

# Managing Groundwater Through Locally Led Group Conservation: A Guide for Producers

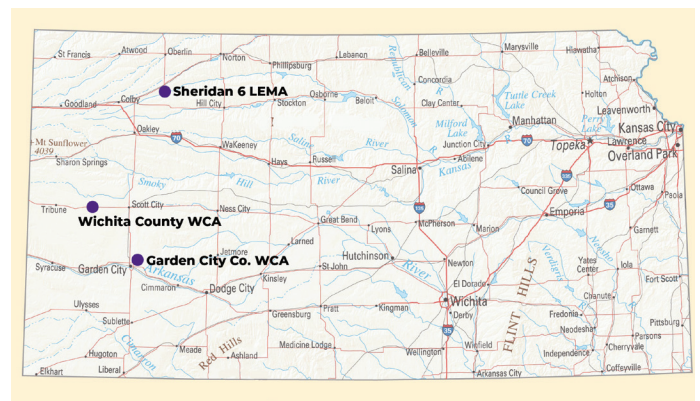
Locally led conservation efforts help agricultural producers be good stewards of groundwater resources while continuing to thrive economically.

This publication provides an overview of locally led, group conservation tools available to Kansas producers and recommendations for organizing local group conservation efforts.

Producers should consider five keys to success for locally led group conservation efforts in Kansas:

- Diverse stakeholder representation
- An early focus on team building
- Bringing in an outside facilitator
- and respectful community outreach
- Partnering with state and local government

*Examples of locally led group efforts to conserve groundwater in Kansas*



## WHY GROUP ACTION?

### Locally led group efforts are effective at conserving groundwater

Producers in Sheridan County reduced groundwater use by 23% between 2013 and 2017, without harming their economic profitability.<sup>1</sup> The local water table responded, declining only 5 inches annually since 2013, compared with a decline of 24 inches annually in adjacent areas not involved in the Sheridan 6 Local Enhanced Management Area (LEMA).

*“Since the LEMA, we’ve become better managers of water, more focused on return. We’re better off in the LEMA even with lower commodity prices because we’re managing to get a higher return.”*

*– Producer in northwest Kansas*

Producers in Wichita County conserved 2,665 acre-feet of groundwater annually since 2017.<sup>2</sup> Interviews with local producers suggest that conservation has not harmed their farm profitability.

[I tell my neighbors that] "I'm not sayin' you're not conserving water. I'm saying that we can do better." And once we get past that ... then people begin to open their minds to: "Okay, this [locally led group conservation initiative] might have some merit to it."

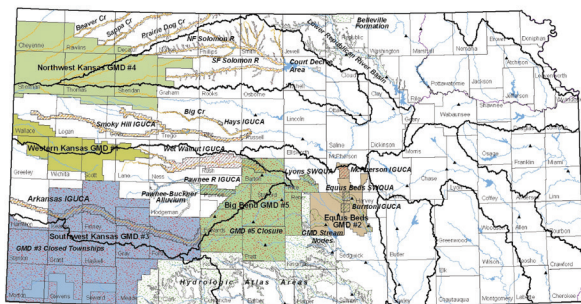
- Producer in west central Kansas

Even if no formal conservation plan is adopted, attempts at locally led group conservation efforts may encourage additional groundwater conservation by raising awareness in the community.

"I think more water has been conserved ... after the LEMA talks have started than was ever conserved before. And I don't think it has to do so much with soil probes and some of this technology. I think it's more a state of mind. I shut my wells off when it rains and then I go back and probe and check and see. And it just seems like more people are more aware of the situation."

- Producer in southwest Kansas

### Special Water Appropriation Management Areas in Kansas.<sup>3</sup>



- Western Kansas GMD #1
- Equus Beds GMD #2
- Southwest Kansas GMD #3
- Northwest Kansas GMD #4
- Big Bend GMD #5
- Closed Area, generally excluding temporary and other small uses
- Restricted Area, subject to special restrictions or regulation
- Intensive Groundwater Use Control Area and Special Water Quality Use Area
- Closed Streams, generally excluding temporary and other small uses
- Restricted Streams, specific restrictions for streams and associated alluvium
- Streams open for appropriation
- Minimum Desirable Streamflow Gage

