



BOARD REPORT

TO: VILLAGE PRESIDENT & BOARD OF TRUSTEES

FROM: SCOTT KOEPPPEL, VILLAGE ADMINISTRATOR
BRAD MERKEL, PUBLIC WORKS DIRECTOR

SUBJECT: ENGINEERING ENTERPRISES, INC. (EEI) MEMO TITLED WATER SUPPLY CAPACITY FOLLOW-UP FROM VILLAGE BOARD DISCUSSION ON AUGUST 18, 2026, AND SUBSEQUENT EMAIL CORRESPONDENCE FROM THE VILLAGE PRESIDENT

AGENDA: September 15, 2026

DATE: September 8, 2026

ISSUE

Shall the Village Board discuss the attached memo from EEI dated 9-1-2026?

DISCUSSION

During the September 1 Village Board Meeting, Trustees requested that a discussion item be added to the agenda of the September 15 Village Board Meeting to discuss the memo from EEI RE: *Water Supply Capacity Follow-up from Village Board Discussion on August 18, 2026, and Subsequent Email Correspondence from the Village President.*

The memo evaluates the Village's available water supply capacity. The memo includes prior analysis of the Village's water system in 2022 and estimates for developments that were approved since then, plus "Future Residential Development – TBD". The memo also includes attached correspondence from the Village President.

COST

There is no cost for the discussion.

ATTACHMENTS

Memo from EEI dated 9-1-2026

RECOMMENDATION

The Village Board discusses the attached memo and asks the Village Administrator and Public Works Director questions.



ENGINEERING ENTERPRISES, INC.

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MEMO

To: Village President and Board of Trustees

From: Michele L. Piotrowski
Vice President - Water

Date: September 1, 2026

Re: *Water Supply Capacity Follow-up from Village Board Discussion on August 18, 2026 and Subsequent Email Correspondence from the Village President*

EEI Job #: SG2307-D

I am writing in response to the discussion regarding water supply capacity at the August 18, 2026, Village Board meeting.

Based on the discussion at that meeting, my understanding was that Village staff would work with Engineering Enterprises, Inc. (EEI) to evaluate the Village's available water supply capacity and provide the results to the Village Board once the analysis was complete. Following the meeting, Village Administrator Scott Koeppel met briefly with Danielle Marion and me on August 20, 2026, to discuss the request, and Danielle and I began compiling information on annexed and approved developments, as well as other developments under consideration.

However, following subsequent emails from Sue Stillwell (attached) requesting an expedited calculation based on specific developments, and given the limited time available due to staff PTO and EEI's resignation, we were unable to develop a comprehensive list of all annexed, approved, proposed, and potential developments. As a result, the analysis presented herein focuses on the specific developments identified by Ms. Stillwell.

Prior to presenting the requested analysis, it is important to understand the intent and basis of the Water System Master Plan. The purpose of the Master Plan was to develop a long-term strategy for the Village's water system and evaluate future system needs based on projected growth. It was not intended to evaluate any specific development, including The Grove. Population projections were based on the Chicago Metropolitan Agency for Planning (CMAP) 2050 forecasts, and the Village's historical per-capita water demand of approximately 70 gallons per day (gpd) was used to estimate future water demands. These planning objectives and assumptions were confirmed by Village staff at that time.

As development discussions progressed, including those involving Crown and the potential Grove development, EEI was asked whether sufficient water supply capacity existed to accommodate

future growth without constructing an additional well. To address that question, we evaluated the system's firm capacity, which is defined as the ability to meet maximum day demand with the largest well out of service. A summary of that analysis is provided in the table below.

Demand	Known Potential Development at the Time of the Water Study (2022-2023)									
	Acres	Units	PE/Unit	GPD/PE	PE/Acre	Average Day Demand (ADD) (gpd)	Average Day Demand (ADD) (gpm)	Maximum Day Demand: Average Day Demand Ratio MDD:ADD	Maximum Day Demand (MDD) (gpd)	Maximum Day Demand (MDD) (gpm)
Existing Water System 2022						794,340	552	2.01	1,599,000	1,110
The Grove	760			80	9	547,200	380	2.25	1,231,200	855
Total							932			1,965
Total Firm Capacity of the Village's System:										2,400
Excess/Deficit of Supply										435

Note: The planning assumption of 80 gpm per population equivalent was established in coordination with Sugar Grove LLC during the planning process due to a higher ratio of commercial/industrial to residential within that specific area.

Based on the information available at the time the Master Plan was completed and the Grove Annexation Agreement was considered, the analysis indicated that an additional well would not be required, and approximately 435 gpm of excess firm capacity remained available to serve future development.

Since completion of the Master Plan, however, several additional development proposals have emerged, some of which have advanced significantly and were not specifically reflected in the growth assumptions used at the time of the Master Plan. Accordingly, based on the discussion at the August 18 Village Board meeting and the developments identified in Ms. Stillwell's correspondence, EEI performed an updated analysis specific to those developments.

