

# Allegan County Ground Water Study Ad-Hoc Work Group



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## WATER STUDY WORKGROUP – AGENDA

Wednesday, November 02, 2022 – 2PM

Human Services Building, Karl Zimmerman Room  
3255 122<sup>nd</sup> Avenue, Allegan, MI 49010  
Virtual Meeting Options – Connectivity Instructions

2PM      **CALL TO ORDER:**  
**ROLL CALL:**  
**PUBLIC PARTICIPATION:**  
**PRESENTATIONS:**  
**COMMUNICATIONS:**  
**DISCUSSION ITEMS:**

- 1) Review action times from October 19 meeting (Dunham)
- 2) Draft Recommendations to Board--Assignments and Discussion (Kunetz)
- 3) Future Work Group meeting schedule (Kunetz)

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## **PUBLIC PARTICIPATION:** **ADJOURNMENT:**

### Workgroup Tasks and Deliverables:

1. Review the final Allegan County Groundwater Study, conducted by Hydrosimulatics, Inc. and submitted to the Board on March 25, 2021.
2. Provide regular updates to the Board and a final written summary of observations and recommendations of the workgroup, within one-year of the appointment of its members, relative to the study content (and any other aspects of Allegan County's current and future state relative to water quality, including recommendations for how the County (as a geographic area) should proceed with next steps (if any) and provide particular focus on Hydrosimulatics, Inc. recommendation to pursue an interactive Decision Support System. All recommendations must be specific as to the management/oversight model, funding, root need/issue to be addressed and expected results of any next steps to be considered.
3. The Allegan County Health Department will participate in the discussions of the work group and will provide administrative support, guidance and expertise.
4. As an ad-hoc workgroup, the work of the group will be considered complete upon the delivery of item number 2 above.

# Allegan County Water Study Workgroup

## Meeting Minutes

Date of meeting            Wednesday, October 19, 2022 2:00 pm

Present:                    Ric Curtis, Doug Sweeris, Dean Kapenga

On Zoom:                  John Shagonaby, Tom Kunez, Zach Curtis, Brian Talsma joined at 3:35 pm

Members not in  
attendance:                Chad Kraai, Jay Drozd, Erick Elgin,

Guests and staff:         Dan Wedge, Randy Rapp, Jill Dunham and Jaclyn Hulst

Next meeting:             Wednesday, October 19, 2022

### 1. Approval of Agenda

Agenda approved

### 2. Action Items from previous meeting

- Jill to contact EGLE for Type 1 well test results (water quality.) Can we get regular test results?  
Heather Bishop for Type 1 (Anita Ladoseur - contact for private well construction)
  - Randy talked with Heather Bishop (Type 1) 50% mfg homes; 50% muni/apt/neighborhood
    - Results are available, but we must FOIA them. Can't access on our own
    - Type I (mostly municipal and mobile home parks) must post/submit a Consumer Confidence Report annually, by June 30<sup>th</sup> to all users on system
  - Doug mentioned that everything that is tested is not included in the report.
  - Randy - Why we need info and what we will do with it – Tom responded that the data could be collected regularly to input into DSS to monitor water quality over time.
  - Zach – Having samples over time to compare how it's changing over time
  - Tom is satisfied that we know where the info is and how to get it.
  - CLOSED
- Zach will respond in writing to Steve Sedore's questions/concerns about BEST DSS
  - Steve confirmed that Zach responded and Steve is satisfied with answers
  - CLOSED
- Randy will check with Carolyn Hobbs Kreger about Type 2 water quality data. County using Water Track - changing to new system.
  - Randy contacted Type 2 person (OOO until 10/28)
  - Randy spoke with Anita Lad and EGLE
  - Also need to FOIA for Type 2 wells
  - State is still not ready to replace Water Track with new system – no target date
  - EPA has water quality portal per Jaclyn
  - CLOSED – can pursue a standing authorization in future when the info is needed.
- Randy and Tom will meet with Rob Sarro to discuss the package and recommendations.
  - Meeting was held; meeting outcome will be discussed as an agenda item.