## Kansas Producers Support Conservation

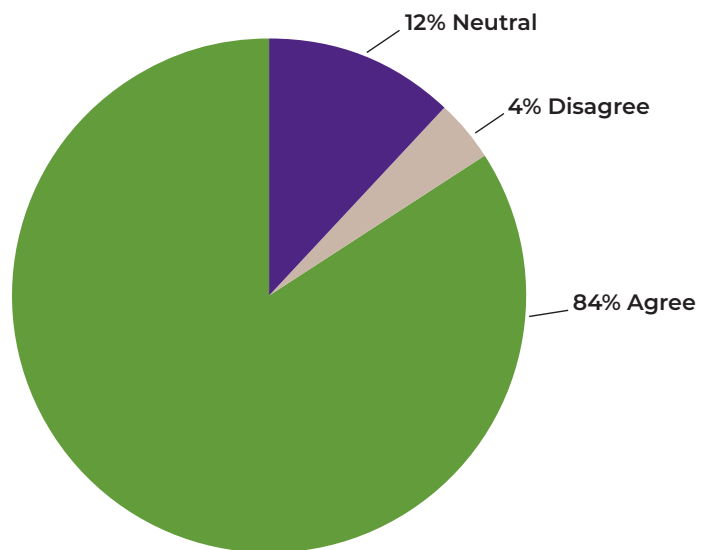
A survey<sup>4</sup> of Kansas producers in 2018 shows:

**Nine out of 10** Kansas producers believe that groundwater should be saved or conserved.

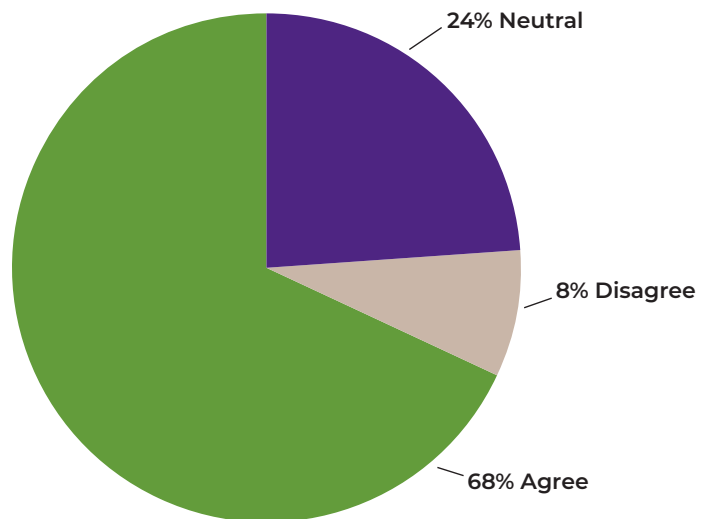


Primary motivation for conservation is **supporting the local community and future generations.**

*Groundwater should be conserved today so that future generations in my area can enjoy the benefits I have experienced.*



*Groundwater should be conserved today so jobs and business opportunities continue to be available in my community in the future.*



*"I used to think that water was mine and I could do with it as I pleased. And I still think the water under my land is mine, but I also believe in a greater sense that it's ours and we need to conserve it ... And I think it would be extremely selfish for us to use that water up and not save it for future generations."*

- Producer in west central Kansas

## Tools for locally led group conservation in Kansas

Plan	Water Conservation Area (WCA)	Local Enhanced Management Area (LEMA)
<b>Details</b>	Producers: <ul style="list-style-type: none"> <li>• commit to conserving groundwater,</li> <li>• can provide additional flexibilities, such as multi-year allocations, moving allocations between enrolled water rights, or allowing new uses of water,</li> <li>• are limited in duration and can be renewed; and</li> <li>• make no permanent changes to water rights.</li> </ul>	
<b>May be right for you if:</b>	<ul style="list-style-type: none"> <li>• You want the plan to be approved quickly.</li> <li>• Your planning team wants full control over writing the plan.</li> </ul>	<ul style="list-style-type: none"> <li>• Your planning team considers it important that every water right owner in the area participates.</li> <li>• You want to work closely in partnership with your local Groundwater Management District (GMD) board.</li> </ul>
<b>Locally Initiated?</b>	Yes, by an individual or a group of producers.	Yes, by the local GMD board.
<b>Locally Developed?</b>	Yes, one or more individuals write it in consultation with the DWR.	Yes. The local GMD board writes it in consultation with the DWR.
<b>Voluntary?</b>	Yes, everyone decides individually whether to participate.	No, all water right owners in the area must participate, but it is approved by their local representatives on the GMD board.
<b>Role of GMD</b> (Groundwater Management District)	None required. They can choose to provide comment or support.	Required. The local GMD board writes the plan, requests approval by the Chief Engineer, and promotes it at public hearings.