Demand	Acres	Units	PE/Unit	GPD/PE	PE/Acre	Average Day Demand (ADD) (gpd)	Average Day Demand (ADD) (gpm)	Maximum Day Demand: Average Day Demand Ratio MDD:ADD	Maximum Day Demand (MDD) (gpd)	Maximum Day Demand (MDD) (gpm)
Existing Water System 2022						794,340	552	2.01	1,599,000	1,110
Settlers 5 & 6		94	3	70		19,740	14	2.25	44,415	31
Brighton Ridge - SF		174	3	70		36,540	25	2.25	82,215	57
Brighton Ridge - TH		148	3	70		31,080	22	2.25	69,930	49
The Grove	760			80	9	547,200	380	2.25	1,231,200	855
Future Residential Development - TBD		794	3	70		166,740	116	2.25	375,165	261
Sugar Grove Fire Protection District Training Facility						1,000	8	2.25	2,250	19
Total							1,116			2,381
Total Firm Capacity of the Village's System:										2,400
Excess/Deficit of Supply										19

Based on this review, the Village's available water supply capacity appears to be sufficient to accommodate the developments evaluated. The analysis shows an excess of 19 gallons per minute (gpm). This result should also be viewed in the context of the conservative assumptions used in the evaluation. For example, the analysis assumes future developments will have higher peak-day water demands relative to average daily use than the Village currently experiences. In addition, residential water consumption across northeastern Illinois has generally declined over time due to the widespread adoption of water-efficient plumbing fixtures and appliances. The population assumptions used in the analysis are also conservative, with 3 residents assumed per housing unit compared to the U.S. Census average for the Village of Sugar Grove of

approximately 2.67 residents per household. While water demands should continue to be monitored as development occurs and usage patterns evolve, the results indicate that the Village's water supply capacity is generally adequate to serve the projected growth.

As noted above, this analysis is not intended to be a comprehensive evaluation of all annexed, approved, proposed, or potential developments, as sufficient time was not available to compile and verify a complete development inventory. Nevertheless, the developments evaluated indicate that development activity may be occurring at a pace that exceeds the growth assumptions established during the preparation of the current Water System Master Plan.

As has been stated previously, if actual growth patterns differ materially from the assumptions used in the Master Plan, an updated study is warranted. Accordingly, the Village may wish to consider updating its Water System Master Plan and including a new aquifer sustainability analysis as part of that effort to ensure future planning decisions continue to be based on current growth trends and available water supply information.

I also recommend the Village assess the amount of connection fees anticipated from these developments and develop a plan to fund Water Works System improvements over the next 20 years.

I appreciate the opportunity to provide this technical perspective.

Table No. 2-1: Existing Water Supply Summary

Village of Sugar Grove, Kane Co., IL

WELL NO. (STATE ASGD ID NO.)	AQUIFER ¹ SG SL GP SP IG MS						DEPTH (BELOW GRADE)			EQUIPMENT INSTALL DATE	DESIGN CONDITION		INSTALLED MANUFACTURER AND TYPE		PUMPING ASSEMBLY CONDITION		COMMENTS
							WELL (FT)	CASING (FT)	PUMP (FT)		FLOW (GPM)	TDH (FT)	PUMP	MOTOR	PUMP	MOTOR	
Backup/Emergency Wells																	
4 (WL20110)				▲	▲		1,475	20" CASING TO 57'; 16" CASING TO 441'5"; 15.25" HOLE 441'5"-801'; 12" CASING 801'-988"; 12" HOLE TO 1,475'	348	2000	250	470	Christensen 7WALC - 6 Stage	Franklin 40 HP 460V	Repaired	Replaced	Megging of motor/cable assembly recommended to determine down-hole resistance; pump inspection recommended for 2023.
									1993	250	470	Christensen 7WALC - 6 Stage	Franklin 40 HP 460V	Rebuilt	Rehab	Regular Maintenance	
									1988	250	470	Christensen 7WALC - 6 Stage	Franklin 40 HP 460V	New	Rebuilt	New submersible pump installed	
									1978	250	470	Christensen 7WALC - 6 Stage	Franklin 40 HP 460V	New	New	Original Installation	
5 (WL20088)		▲	▲				200	8" CASING TO 51'; 7.6" HOLE TO 200'	40	1992	350	208	L&B 8RKHC - 8 Stage	U.S. 30HP 230V	Replaced	Rebuilt	Pump inspection and possible well rehabilitation recommended for 2022.
										1979	350	208	L&B 8RKHC - 8 Stage	U.S. 30HP 230V	Replaced	Replaced	
										1975	350	208	L&B 8RKHC - 8 Stage	U.S. 30HP 230V	Rebuilt	Rebuilt	Converted to Water Lube
										1972	350	208	L&B 8RKHC - 8 Stage	U.S. 30HP 230V	N/A	Rebuilt	
									40	1970	350	208	L&B 8RKHC - 8 Stage	U.S. 30HP 230V	New	New	Original Installation
7 (WL00737)	▲						103	16" CASING TO 80'; 16" WELL SCREEN FROM 80'-100'; 42" HOLE TO 103'	70	2016	600	200	L&B 10RKHC - 6 Stage	U.S. 50 HP 230/460V	Rebuilt	N/A	Pump inspection and well rehabilitation recommended for 2027
									70	2004	600	200	L&B 10RKHC - 6 Stage	U.S. 50 HP 230/460V	Rebuilt	N/A	New column pipe, boreblast and SJ
									70	1991	600	200	L&B 10RKHC - 6 Stage	U.S. 50 HP 230/460V	New	New	Original Installation
Primary Wells																	
8 (WL01400)				▲	▲		1,475	18" CASING TO 120'; 14" CASING TO 1080'; 13" HOLE TO 1,475'	718	2013	700	914	FS/BJ 10MQH - 23 Stage	FS/BJ 200 HP 460V, Type H	Rebuilt	Rehab	Inspection and service of pump and motor recommended for 2026.
									701	2003	700	874	FS/BJ 10MQH - 22 Stage	FS/BJ 200 HP 460V, Type H	New	New	Original Installation
9 (WL01473)				▲	▲		1345 (shortened from 1420 due to unstable geologic formation)	19" CASING TO 190'; 14" CASING TO 1185'; Aquastream Flow Control Unit from 1163' to 1333'	710	2005	700	765	FS/BJ 10MQH - 19 Stage	FS/BJ 200 HP 600V, Type H	New	New	Original Installation; Layne recommends rotating leads at the starter panel to possibly improve slight amp unbalance - inspection and service of pump and motor recommended for 2025.
10 (WL01678)				▲	▲		1,432	24" CASING TO 110'; 18" CASING TO 1267'; 21" HOLE TO 1,432'	893	2021	1,000	805	FS/BJ 12EMM - 13 Stage	FS/BJ 300 HP 460V, Type H	New	New	Reduced Voltage Auto Transformer (RVAT) Motor Starter for Well Pump replaced; inspection of pump components recommended for 2031.
									893	2006	1,000	805	FS/BJ 12EMM - 13 Stage	FS/BJ 300 HP 460V, Type H	New	New	Original Installation - Per Village, Layne installed a different motor than the one the Village ordered due to a manufacturer mix-up. The substitute motor was run to failure and Layne came back out and installed the correct motor (which the Village had and sat unused) in 2021
11 (WL01679)				▲	▲		1,400	24" CASING TO 75'; 18" CASING TO 1275'; 17" HOLE TO 1,400'	970	2019	1,000	950	FS/BJ 12EMM - 15 Stage	FS/BJ 400 HP 2300V, Type H	Replaced	New	All column piping replaced, new motor installed. Pump inspection recommended for 2029.
									970	2007	1,000	950	FS/BJ 12EMM - 15 Stage	FS/BJ 400 HP 2300V, Type H	New	New	Original Installation
TOTAL DESIGN FLOW CAPACITY - ACTIVE WELLS ³												3,400 GPM					
												4.90 MGD					
TOTAL DESIGN FIRM CAPACITY (WITH LARGEST OUT) - ACTIVE WELLS ³												2,400 GPM					
												3.46 MGD					
TOTAL DESIGN FLOW CAPACITY - ALL WELLS:												4,600 GPM					
												6.62 MGD					
TOTAL DESIGN FIRM CAPACITY (WITH LARGEST OUT) - ALL WELLS:												3,600 GPM					
												5.18 MGD					