- CLOSED
- Tom will put together the draft BOC package for Oct 19<sup>th</sup> meeting; as such, recommend no meeting on Oct 5.
  - Tom sent out the draft package earlier today.
  - CLOSED
- Randy will add Jaclyn to the meeting invitation for this meeting.
  - Randy got approval and will add Jaclyn to the meeting invite.
- Jill will insure that all Water Study Workgroup meetings are on the county calendar.
  - All meetings, agendas and minutes are posted.
  - CLOSED

### 3. Discussion

- 1) Draft Recommendations to Board--Assignments and Discussion (Kunetz)
  - a. County should take the lead because the aquifer transcends the local municipal boundaries
    - i. LUG must engage – must be a collaborative effort
    - ii. Potentially County taking the lead to contract with a qualified consulting firm to develop the Water Supply Master Plan, while asking LUGs to contribute to the cost as well as a representative to participate on an oversight committee and provide local input.
    - iii. Suggestion for an in-person meeting with all local municipals – target end of winter or early spring. Possible location of The Silo including a meal. Provide info from Phase I and Phase II and get input from LUG. Also invite surrounding counties as water transcends county boundaries as well.
    - iv. DSS tool would be primarily used by LUG, but local residents or businesses could also be stakeholders in protecting ground water. Determination about purchasing DSS should be made by the LUG and other county stakeholders.
    - v. Tom will revise the Draft Recommendation to reflect the discussion and change the title to Water Supply and Water Quality Protection Plan. Remove info on DSS and Ground Water Steward for now – to be taken up in the joint LUG/County master planning process.
    - vi. Next step is presenting revised Recommendation from Water Study Group to Board of Commissioners for confirmation of their support to go forward.
    - vii. Rob will draft a Resolution to present to the BOC to approve hiring a consultant and engaging the LUGs in a planning exercise. If approved, the Work Group could assist with creating a scope of work for a consulting engagement.
- 2) Future Work Group meeting schedule (Kunetz)
  - a) November 2 – Review draft 4 of Recommendation document for approval to present at Nov 10 meeting of Board of Commissioners
  - b) November 16 meeting cancelled
  - c) November 30 - Zach will present Hydrosimulatics Phase 2 results
  - d) December 7 – may cancel, TBD

#### 4. Action Items

- Randy will add Jaclyn Hulst to the Outlook meeting distro, after the group approved of this.
- National Ground water monitoring network is where the monitoring well data should go.
  - Randy will email John Yellich on collecting of monitoring well results and where they are reported.
  - Zach will check the National Ground Water Monitoring Network to see if Allegan results are in there. Operated by the US Geological Survey.
- Zach will get Phase 1 long report (100 slides) to Randy, who will add the report to the county website.

Meeting adjourned 3:50 pm

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Chairperson, Tom Kunetz  
Vice-Chairperson, John "Ric" Curtis

**To:** Allegan County Board of Commissioners  
**Subject:** Recommendation for the Allegan County Groundwater Quantity and Quality Protection Plan  
**Submitted:** XXXXXXXX

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## Part 1: The Case for Creating a Groundwater Protection Plan

Historically and presently, practically all the water supply in Allegan County is from two geologic aquifers as groundwater. In select areas, water supply is the responsibility of the local unit of government or municipal utility. In the majority of the County, water supply is from private wells. There are approximately 21,348 private household wells, 671 irrigation wells, and 32 industrial wells in Allegan County. These private wells account for 93% of all the wells in the County by number. The remainder 7% are municipal water utility wells. Virtually the entire population of the County shares the two aquifers. Yet neither the County government nor the local units of government hold oversight for private wells. In other words, the water supply is largely unregulated, with no protection from overdraft, neighbor impacts, drought, climate change, or natural contamination.

A resilient supply of clean water is essential for public health and economic vitality of Allegan County. Historically, the people of Allegan County have taken the natural abundance of the aquifers for granted with little thought of the consequences of losing this godsend. Yet environmental, social, and political conditions across the world show beyond doubt that a clean water supply is not guaranteed and cannot be taken for granted. Therefore, it is prudent for the people of Allegan County to establish a plan to establish activities and policies to protect this precious resource for today and for the future.

This raises the question: Who should take the lead in generating a groundwater protection plan? Currently, no single unit of government provides oversight on a regional basis. Private wells, which make up the majority of the groundwater withdrawal, have virtually no oversight beyond the initial County Health Department checklist during construction and state-level permit requirements for extremely large withdrawals. The County government may be in the best position to take the lead in coordinating planning and implementation efforts for protection of the aquifers. Why should the County take the lead? Because impacts to the aquifers, which threaten water supply and water quality, transcend the political boundaries of the local units of government. Jurisdictional reach limits the extent to which any single local unit can protect and manage the groundwater beneath its feet to prevent its actions from impacting a neighboring local unit. The two aquifers extend beyond the political boundaries of Allegan County, and activities in neighboring counties impact Allegan County's groundwater supply. Therefore, coordination at the County level is essential. However, this effort must be coupled with active participation by the local units of government (LUG). While the County may lead, the local units must engage.