[agriculture.ks.gov/WCA](http://agriculture.ks.gov/WCA)

[agriculture.ks.gov/LEMA](http://agriculture.ks.gov/LEMA)

### For More Information

Contact your local Kansas Department of Agriculture, Division of Water Resources field office: Garden City: (620) 276-2901, Stockton: (785) 425-6787, Stafford: (620) 234-531, Topeka: (785) 296-5733

# KEYS TO SUCCESS

## Diverse Stakeholder Representation

Diverse stakeholder representation includes:

**Age** – members representing the age range of local producers;

**Gender** - both male and female;

**Farm Type** - large irrigators, small irrigators, and dryland producers; and

**Non-farming Community** - feedlot and town interests.

**Building a team with diverse stakeholder representation is important because it:**

- makes your conservation plan more relevant to more people,
- helps prevent accidentally overlooking something important, and
- increases buy-in within your community.

It is possible to have too much of a good thing. Try to keep the planning team size between seven and 15 people. Invite people who are good at working with others.

## An Early Focus on Teambuilding

Focus on teambuilding early because it:

- establishes a set of common values and goals, and
- helps the team make tough decisions without personal animosity.

**An early focus on teambuilding includes:**

**Asking each person why they care** about ground-water and what they hope to achieve through this process.

**Developing guidelines for the process that everyone can agree to.** Examples may include avoiding personal attacks, assuming everyone is speaking in good faith, making decisions by consensus, and an expectation that members will propose alternative ideas rather than simply disagreeing with the ideas proposed others.

**Taking time for reflection.** At the beginning of each meeting, take time to acknowledge how people are feeling and to recognize the progress your group have made so far.

**Additional teambuilding resources include:** **Public Narrative Guide and Worksheet** by Marshall Ganz, available at [bit.ly/GanzNarrativeGuide](http://bit.ly/GanzNarrativeGuide) and [bit.ly/GanzNarrativeWorksheet](http://bit.ly/GanzNarrativeWorksheet)

**Chapter 16 of KU's Community Toolbox**, available at [ctb.ku.edu/en/table-of-contents/leadership/group-facilitation](http://ctb.ku.edu/en/table-of-contents/leadership/group-facilitation)

**K-State Master Community Facilitator Curriculum**, available at [ksre.k-state.edu/community/leadership/facilitation](http://ksre.k-state.edu/community/leadership/facilitation)

## Bring in an Outside Facilitator

Bringing in an outside facilitator is important because it:

- helps the team manage difficult conversations and stay on-track, and
- brings an impartial, outside perspective to the table.

**Characteristics to look for in an outside facilitator include:**

**Do they have experience facilitating** small-group discussions in rural Kansas?

**Are they truly outsiders?** Look for facilitators who live and work at least a county removed and who are not close relatives of anyone who lives in your community.

**How are they compensated?** Facilitators who work for universities and nonprofits might offer services at low or no cost. Private individuals might ask for a consulting fee. If your chosen facilitator requires a fee, check with local businesses and commodity groups to see if they are willing to help with the cost.

For help identifying an outside facilitator, contact:

**Your local K-State Research and Extension Office.**

Find your local office at:

[ksre.k-state.edu/about/StateAndAreaMaps.html](http://ksre.k-state.edu/about/StateAndAreaMaps.html), or call 785-532-5820

**The Kansas State Center for Engagement and Community Development.**

Website: [k-state.edu/cccd/](http://k-state.edu/cccd/)

Email: [cccd@k-state.edu](mailto:cccd@k-state.edu)

Phone: 785-532-6868

**The KDA Division of Water Resources.** Find your local office at:

[agriculture.ks.gov/divisions-programs/dwr/dwr-field-offices](http://agriculture.ks.gov/divisions-programs/dwr/dwr-field-offices), or call 785-564-6640.

**The Kansas Water Office.** Call 785-296-3185.

**Your local GMD Board** also may help facilitate, especially if you partner with them to write a LEMA.

## Frequent and Respectful Community Outreach

Frequent and respectful community outreach is important because it:

- raises awareness of groundwater conservation efforts and opportunities,
- helps you tell your story and avoid misunderstandings, and
- increases buy-in within your community.