Notes:
1. Aquifer Designations: SG = Sand & Gravel; SL = Silurian Dolomite; GP = Galena-Platteville Dolomite; SP = St. Peter (Ancell) Sandstone; IG = Ironton-Galesville Sandstone; MS = Mt. Simon Sandstone
2. UN = Unknown
3. Active Wells include Wells 8, 9, 10, & 11, from which water is treated at the corresponding WTP (Well 8 WTP, Well 9 WTP, and Wells 10 & 11 WTP)

Michele Piotrowski

From: Sue Stillwell <sstillwell@sugargroveil.gov>
Sent: Tuesday, August 25, 2026 10:37 AM
To: Michele Piotrowski; Scott Koeppel; Danielle Marion
Cc: Tracey Conti; Brad Merkel; James Vasselli; Brian Miller
Subject: RE: 88 & 47 Water System Information

EXTERNAL SENDER: This email originated outside of EEI. Do not click links, open attachments, or respond if it appears to be suspicious.

Michele,

I did not say **active and approved developments**, at this point you are taking with the Village President is asking of you, changing the terms and then charging for it. You are also delaying a filing with your shenanigans.

The question is not how many GPM are available after **active and approved developments**.

The question is how many GPM are available after every single phase of the Grove Development at 9PE per gross acre x 760acres and 1,126 residential units approved or proposed.

Danni, please see the question above, it cannot be restated as “active and approved developments”. I am in need of the answer to that exact question.

Michele, I have been asking you to answer that direct question and over and over you send unrelated information, try to answer a completely different question etc and direct miscellaneous information sent to our Village Board.

Please answer my direct question. This is now Day 7 of trying to get you to answer that exact question.

Sue



Sue Stillwell

Village President | [Village of Sugar Grove](#)

160 S. Municipal Dr., Suite 110, Sugar Grove, IL 60554

T: 630.391.7200 | F: 630.391.7210 | E: sstillwell@sugargroveil.gov

From: Michele Piotrowski <MPiotrowski@eeiweb.com>
Sent: Tuesday, August 25, 2026 10:25 AM
To: Sue Stillwell <sstillwell@sugargroveil.gov>; Scott Koeppel <skoeppel@sugargroveil.gov>
Cc: Tracey Conti <tconti@sugargroveil.gov>; Brad Merkel <bmerkel@sugargroveil.gov>; James Vasselli <james@jmvchicagolaw.com>; Brian Miller <brian@jmvchicagolaw.com>
Subject: [EXTERNAL] RE: 88 & 47 Water System Information

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Sue,

In follow up to the discussion at last Tuesday's Village Board meeting, Village Staff is working on an inventory of active and approved developments. I have exchanged emails with Danielle yesterday, and then I followed up with some further clarification requests a few minutes ago. Once we receive the full inventory from Staff, we will assess how long it will take to complete the calculation and forecast when we will be able to respond.

Scott – Please forward this to the Village Board.