## Allegan County Groundwater Quantity and Quality Protection Plan

Presented herein is the recommendation from the Groundwater Work Group to enact a plan called the “Allegan County Groundwater Quality and Quantity Protection Plan.” The Allegan County Groundwater Quantity and Quality Protection Plan is a collection of activities intended to provide LUGs and County staff with the means and methods to be proactive in monitoring, protecting, and managing this precious resource today and well into the future. The plan as presented is not meant to be a once-and-done affair; rather, it is the starting point for what should become an ongoing series of activities—executed at both the local unit of government level and the County level-- to continually assess, plan, and act in the interest of protecting this precious resource.

The Allegan County Groundwater Quantity and Quality Plan begins with four activities:

1. Implementing the recommendations of the Phase 2 Screening Level Modeling, Risk Analysis, and Ranking Study.
2. Installation of an array of water table monitoring wells across the County
3. Creation of a public education and outreach program
4. Development of a Water Supply Master Plan for the County

The first three activities (Phase II Study, monitoring wells, and public outreach) were previously recommended to the Board by the Work Group at the June 9, 2022 Planning Session as a preliminary assessment of recommendations. They are presented in greater detail in Part 2 of this report.

The fourth activity, the Water Supply Master Plan, is deemed essential for setting the roadmap for the protection and management of the groundwater supply, today and for future generations. However, planning activities cannot be dictated by the County alone. The County does not have the authority over critical activities such as withdrawal, remediation of contaminated sites, and connection to municipal supplies, nor will it engage in local unit governance. Therefore, groundwater protection planning activities must include the participation of primary stakeholders, namely the LUGs, state regulators, and the Groundwater Work Group, who represent various stakeholder interests.

The Groundwater Work Group recommends that the Board authorize the Health Department to engage the services of a consulting firm to prepare the Water Supply Master Plan. The general statement of work is described in Part 2 of this report. Included in the scope of work is for the consultant to engage the primary stakeholders in in-person input and discussion sessions. This would start with a series of learning sessions, educating the stakeholders on the results of the Phase 1 and Phase 2 Studies so that they may become familiar with the geology, hydrogeology, water quality concerns, state of the aquifers, current withdrawals, and other essential background information upon which to build the Water Supply Master Plan.

The Phase 1 Study recommended the County implement an interactive Decision Support System tool to assist the County in making informed decisions to protect the groundwater supply. The Board charged this Groundwater Work Group to “provide particular focus on Hydrosimulatics, Inc.’s recommendation to pursue an interactive Decision Support System” (DSS). After robust discussion, the Groundwater Work Group has concluded that the decision on whether to implement a DSS, and what features the DSS should include, is not a decision that the County

## Allegan County Groundwater Quantity and Quality Protection Plan

should make alone. Rather, the decision should be vetted through a collective process that includes the LUGs, state, and Groundwater Work Group.

The power of a DSS is that it is widely adaptable in its breadth and depth. It can be used to address questions as broad reaching as the impact of a drought on the entire county and as site-specific as the influence of an individual well. An interactive DSS can be used by County staff, LUG staff, state agencies, Michigan Geologic Survey, property developers, farmers, commercial businesses, industries, and individuals to answer such questions as:

- What will be the impact of the new housing development on existing nearby wells?
- What is the maximum pumping rate that can be sustained from my neighbor's well without interfering with my well?
- Is there an area of low-production private wells that can be better served by expansion of a municipal water distribution system?
- There is a drought. Can a farmer afford to irrigate her crops at the same rate as typical? Can adverse impacts be avoided/eliminated based on strategic irrigation well placement?
- Where are the areas in the aquifers that are particularly vulnerable to contamination?
- If an accidental spill occurs and an emergency capture wells need to be quickly installed to control / prevent plume spreading, where should the wells be placed?
- How much farther down can the water table go before naturally occurring salinity affects the well water?
- Are nitrates impacting a municipal wellhead protection area?

Therefore, it is important that the people who would use the DSS be the ones who drive the decisions on design, implementation, training, and system management.

Other issues that the primary stakeholders should discuss during the master planning process are the possible creation of an independent, county-wide water authority, and the possible creation of a county-wide position for a Groundwater Specialist. The Groundwater Specialist would be the central point of coordination with the LUGs to assure County-wide consistency oversight, as well as provide technical advice to the County's 21,000 private well owners, who otherwise have no advocacy or support.

