wes Cattoor	IDNR	



Attachment C – Strengths

Resp.	Strength(s) – combined Deer Grove and Freeport responses Lot of vertical faults for aquifer diversity, generally good quality of water
2	Ample water supply, diversity of business/industry/residential, smaller communities-population of 25K or less & many less than 5K, well managed-maintained municipal water facilities
3	Brings land value to the area
4	Fair amount of water supply, Lake Carroll tax values helps schools
5	Four rivers, different aquifers, quantity of water, conservation practices
6	Good volume producing wells, public & elected officials are starting to see the need for investment, metering programs are promoting conservation
7	Good water supply, increase in water conservation, increase in public education
8	Have always had the needed quantity of water (public use), water needed for recreation, plenty of water for wetlands
9	Healthy aquifer recharge rates
10	Healthy aquifer, good recharge rate
11	Healthy aquifer, low industrial usage
12	High quality water supply, low demand on aquifer in East Dubuque, 800' & lower better quality than river level water
13	Industry support, good water supply, high recharge rate in Boone County
14	Lots of water, regional environmental planning is a priority, new hazard mitigation plan (Winnebago Co), high biodiversity in Rock River & Kishwaukee River
15	Natural beauty of water systems in region
16	Plentiful regional aquifer
17	Rechargeable aquifer
18	Recreational opportunities
19	Rivers, good quality water, volunteer conservation
20	Sandy bottom lands, control of water levels by lock & dams
21	Steady water supply
22	Subsurface geology, lock & dam system on the Mississippi



Attachment C – Weaknesses

Resp.	Weakness(es) – combined Deer Grove and Freeport responses
1	Abandoned wells, lack of samples, recharge challenges
2	Abundance of abandoned wells, leaky distribution lines & infrastructure
3	Aging water infrastructure
4	Barium & radium levels; abandoned wells
5	Declining industrial base, karst
6	Farmers get picked on for water shortages - lack of understanding
7	Hydraulic fracturing if it comes to our region
8	Knowledge deficit re: water control, water usage is high for industry, the IEPA has declared Boone County as highly sensitive to contamination due to our geology, our river's water level is dropping as Joliet's cone of depression is spreading outward, we do not plan for growth using a SAR map - we look at 2D maps instead, lack of funding for 3-D mapping
9	Lack of knowledge by homeowners as to use
10	Lack of understanding of water supply issues, removal of vegetation in fields, very leaky old municipal water systems
11	Leakage of 100-year-old system, no backflow prevention
12	More extreme weather events - flooding, rainstorms
13	Multi levels (depths) of radium 226 & 228, shallow aquifer high in iron & manganese, total hardness, some unregulated contaminants occurring, public water distribution systems are failing, inflow & infiltration displacing water supplies
14	Old farm wells must be abandoned
15	Old infrastructure, significant demand, large-scale stormwater issues, public education on issues
16	Perceived abundance leads to lack of conservation
17	Pollutants in water, methods of distribution, increasing methods of contamination
18	Radium is a serious challenge (economically for small villages)
19	Radium levels vary, protect surface water
20	Radium, increased levels of nitrates in municipal systems, strain on local & county gov. to maintain & expand water facilities, lack of consumer awareness regarding the true value of our water supply & clean water supply, many business/industry/residential that may negatively impact watershed by lack of regulatory compliance/ignorance
21	Radium, iron, hardness
22	Slowed population growth/population loss = fewer people to share the costs of infrastructure maintenance/upgrades
23	Soil and/or nutrient runoff-loss, aging infrastructure
24	Taxes high and incentives very low, no industry, Lake Carroll - drugs, age of population (old), need farmers involved - not many at meeting tonight
25	Watershed contamination, protect shallow H2O, no water conservation



Attachment D – Miscellaneous

Suggested goals & objectives (from Deer Grove only):

Goal	Objective	Objective	Objective	Objective	Objective
Conserve groundwater	Draw from surface water when possible for large users	Put a premium on groundwater use	Support creative demonstration projects that conserve groundwater	Promote projects and practices that increase infiltration and reduce runoff	Consider pros & cons of a groundwater allocation system
Keep the rivers & aquifers pollution-free	Stop the erosion of Lawrence Park by the Rock River each winter	Develop the Hennepin Canal for further recreational use (clean the east bank like the west bank)			
Committee composition	Health department employees, water/wastewater engineers	Well drillers, farm/supply, fertilizer/irrigation	Water company representative (i.e., Illinois American)		
Good representation from area not too far away Offer home gardeners strategies, tips, & resources for reducing					
H2O consumption while being able to grow plants, fruits, & veggies for their family use					
Develop a long range plan to address	Identify largest consumers of H2O	Identify alternative sources of H2O	Outline productive conservation		



Goal	Objective	Objective	Objective	Objective	Objective
potential future H2O			efforts/economic		
deficits			impacts		
Identify key areas of					
water use and potential					
demand					
Learn more about what	Develop a system/				
is the state of our water	organization that can				
supply	assemble and disperse				
	factual information in				
	regards to protecting				
	our water supply in				
	terms of both quantity				
	and quality				
Protect water quality	Promote projects and				
	practices that increase				
	infiltration and reduce				
	runoff.				
Address recycling of					
WWTP effluent					



Comments received on our Facebook survey promotion:



Georgann Castro Did you ever wonder why we have so many floods these days. Could it be because the farmers all tile their fields and the water does not settle to the earth but is hustled off via drainage tiles to the nearest creek

Like - Reply - Message - 20w



Blackhawk Hills Regional Council Hi, Georgann. Thanks for commenting. Flooding is an important issue, but this study is focused on water use and availability. We're trying to determine (through these meetings and other research) whether the region has enough water to support existing and future uses - whether by businesses, communities, or

Like - Reply - Commented on by Daniel Payette [7] - 20w



Georgann Castro That's the point. Water that is redirected to creeks rather than being allowed to reach the aquifer goes to Louisiana . Not here for use here. That has to be consid er red 8n any discussion regarding available water

Like - Reply - Message - 20w



Supplemental Documents

The following are enclosed:

- Survey form
- Survey narrative & report
- Illustrated survey responses
- Communication plan