MICHELE L. PIOTROWSKI, PE, LEED AP

Vice President / Water

MPiotrowski@eeiweb.com

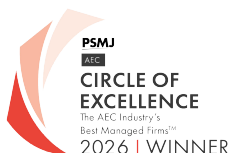
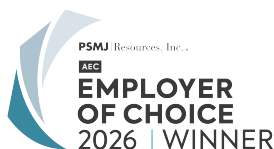
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From: Sue Stillwell <sstillwell@sugargroveil.gov>

Sent: Monday, August 24, 2026 4:42 PM

To: Michele Piotrowski <MPiotrowski@eeiweb.com>; Scott Koeppel <skoeppeel@sugargroveil.gov>

Cc: Tracey Conti <tconti@sugargroveil.gov>; Brad Merkel <bmerkel@sugargroveil.gov>; James Vasselli <james@jmvchicagolaw.com>; Brian Miller <brian@jmvchicagolaw.com>

Subject: RE: 88 & 47 Water System Information

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Michele,

Your avoidance of answering my direct question is now causing a delay with a filing that I was “strongly recommended” by the local municipal comptroller to file with another government agency.

I have now been waiting for 6 days for you to answer my question.

Please answer this question in GPM:

As of September, 2024 you had provided information in the approval hearing that stated Sugar Grove had 500 GPM remaining to use for future development. My concern is that we have approved 332 residential units in Brighton Ridge, have another proposed 794 units and have approved a fire training facility since. I have asked you to provide me with the GPM remaining because it appears to me to be zero upon full buildout, but I have not yet received a response in the last six days.

If you had already calculated there were 500 GPM remaining in 2024, please subtract the approved or proposed residential units of 1,126 residential units for the two unrelated developers and respond. **How many GPM remain for future development? Is the answer zero?**

Any additional responses failing to directly answer that question will be interpreted as a confirmation that zero GPM would remain if all 1,126 residential units are approved and built out and indicating that the well that we were told would not be needed is already needed, 24 years earlier than was disclosed.

Sue



Sue Stillwell

Village President | [Village of Sugar Grove](https://www.villageofsugargrove.org)

160 S. Municipal Dr., Suite 110, Sugar Grove, IL 60554

T: 630.391.7200 | F: 630.391.7210 | E: sstillwell@sugargroveil.gov

From: Michele Piotrowski <MPiotrowski@eeiweb.com>

Sent: Monday, August 24, 2026 3:46 PM

To: Sue Stillwell <sstillwell@sugargroveil.gov>; Scott Koeppel <skoeppe@sugargroveil.gov>

Cc: Tracey Conti <tconti@sugargroveil.gov>; Brad Merkel <bmerkel@sugargroveil.gov>

Subject: [EXTERNAL] RE: 88 & 47 Water System Information

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Scott – Please forward this to the whole Board.

Sue,

While I disagree with your characterizations of my comments, I stand behind the statements made at the Village Board meeting and those contained in my memorandum to the Village Board dated August 10, 2026.

The data center water study was not incorporated into the Water System Master Plan because the ISWS data center analysis evaluated a hypothetical, high-demand water use scenario and was not intended to establish the Village's long-term planning assumptions. In addition, the Grove development agreement and resulting TIF approval established water-use limitations that made the hypothetical high-demand scenario no longer applicable for planning purposes. Accordingly, the Water System Master Plan was based on the Village's adopted growth projections through 2050, which were confirmed by Community Development at the time, rather than the hypothetical data center demand scenario.

Please also refer to the excerpt from the Master Plan below. Should the Village's growth projections, development assumptions, or water demand forecasts change, additional study and evaluation would certainly be warranted. The Master Plan includes planning for approximately 9,900 additional residents, or equivalent demand, together with anticipated commercial and industrial growth.

Given the many unknowns related to the supply planning and implied decrease in water use per capita in the coming years based on modeled major risk level not occurring until 2070, it is recommended to monitor the regional water supply efforts and re-engage with ISW years as the regional alternative water supply efforts unfold. The data center study will likely have a significant cost and water impacts to the Village.

The May 2025 email below confirms that the ISWS data center study existed, was completed, and was shared in response to questions regarding the Village's water supply planning. It does not support allegations that EEI withheld information, concealed facts, acted unethically, or compromised public safety.

I remain concerned by statements suggesting dishonesty, unethical conduct, or other professional misconduct without supporting evidence. Such allegations are serious and do not advance a constructive discussion of the technical issues involved.

As I stated during the Village Board meeting, I welcome the opportunity to discuss the water system studies and planning efforts completed to date and to answer any questions regarding the assumptions, analyses, findings, or recommendations contained in those studies.

MICHELE L. PIOTROWSKI, PE, LEED AP

Vice President / Water

MPiotrowski@eeiweb.com

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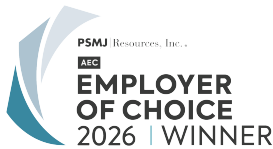
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From: Sue Stillwell <sstillwell@sugargroveil.gov>
Sent: Wednesday, August 19, 2026 9:42 PM
To: Scott Koeppel <skoeppe@sugargroveil.gov>; Michele Piotrowski <MPiotrowski@eeiweb.com>
Cc: Tracey Conti <tconti@sugargroveil.gov>; Brad Merkel <bmerkel@sugargroveil.gov>
Subject: FW: 88 & 47 Water System Information

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Hello,

Would you mind sending the email below to the Board as well? #'s 1 and 2 below do not indicate that the data center study had "bad data", it was sent to me as valid data by EEI. Michele references one study was done without a data center and the second was with a data center. She states "Data Centers result in an increase in drawdown on the aquifer".