Given the amount of time it would take for the process to issue a request for proposals for a Water Supply Master Plan consultant, award the contract, organize the in-person input and discussion sessions, and generate deliverables, the planning timeframe for the master planning work will extend through the Spring of 2023. As such, it would be prudent for the Board to extend the life of the Groundwater Work Group, which is set to sunset in April 2023, through this planning period. This can be formally addressed by the Groundwater Work Group in 2023.

Based on the above, the Groundwater Work Group recommends that the Board of Commissioners authorizes the Health Department to proceed with the installation of water table monitoring wells across the County and to proceed with a professional services contract to develop a public communication and outreach program as described herein. Further, the Groundwater Work Group seeks the Board of Commissioners' confirmation that the County should engage a

## **Allegan County Groundwater Quantity and Quality Protection Plan**

professional services provider to develop a Water Supply Master Plan for the County and formally engage local and state stakeholders in the process. Upon such confirmation, the Groundwater Work Group will work with County staff to develop the statement of work and scope of work for the Water Supply Master Plan request for proposals



## Part 2: Elements of the Allegan County Groundwater Quantity and Quality Protection Plan

### 1. Phase 2: Screening Level Modeling, Risk Analysis, and Ranking Study

#### A. Recommendation

Recommendations will be submitted to the Board by the Groundwater Work Group when the final report is submitted by Hydrosimulatics Inc. in early January 2023.

#### B. Root Need

Hydrosimulatics, Inc. has been retained by the County to prepare the Phase 2 groundwater study. The project will enable the County to rank and prioritize sites of environmental concern across its entire site portfolio – from high-risk sites requiring “immediate” action (e.g., oversight, groundwater sampling and analysis, and possible remediation), to low risk sites that can be addressed later (perhaps years in the future), or everything in between. The project will also provide additional information regarding source water areas (or “well-watersheds”) of critical public water supply wells in the County (Type I community supply wells).

#### C. Expected Result

The deliverables of this project--maps of pollution site impact areas, source water areas of critical groundwater receptors, a countywide aquifer vulnerability map, and risk rankings--can be used to guide long-term planning relative to groundwater use and growth trends, allowing the county to answer questions such as:

- Which critical groundwater receptors are threatened by known or potential sources of groundwater pollution because of proximity to a pollution impact area?
- Which receptors are most vulnerable because of aquifer and soil properties?
- Which ones require “immediate attention” or close monitoring?
- Which ones might have an issue sometime later in the future?
- Which areas being considered for future development face water supply issues because of impaired water quality?
- What are the time-scales involved?

#### D. Management/Oversight Model

The contract with Hydrosimulatics was approved on July 19, 2022. The Health Department is administering the contract. The Groundwater Work Group is providing feedback and oversight to Hydrosimulatics. The deliverables will be retained by the Health Department. Recommendations for action will be vetted by the Ground Water Work Group and forwarded to the Board.

#### E. Funding

The Phase 2 Study has been awarded for \$107,000.00 and paid with ARPA funds.

## Allegan County Groundwater Quantity and Quality Protection Plan

Funding for each of the recommendations that will be presented by Hydrosimulatics as part of their deliverables will be presented to the Board after vetting by the Groundwater Work Group. at that time.

### 2. Water Table Monitoring Wells

#### A. Recommendation

The Groundwater Work Group recommends that the Board of Commissioners approve the funding for installing up to 20 monitoring wells across Allegan County. The Work Group further recommends that the Department of Health approach public land holders including the County Road commission, DNR, public school districts, and local units of government to seek cooperative agreements for siting the necessary number of monitoring wells.

#### B. Root Need

Understanding how much groundwater is available in the aquifer is important for the County to be able to make decisions with respect to meeting groundwater demand. Unfortunately, this is not a precise science. Water supply can be estimated by calculations based on measurements of the water table and other properties of the subsurface (e.g., aquifer thickness and aquifer yield). Because the geology of the County is highly variable, the more (accurate) data points there are, the better prediction a hydrogeologist can make about the available water supply and its changes over time. For example, if the groundwater table shows a downward trend over time, it means that the water supply is shrinking. Therefore, it is necessary for the County to establish water table monitoring wells at numerous points throughout the County, and to collect and monitor this data over time, so that proactive actions can be taken before a crisis exists.