Last night I was given a completely different story by Michele, that the data center study had "bad data" and was "irrelevant". This is extremely concerning to me that the Engineering firm we use changes their story and discredits available water studies (this one and parts of CMAPs).

This behavior is so egregious, I want to believe EEI is acting professionally because of the longstanding relationship, however this really does not sit right with me. There are real ethics/public safety issues when a Village cannot trust the information provided by an Engineer.

I am really torn about what to do here because withholding this information likely contributed to this developer not having to pay for at least one well and hid relevant facts in hearings for a \$109 million TIF approval that related to public safety and the public water supply.

Michele, I am including you on this email, you can see below that you did not send this report to me because it was irrelevant or bad data. EEI is just not being honest here. Our Village Board believes you when you say things like the report had "bad data" – but the information below shows that you were aware that it was a valid report with valid and relevant information.

I'm struggling with this because of the magnitude of the problem and the ethics issues involved.

Sue



Sue Stillwell

Village President | [Village of Sugar Grove](https://www.villageofsugargrove.org)

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T: 630.391.7200 | F: 630.391.7210 | E: sstillwell@sugargroveil.gov

From: Michele Piotrowski <MPiotrowski@eeiweb.com>
Sent: Thursday, May 15, 2025 12:08 PM
To: Sue Stillwell <sstillwell@sugargroveil.gov>
Cc: Scott Koeppel <skoeppe@sugargroveil.gov>; Brad Merkel <bmerkel@sugargroveil.gov>; Brian Schiber <bschiber@sugargroveil.gov>
Subject: [EXTERNAL] Re: 88 & 47 Water System Information

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Susan,

Congratulations on your election! It's great to see you actively engaging with such important issues that are vital to the Village's future.

Thank you for reaching out! I am always happy to answer any questions.

To be transparent with staff and, honestly, just to make sure that they have all the information for their files as well, I copied Scott, Brad, and Brian.

I have done my best to respond to your questions below with **red text**. Engineering issues can be quite complicated, particularly on the water system planning side, and we spent a lot of time/effort with Village staff on water planning before making any recommendations for storage, supply, and water main. At your convenience and when time permits, I would be happy to meet with you to review any of our planning efforts that we have worked together on with Village staff. Please just let me know.

Please let me know if you have any questions.

Thank you,

MICHELE L. PIOTROWSKI, PE, LEED AP

Vice President

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From: Sue Stillwell
Sent: Thursday, May 15, 2025 9:33 AM
To: Michele Piotrowski
Subject: RE: 88 & 47 Water System Information

EXTERNAL SENDER: This email originated outside of EEI. Do not click links, open attachments, or respond if it appears to be suspicious.

Good Morning Michelle,

I just wanted to introduce myself and ask a couple of questions if you have time. I want to make sure I fully understand the situation surrounding The Grove development.

1. I had come across the email below and staff was not immediately sure if it was completed. Do you happen to know if this study was completed and if not, is it still recommended? **Please note that the email below refers to a study of the "shallow wells." This is incorrect, it was a study of the deep aquifer, not the shallow aquifer. For reference, I attached an exhibit that shows the various Sugar Grove well depths and aquifers for reference. Deep well use does not influence the shallow aquifer or the aquifer of any of the residents in the general area. That said, yes, we did contract with the Illinois State Water Survey (ISWS) to perform the study to better understand the potential impacts that the data centers could have on the deep aquifer. Actually, we had two (2) studies completed by the ISWS, one without the data centers and the other (mentioned below) that included data center use. Please find attached the following:**
 - a. **ISWS Report from March 2022 (without data centers)**
 - b. **ISWS Report from October 2022 (with data centers)**
2. **The data centers result in an increase in the drawdown on the aquifer, but the supply availability horizon remained relatively the same between the two studies. Below is an excerpt from the report that included the data center analysis:**

Q2: How long can Sugar Grove meet needed supply from the sandstone

A: Planning based on a time-horizon of available water from an aquifer sensitivity of projected water levels to minor changes in future demand increase, but for all scenarios simulated here, most Sugar Grove wells have a zone of declining well production. These results indicate that Sugar Grove

It is worth noting that the Village primarily uses water from deep wells for its source, and this aquifer is very dependent on water use of towns throughout the region who use the same water source such as Yorkville, Montgomery, Oswego, and the Joliet region to name a few. However, many of these cities/Villages are moving to Lake Michigan water in the next 5 or 10 years which should improve the availability of water from the deep aquifer in the future. That said, the ISWS studies include analysis with and without these cities/Villages still utilizing the deep aquifer.

To summarize the findings of the ISWS reports, based on the current and projected regional deep sandstone withdrawal rates, the deep sandstone aquifers likely will have significant water level drawdown into the future. Furthermore, the ISWS report generally concludes that,

“The updated scientific modeling indicates that Sugar Grove could be at risk of declining performance for wells reliant on the Ironton-Galesville aquifer.” Water levels approach risk levels in 2030 but recover slightly after Joliet and other communities switch off deep wells. Ultimately, the model predictions do not identify any major risks in any of the three (3) scenarios until closer to 2070. However, this is a model prediction only, and the regional alternative water supply planning and implementation is still unfolding. Furthermore, in 2070, the risk of declining production appears to be stemming from the east and is likely heavily related to the City of Aurora’s use of the deep sandstone wells. We recommend the Village continue to monitor and study the sustainability of the aquifer every five (5) or so years and/or when major changes to the deep aquifer water users occur.