Monitoring wells should be located in areas of greatest concern, and which can provide optimal benefit. Based on the Phase 1 Study, these areas include:

- Areas where Static Water Level trend analysis suggested a possible systematic decline across the area.
  - North-central Lee Twp.
  - Northwest Saugatuck
  - West-central Allegan Twp.
  - Central Door Twp.
  - Leighton Twp. (bedrock aquifer)
  - Overisel Twp. (bedrock aquifer)
- Areas where groundwater use is highest or has increased significantly in recent decades (which could lead to aquifer overmining).
- Areas of water quality hotspots based on analysis of “background” groundwater concentrations.
- The results from the Phase 2 screening level analysis of impact areas will likely reveal a number of locations that should be monitored for possible current or future contamination concerns.

Siting water table monitoring wells is challenging in that not only is it necessary to find sites that offer valued information from a geologic perspective, but access is also needed for County

## **Allegan County Groundwater Quantity and Quality Protection Plan**

personnel to drill the well, and then for subsequent periodic access to the level sensors and data loggers. For this reason, public property is typically preferred over private property. To date, the Health Department has collaborated with the Michigan Geologic Survey to site two monitoring wells on County government property. However, the County government does not own enough property across Allegan County to satisfy the need for monitoring well sites. Therefore, the county will have to work in cooperation with other public entities to make arrangements for establishing monitoring wells across the County.

While it is understood that it will be a challenge to work with other public entities to get cooperative agreements to site monitoring wells, the hard reality is that the only way for the County to truly understand the groundwater situation is through a well-distributed array of data points. This underscores the importance of keeping local units of government involved in the Water Supply Master Plan process.

### **C. Expected Results**

The data from the monitoring wells will be collected by the County and made available to LUGs and the public through a webpage created for making this data public. In addition, if the LUGs decide to move forward with the Decision Support System tool, this data will be connected to the DSS to provide up-to-date data in the DSS.

### **D. Management/Oversight Model**

Siting of the wells, installation, and data gathering will be done by the Health Department. During the Water Supply Master plan process, LUGs will be encouraged to cooperate with the County in siting and managing data collected from monitoring wells located within their municipalities.

### **E. Funding**

Assuming \$8,000 per well, 20 wells would cost approximately \$160,000, funded through ARPA funds.

## **3. Public Education and Outreach Program**

### **A. Recommendation**

The Groundwater Work Group recommends that the Board of Commissioners provide funding to the Health Department to create a public education and outreach program concerning Allegan County's water supply and water quality. While the expertise to develop such a program does exist within the County staff, the institutional capacity does not. The Work Group recommends that the County retain a consultant experienced in community education and outreach to develop the program. The target audience of the proposed program is all residents of Allegan County, businesses, and local units of government.

### **B. Root Need**

The Allegan County Health Department's Vision Statement declares that it will "promote a safe, clean, and healthy environment in which to live, work, and play." One of the best ways the

## **Allegan County Groundwater Quantity and Quality Protection Plan**

Health Department can meet this vision is to provide the information and tools that enable residents of the County to make good decisions. Good health starts with a good education. The more that Allegan County residents know about their drinking water the better they will be at making important decisions at both the individual and community level. Therefore, a robust community education and outreach program on water supply and water quality is instrumental in achieving the Department's Vision. The Health Department is well-situated to be the prime transmitter of information that is trustworthy and based in science.

### **C. Expected Results**

The program should include the following elements and activities:

- Education about where the county's drinking water comes from, and why it is important to protect both water quantity and water quality.
- Ways in which residents can help protect the aquifer and surface water, such as properly maintained septic systems, stormwater management, and capping of abandoned wells.
- Online County-wide map showing up-to-date information on groundwater levels derived from the monitoring wells program.
- Outreach to local units of government educating them on how to use the Decision Support System tool.
- Serve as a clearinghouse of information to assist residents and local units of government:
  - Provide appropriate sources for technical support
  - Consult on how to apply to other agencies for loans and grants
  - Provide a list of water quality laboratories
  - Reach out to neighboring counties that share the aquifers with Allegan County
- In-person and online recorded tutorials covering Surface and Groundwater Basics
  - Ties into the first bullet point on education about county drinking water by providing a strong foundation for understanding the county's water and how it is connected.
  - Educational workshop (in-person and online recorded tutorials) on planning and zoning best practices for water quantity and quality
  - Facilitate multiple public panel discussions and Q&A conducted in multiple municipalities for the general public on the state of Allegan County's water supply and quality.
  - Identify and develop connections among complementary organizations to build water education and outreach capacity in the County.

### **D. Management/Oversight Model**

The professional services contract will be managed by the Health Department, and supported by the Information Services Department.

### **E. Funding**

The estimated cost for a professional services contract is \$100,000, funded through ARPA funds.

## **4. Water Supply Master Plan**

## Allegan County Groundwater Quantity and Quality Protection Plan

### A. Recommendation

The Groundwater Work Group recommends that the Board of Commissioners authorize the Health Department to retain a qualified consultant to prepare a Water Supply Master Plan for the County. The Water Supply Master Plan should estimate the current usage of groundwater by various categories of users, including residential, municipal, industrial, commercial, and agriculture. Using the event horizons of fifteen years and thirty years, the plan should project future use by category. The consultant should actively include representatives from each local unit of government and relevant state agencies to sit on an oversight committee, to participate in the development process, and to provide local perspectives to insure buy-in of the final product.

### B. Root Need

Lakeshore Advantage has determined that Allegan County's population is growing at a rate of about 8% per year. The County is one of the fastest growing counties in southwest Michigan. This period of growth that started decades ago and has sustained in recent years results in systematic increases in water use. The essential question is: Will there be enough water for all needs (agriculture, residential, industrial, commercial) in the future? And if not, what actions should the County take today to mitigate water shortages? In as much as potential solutions to future water demand may require a long-lead time (such as developing a water intake and treatment plant at Lake Michigan) it would be prudent for the County to know well in advance what future actions may be required. While it is not possible to accurately predict what the water demand will be in fifteen and thirty years, by establishing a baseline today, the Master Plan can be revisited at biennial intervals to identify if projections are under-estimated, on-target, or over-estimated. Furthermore, external factors such as increasing or decreasing groundwater recharge rates, or contaminated wellhead areas, should be considered in the projections to provide "worst case," "best case" and "most likely" scenarios.

### C. Expected Results

The process will involve formal in-person convenings of primary stakeholders including representatives from LUGs, state agencies, and the Groundwater Work Group. Much of the development work must revolve around the input of these stakeholders.

The main deliverable will be a Master Plan document that the County and LUGs should use to support decision making with respect to land development, infrastructure planning, environmental degradation, impacts of climate change, economic development, and population growth. Additional possible outcomes include the recommendation to create an independent water authority, the request for a Decision Support System tool, and the recommendation for establishing a county Groundwater Specialist position.

### D. Management/Oversight Model

The Groundwater Work Group will assist County staff in the development of the statement of work and scope of work for the professional services contract. The professional services contract will be administered by the County Health Department. Each local unit of government, plus relevant state agencies will be encouraged to send one representative each to actively engage in the planning process.

## Allegan County Groundwater Quantity and Quality Protection Plan

### **E. Funding**

Estimated to be \$150,000, payable through ARPA funds.



# Allegan County

## Broadband Action Workgroup



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# STEP 1: Connect to the Meeting

- **OPTION 1: Zoom over Telephone**

- Call (929) 205-6099 -or- (312) 626-6799 -or- (253) 215-8782
- Type in Meeting ID: 854 0746 8607, then #, then # again
- Type in Meeting Password: 2022, then #
- To raise your hand to speak, press \*9
- To Mute and Unmute, press \*6

<STOP here>

You do not have to continue reading the rest of the instructions.

- **OPTION 2: Youtube**

- Open Internet Explorer or Chrome
- Navigate to <https://www.youtube.com/channel/UCQliZQstN2Pa57QAItAWdKA>
- Click on image of “Live” video

<STOP here>

You do not have to continue reading the rest of the instructions.

- **OPTION 3: Zoom over Web browser**

- Open Internet Explorer or Chrome
- Navigate to <https://us02web.zoom.us/j/85407468607?pwd=TFN5YkxpZVdSNDBpejllMmpSd1c4Zz09>
- Meeting Password: 2022

<Continue with the rest of the instructions>



# STEP 2: Enter registration information

Webinar Registration - Zoom

zoom.us/webinar/register/WN\_YneHxuk\_SjqfnMwchbtUEg

## Webinar Registration

Topic: BOC Meeting - 4/9/2020

Time: Apr 9, 2020 01:00 PM in Eastern Time (US and Canada)


\* Required information

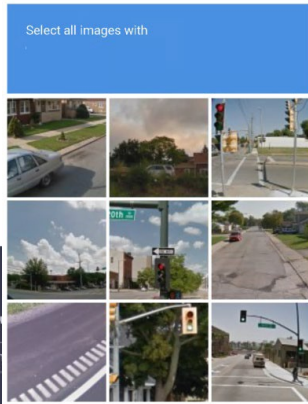
First Name \*

Last Name \*

Email Address \*

Confirm Email Address \*

I'm not a robot  reCAPTCHA Privacy - Terms

Select all images with 

reCAPTCHA VERIFY

US Dollars

Footer:

- About: Zoom Blog, Customers, Our Team, Why Zoom, Features, Careers, Integrations, Partners, Investors
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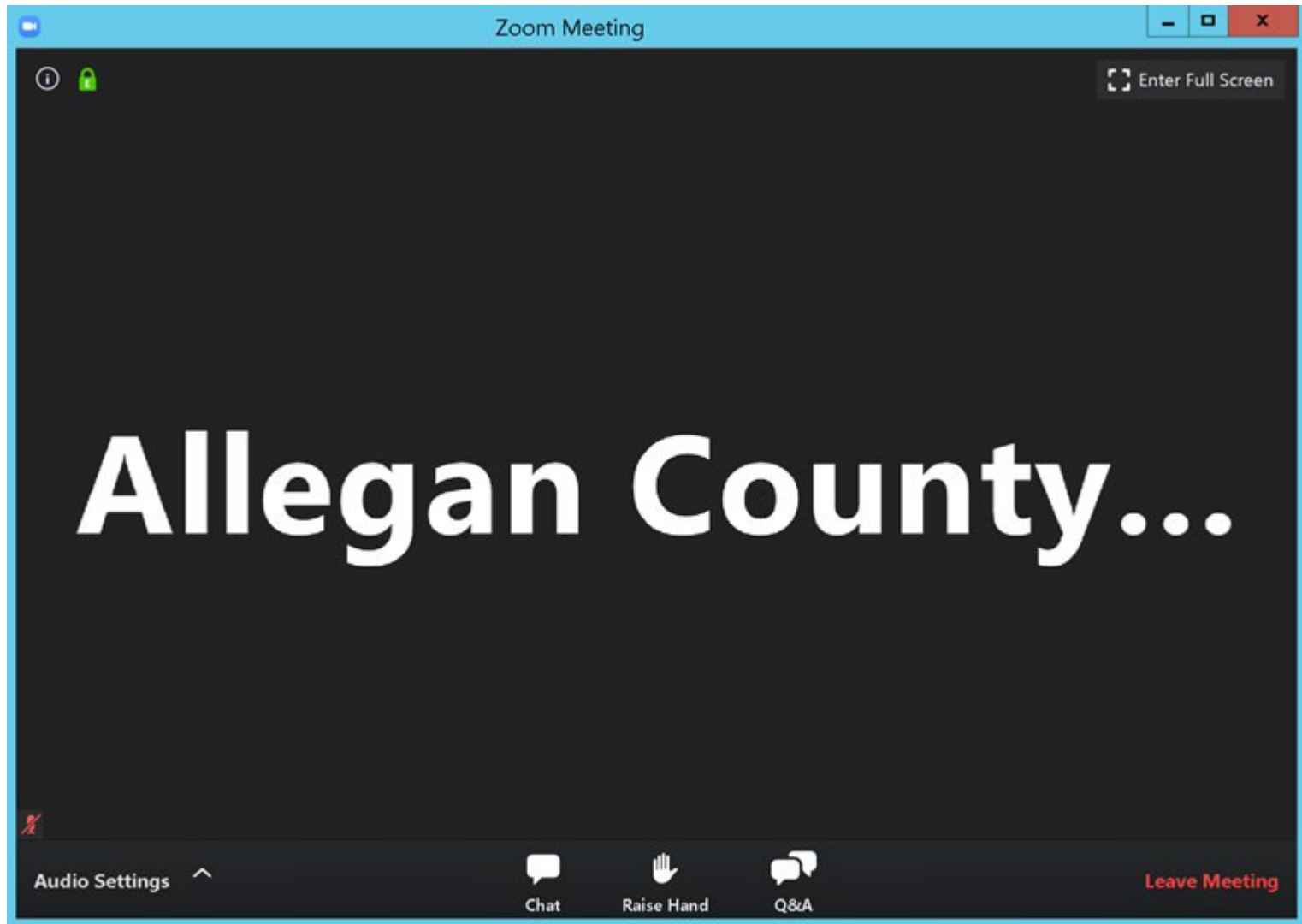
1. Enter name and email

2. Click this box

4. Click when done.

3. Answer challenge question

STEP 3: This Window will appear when connected.