Please note that as part of our Master Water System Planning, we did meet with the City of Aurora, the likely closest connection point to alternative supply, to see what is feasible in terms of connecting in the future.

At the end of the day, given the many unknowns related to the supply planning and implementation, an anticipated likely decrease in water use per capita in the coming years based on regional trends, along with the modeled major risk level not occurring until 2070 and extensive discussions with staff, it was recommended that the Village continue to monitor the regional water supply efforts and re-engage with ISWS in the next five (5) years or so as the regional alternative water supply efforts unfold. Transferring to an alternative supply will likely have a significant cost and rate impacts to the Village’s water customers. Monitoring and continuing to study the sustainability of the deep sandstone aquifers is critical as water use and sources change throughout the region.

2. I saw the EEI report using the topographical and floodplain maps to determine water runoff onto other properties. Was any evidence of flooding actually found or reported in addition to the maps showing that it could happen? **The maps included in our report were from FIRM maps (Flood Insurance Rate Maps) which are based on flood studies and analysis conducted by the Federal Emergency Management Agency (FEMA). These are industry standard maps used by most if not all planning agencies. If flooding is indicated on these maps and someone wants to develop in these areas, additional significant improvements are required and there are processes in place to either build in these areas or amend these flood elevations that require significant engineering effort. Furthermore, if someone purchases a home constructed in an area on a FIRM map that indicates it floods, then they typically have to obtain flood insurance before a bank will issue them a mortgage. Therefore, if FEMA indicates that the areas downstream of the 88&47 are flooding, then no additional study is necessarily warranted.**

Also, to further clarify, EEI, I, and the report have never stated that the 88&47 property has chronic flooding issues, but rather that it contributes to downstream flooding. Per the TIF State Statue (Illinois General Assembly - Illinois Compiled Statutes), we were specifically asked if the property at 88&47 meets this criteria: “surface water that discharges from all or a part of the area and contributes to flooding within the same watershed, but only if the redevelopment project provides for facilities or improvements to contribute to the alleviation of all or part of the flooding.”

3. For what it is worth, below is the exact eligibility language in the TIF State Statue. The premise of our report was based on C.ii.

(C) The area, prior to its designation, is subject to (i) chronic flooding that adversely impacts on real property in the area as certified by a registered professional engineer or appropriate regulatory agency or (ii) surface water that discharges from all or a part of the area and contributes to flooding within the same watershed, but only if the redevelopment project provides for facilities or improvements to contribute to the alleviation of all or part of the flooding.

3. At the time of determining if a property qualifies to be part of a TIF or not, the TIF state statute does not require the Village/EEI to quantify how much it contributes to downstream flooding, but rather just say whether it does or does not. The quantification of the runoff and development of adequate facilities is more appropriately done at or after preliminary or final engineering when the design engineer has a better idea of the exact development to better understand the stormwater needs and facilities needed to help alleviate downstream flooding. It is my understanding that it is when a TIF reimbursement request is requested that the developer must demonstrate that “the redevelopment project provides for facilities or improvements to contribute to the alleviation of all or part of the flooding.”
3. There was some reported discussion that you may have been provided reports from other municipalities to structure your report on. Were sufficient studies done for the EEI engineers to be confident in their statements that 88% of the runoff from the proposed RPA contributes to downstream flooding within the Watershed? **I cannot think of any other reports. We are confident that 88% of the property contributes to downstream flooding because no measures/improvements have been put in place in this undeveloped portion of the property to-date. We assumed detention was provided for the remaining 12% of the land as detention would have been needed for the property included in the I-88 & IL-47 interchange project. Was there a specific study that you heard about that you would like me to research?**

Thank you very much!

Sue



Village President | [Village of Sugar Grove](https://www.sugargroveil.gov)

160 S. Municipal Dr., Suite 110, Sugar Grove, IL 60554

T: 630.391.7200 | F: 630.391.7210 | E: sstillwell@sugargroveil.gov

From: Brent Eichelberger <beichelberger@sugargroveil.gov>

Sent: Friday, August 26, 2022 9:28 AM

To: Jennifer Cowan (jcowan@crown-chicago.com) <jcowan@crown-chicago.com>

Cc: Anthony Speciale <aspeciale@sugargroveil.gov>; Michele Piotrowski (MPiotrowski@eeiweb.com) <MPiotrowski@eeiweb.com>; Jennifer Konen <jkonen@sugargroveil.gov>

Subject: 88 & 47 Water System Information

Importance: High

Jennifer,

Separate from your project, the Village is in the process of an overall water system assessment. Using recent ISWS deep aquifer information we are developing a good idea of the long term sustainability of the system based on typical development in a general overall sense. When we discuss your property and the potential for a user who requires a greater water demand we believe it may be necessary to consider the shallow aquifer as well. Through EEI we have contacted the ISWS regarding modeling the shallow aquifer under your property based on a more intense user such as a data center.

The attached proposal for shallow aquifer modeling is \$8,000. The Village does not need this information to complete the water system assessment, but we believe it would be very valuable in determining the development options for your property.

We have been advised by ISWS that they need to know within the next 7-10 days if we wish to proceed with the study this fall. They have other projects in their queue and can't hold our spot any longer. If we pass at this time, the next earliest opportunity is next summer.

Please let us know next week if Crown is willing to fund the effort. If you have questions on the scope of the project please contact Michele Piotrowski at EEI directly or Tony.

Sincerely,

Brent



Brent M. Eichelberger, Administrator

[Village of Sugar Grove](#)

10 S. Municipal Drive, Sugar Grove, IL 60554

T: 630.391.7200 ext. 7205 | F: 630.391.7210

beichelberger@sugargroveil.gov

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Michele Piotrowski

From: Sue Stillwell <sstillwell@sugargroveil.gov>
Sent: Monday, August 24, 2026 11:13 AM
To: Michele Piotrowski; Danielle Marion
Cc: Scott Koepfel; Tracey Conti
Subject: RE: Response Requested on Monday - Water Demand and The Grove / Partially Confidential

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Hello,

I have sent the email below to the IEPA as it has now been 6 days that you have declined to answer my question. I had provided you with the # of units approved and proposed. Scott is out, Tracey can send to the full Village Board.

You had stated in information provided at the hearing the Village had 500 GPM remaining. There are 1,126 residential units approved and proposed. At 0.5 GPM / residential unit, we appear to be at 0 GPM remaining upon full build out unless the information you had provided for the TIF hearing was inaccurate or some other standard for residential units is used.

The problem is that a necessary well cannot be left out of a TIF approval to avoid doing the required studies, obtain permitting after the approval and expedite the TIF approval and instead fund the entire thing with the entirety of well tap on fees for the next 1,000+ homes. Nor can we require any other developer to pay for Well 12 on Crown's property.

The well should have been included in the feasibility study for the development and included the necessary studies. What happens if the studies come back showing the well was not feasible in the location planned? The project was then not feasible, but the developer would have already received the TIF reimbursements. All needed infrastructure was required to be included in that feasibility study.

I am asking you a basic question that you are delaying answering, and honestly you are not the only one avoiding my well-related questions stemming from this timeline in June, 2023. (For example, how did Crown go from stating they'd dig a well on June 6, 2023 to all related parties stating a well was no longer needed as of two days later with a Layne Christensen well monitoring report?)

After all approved and proposed units, are we in fact at 0 GPM remaining IEPA firm capacity?

Sue Stillwell



Sue Stillwell

Village President | [Village of Sugar Grove](#)

160 S. Municipal Dr., Suite 110, Sugar Grove, IL 60554

T: 630.391.7200 | F: 630.391.7210 | E: sstillwell@sugargroveil.gov

From: Sue Stillwell
Sent: Saturday, August 22, 2026 12:56 PM
To: 'Saleem, Mohammed S.' <Mohammed.Saleem@Illinois.gov>
Subject: Grove Development, Sugar Grove

Good Morning,

I have concerns once again about this same development and am wondering if the IEPA can advise.

The attached ISWS Data Center Study was not delivered to the Village by the Engineering Firm involved in this project by email or hard copy at the time of completion (Nov, 2022), its contents were verbally delivered by the Engineer to a couple of Village employees and the Developer. It was emailed to me by the engineer in 2025 which is when it became publicly available. The circumstances surrounding that are being reviewed, but the result was that the information was not available to the public for 2 ½ years, omitted from FOIA requests and information available at the hearings for this project and not provided to the Sugar Grove Water Authority in the approval of this project.

In researching that issue, I realized an entire well that was planned as of June 6, 2023 (which would have been Sugar Grove Well 12) was suddenly removed from the planning process two days after the community expressed concerns, the timeline is below -

The June 6, 2023 Sugar Grove Township meeting minutes show “Went to Crown Project meeting [Public Meeting/presentation at Waubensee Community College] and asked about where water would come from. Crown said they would dig well, but didn’t know where. Jerry is concerned that they will pump SG water to Blackberry Township. Brad Merkel wants to meet. Jennifer Konen said they would make sure that all of Jerry’s questions are answered.”

Then June 8, 2023 Brad brings a Layne Christensen well monitoring report to Jerry indicating the current well levels and says we are secure in our water resources and can accommodate the Crown project.

June 20, 2023 Michele from EEI gives the water presentation to the Board without the data center study and stating we have sufficient water resources.

I do not know how we went from the developer agreeing to provide a municipal well for their development to not needing a well until 2050 within two days. I know that there was public opposition questioning the cone of depression and the ability of the aquifer to handle additional demands and then shortly after it was being presented that we do not need a well until 2050.

Am I correct in understanding that if they were required to put in the well they had planned to dig, the approval process would have been extended by up to a year as it would have required hydrogeological modeling, and IEPA inventory and permitting?

Also, can you confirm if this hydrogeological modeling needed for a community well was done, it would have shown the cone of depression, effect on private wells, aquifer sustainability and groundwater flow?

As of September, 2024 the Engineer provided information in the approval hearing that stated Sugar Grove had 500 GPM remaining to use for future development. My concern is that we have approved 332 residential units in Brighton Ridge, have another proposed 794 units and have approved a fire training facility since. I have asked the same Engineering firm involved to provide me with the GPM remaining because it appears to me to be zero upon full buildout, but I have not yet received a response in the last four days.

I am in need of the information because it is relevant to future development approvals and a document I am filing related to this project.

Is there any way the IEPA could confirm with information on hand whether the current usage + the Grove's 9PE/gross acre x 760 acres + 1,126 residential units for the two unrelated developers puts us close to or over our IEPA firm capacity?