# STEP 4: Adjust audio settings (if needed)

The screenshot shows a meeting interface with a 'Settings' window open. The 'Audio' section is selected in the left sidebar. A context menu is open, showing options for speaker and microphone settings. A blue arrow labeled '1' points to the context menu, and another blue arrow labeled '2' points to the 'Audio' settings section in the 'Settings' window.

**Settings**

- General
- Video
- Audio**
- Share Screen
- Virtual Background
- Recording
- Statistics
- Feedback
- Keyboard Shortcuts
- Accessibility

**Speaker**

- Test Speaker
- Remote Audio

Output Level: \_\_\_\_\_

Volume:

**Microphone**

- Test Mic
- \_\_\_\_\_

Input Level: \_\_\_\_\_

Volume:

Automatically adjust volume

Use separate audio device to play ringtone simultaneously

Automatically join audio by computer when joining a meeting

Mute my microphone when joining a meeting

Press and hold SPACE key to temporarily unmute yourself

Sync buttons on headset

Advanced

**Context Menu:**

- Select a Speaker
- Remote Audio
- Same as System
- Test Speaker & Microphone...
- Leave Computer Audio
- Audio Settings...

**Meeting Content:**

269-673-4514  
mthiele@allegancounty.org

**Economic Development — Greg King, Director**  
**ADMINISTRATIVE REPORTS:**

**DISTRICT 4**  
Mark DeYoung  
616-318-9612  
mdeyoung@allegancounty.org

**CONSENT ITEMS:**

1. Motion to approve of claims paid and to incorporate into proceedings of the Board (3/20/20 & 3/27/20)

Audio Settings ^

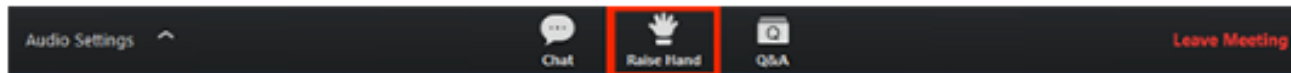
Chat Raise Hand Q&A

# STEP 5: Raise hand to be recognized to speak.

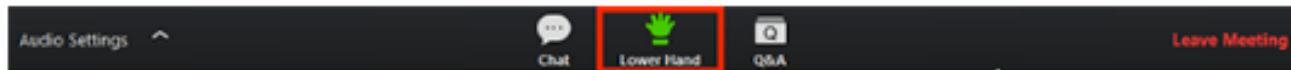
- Once “Raise Hand” is clicked, the Board Chairperson will receive notice and may UNMUTE your microphone when ready and verbally recognize you to speak.

On bottom of screen.

1. Click **Raise Hand** in the Webinar Controls.



2. The host will be notified that you've raised your hand.
3. Click **Lower Hand** to lower it if needed.



# STEP 6: To leave the meeting

The screenshot shows a Zoom meeting interface. At the top, a green banner reads "You are viewing Allegan County Administration's screen" with a "View Options" dropdown. In the top right corner, there are window control buttons and an "Enter Full Screen" button. The main area displays a Microsoft Word document titled "BOC20200409\_agenda [Compatibility Mode] - Word" by "Steve Sedore". The document content includes the Allegan County Board of Commissioners logo and contact information for Jim Storey and Gale Dugan. The agenda items are listed as follows:

**BOARD OF COMMISSIONERS MEETING – AGENDA**

**DISTRICT 1**  
Dean Kasperge  
616-218-2599  
dkasperge@allegancounty.org

**DISTRICT 2**  
Jim Storey  
616-848-9767  
jstorey@allegancounty.org

**DISTRICT 3**  
Max R. Thiele  
269-673-4514  
mthiele@allegancounty.org

**DISTRICT 4**  
Marti DeYoung

**Virtual Meeting – Connectivity Instructions Attached**

**1PM**

**CALL TO ORDER:**  
**ROLL CALL:**  
**OPENING PRAYER:**  
**PLEDGE OF ALLEGIANCE:**  
**COMMUNICATIONS:** Attached  
**APPROVAL OF MINUTES:** Attached

**PUBLIC PARTICIPATION:**  
**ADDITIONAL AGENDA ITEMS:**  
**APPROVAL OF AGENDA:**  
**PRESENTATIONS:**  
**PROCLAMATIONS:**  
**INFORMATIONAL SESSION:** Attached  
**ADMINISTRATIVE REPORTS:**

**CONSENT ITEMS:**

The Zoom meeting control bar at the bottom includes "Audio Settings", "Chat", "Raise Hand", "Q&A", and a red "Leave Meeting" button. A large blue arrow points to the "Leave Meeting" button.