Thank you,

Sue Stillwell



Sue Stillwell

Village President | [Village of Sugar Grove](#)

160 S. Municipal Dr., Suite 110, Sugar Grove, IL 60554

T: 630.391.7200 | F: 630.391.7210 | E: sstillwell@sugargroveil.gov

From: Michele Piotrowski <MPiotrowski@eeiweb.com>

Sent: Monday, August 24, 2026 10:58 AM

To: Sue Stillwell <sstillwell@sugargroveil.gov>; Danielle Marion <dmarion@sugargroveil.gov>

Cc: Scott Koeppel <skoeppe@sugargroveil.gov>

Subject: [EXTERNAL] RE: Response Requested on Monday - Water Demand and The Grove / Partially Confidential

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Scott-

Also, per Heidi's request at the Village Board meeting on 8/18, please forward this correspondence to the full Village Board.

MICHELE L. PIOTROWSKI, PE, LEED AP

Vice President / Water

MPiotrowski@eeiweb.com

Direct: 630.466.6724 / Cell: 773.491.3381 / Main: 630.466.6700

52 Wheeler Rd, Sugar Grove, IL 60554

eeiweb.com



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From: Michele Piotrowski

Sent: Monday, August 24, 2026 10:56 AM

To: 'Sue Stillwell' <sstillwell@sugargroveil.gov>; Danielle Marion <dmarion@sugargroveil.gov>

Subject: RE: Response Requested on Monday - Water Demand and The Grove / Partially Confidential

Sue,

In follow up to the discussion at Tuesday's Village Board meeting and then via the emails exchanged on last Thursday between Scott, Danielle, and yourself, Village Staff is working on an inventory of active and approved developments. Once we receive that inventory, we will assess how long it will take to complete the calculation.

From: Sue Stillwell <sstillwell@sugargroveil.gov>

Sent: Saturday, August 22, 2026 9:55 AM

To: Michele Piotrowski <MPiotrowski@eeiweb.com>; Danielle Marion <dmarion@sugargroveil.gov>

Subject: Response Requested on Monday - Water Demand and The Grove / Partially Confidential

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Hello,

I apologize as this is the second "rush" request I have made from you recently, however I believe this calculation is straightforward and I need it related to something I have to file.

To clarify what I need, in the email below which was quoted at the I-88/47 project approval hearing in response to Trustee Michels asking how much additional development our current wells can handle. The email states:

"The Village is anticipated to have another 500 gpm available for future development, assuming water trends remain consistent with historical trends."

Can you please take that number and subtract the development approved or planned since September, 2024?

I do not need an entire slideshow, presentation, lengthy document, etc, I need the result of the calculation.

There is a proposal from Settler's Ridge with 794 units (not yet approved/this line only remains confidential)

I believe Brighton Ridge has 332 units

I have no idea how much water the fire department training site uses

And then anything else that may have been approved since 9/24.

It looks to me at 0.5 GPM for each housing unit we are maxed out (at the time of full build out), and that is excluding the fire department training site, but I am not an Engineer and using rough calculations with available information.

Thank you,

Sue



Sue Stillwell

Village President | [Village of Sugar Grove](https://www.villageofsugargrove.org)

160 S. Municipal Dr., Suite 110, Sugar Grove, IL 60554

T: 630.391.7200 | F: 630.391.7210 | E: sstillwell@sugargroveil.gov

From: Scott Koeppel

Sent: Monday, September 9, 2024 10:52 AM

To: Brad Merkel <bmerkel@sugargroveil.gov>; Danielle Marion <dmarion@sugargroveil.gov>; Matt Anastasia <manastasia@sugargroveil.gov>; Michael Cassa <mcassa@sugargroveil.gov>; Patrick Rollins <prollins@sugargroveil.gov>; Tracey Conti <tconti@sugargroveil.gov>
Subject: Water Demand and The Grove

Good Morning Village Board,

A Trustee asked a couple of detailed questions about water demand, our current system, and the Grove development. I've pasted the responses below from EEI:

Below I have copied and pasted the questions in **red text**, and then provided the associated response.

Daily demands at full build out?

Response: Estimated to be 504,000 gallons per day for average daily pumpage.

What demand can the Village meet? How much extra water capacity is there for future development?

Response: The ability to meet demand is based on three main components:

1. Water Supply and Treatment Capacity – Do we have an adequate volume of water supply and treatment?
2. Water Storage Capacity – Do we have an adequate volume of water storage?
3. Hydraulic capacity – This is the ability to get the water to the location with adequate pressure at the quantity of water that is needed to meet peak demands as well as any fire flow demands. This can only be evaluated on a location basis, and it varies depending on where the development is located.

Based on the last needs assessment calculation that we performed as part of the water master plan, the Village had a surplus of 1,290 gpm of supply and treatment. The Crown Development is anticipated to need approximately 790 gpm, which is less than the Village surplus. The Village is anticipated to have another 500 gpm available for future development, assuming water trends remain consistent with historical trends.

From a storage volume perspective, we had an excess of 537,000 gallons of storage based on the systems ability to meet the Peak Hour Demand. Based on Peak Hour Storage needs, the Crown Development needs approximately 473,000 gallons of water, which is less than the current Village surplus. In addition, as part of the annexation agreement, Crown will be constructing a 750,000 gallon

tank. From a storage volume perspective, this new tank will be surplus. However, it is needed to be able to provide adequate pressures(given the higher elevations north of I-88) and to meet fire flow needs north of I-88 as well as some of the development south of I-88. So, when asking “*How much extra water capacity is there for future development?*,” this will really depend on the location of where that development will occur in the future due to hydraulics, providing adequate pressure, and meeting fire flow demands.



Scott Koeppel | Village Administrator

Administration Department | [Village of Sugar Grove](http://www.villageofsugargroveil.gov)

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T: 630.391.7205 | F: 630.391.7210 | E: skoeppel@sugargroveil.gov

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