**Frequent and respectful community outreach includes:**

**Personal Conversations** – one-on-one conversations in-person or over the phone to share your efforts, correct any misunderstandings, and solicit feedback;

**Presentations to Community Groups** – offer to give short (5 to 10 minute) presentations to groups such as your local chamber of commerce, Rotary/Kiwanis Clubs, American Legion/VFW, or FFA/4H;

**Meetings to Solicit Feedback** – when your plan is almost ready, consider inviting all producers and water right owners to a meeting to present your plan and solicit feedback.

*Personal conversations have the most impact*

Additional resources for community outreach include:

**Public Narrative Guide and Worksheet** by Marshall Ganz, available at [bit.ly/GanzNarrativeGuide](http://bit.ly/GanzNarrativeGuide) and [bit.ly/GanzNarrativeWorksheet](http://bit.ly/GanzNarrativeWorksheet)

**K-State Extension's Community Discussion Guide**, available at:

[bookstore.ksre.ksu.edu/pubs/MF3157.pdf](http://bookstore.ksre.ksu.edu/pubs/MF3157.pdf)

**Chapters 4 and 6 of KU's Community Toolbox**, available at: [ctb.ku.edu/en/table-of-contents](http://ctb.ku.edu/en/table-of-contents)

## Partnering with State and Local Government

Partnering with state and local government:

- provides information and support as you develop and implement your plan,
- can help connect you to additional resources to support your efforts, and
- increases the visibility and legitimacy of your work.

**Agencies to contact include:**

**KDA Division of Water Resources** – can provide support with community outreach and expert knowledge on the legal and policy tools available to conserve groundwater;

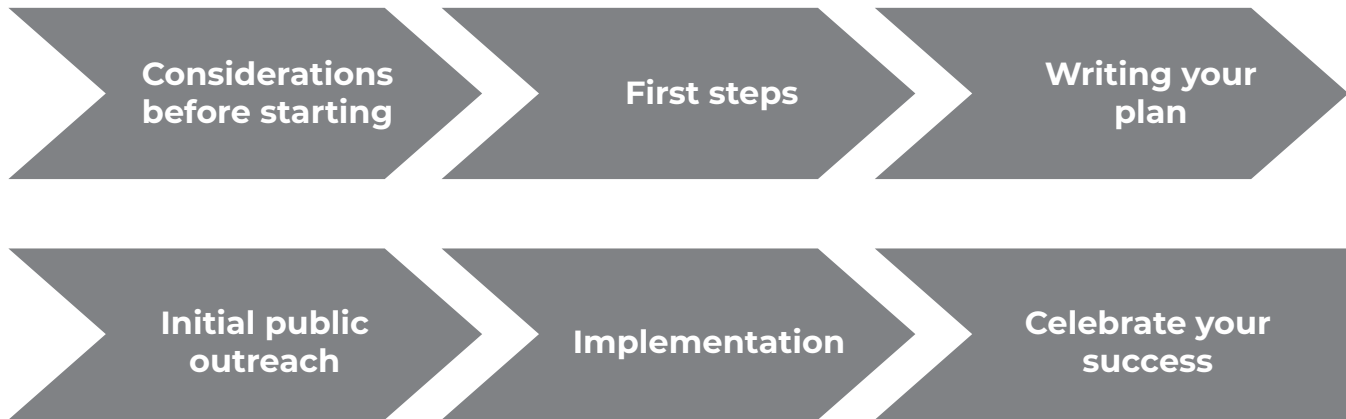
**Kansas Geological Survey** – can provide expert knowledge of how your local aquifer behaves and the effects of different groundwater conservation measures;

**K-State Research and Extension** – can provide unbiased information and help make connections as you get started;

**KU Center for Community Health and Development** – can provide information about teambuilding and community outreach and help you connect with a facilitator; and

**Local Groundwater Management District Board** – can provide many kinds of support. Even if you choose to work independently it is a good idea to make sure they are aware of your efforts.

# PROCESS



# SUGGESTIONS AND TIPS

## Considerations Before Starting

Locally led group conservation efforts are effective but require work and can be difficult at times. The process can take about a year if you work through planting and harvest, or closer to three years otherwise.

### Before starting, ask yourself:

- Can I realistically commit enough of my time?
- Do I have support from my family and/or business partners?
- Can I identify three or four other people to help me lead this effort?

Options to consider if a locally led group conservation is not for you:

- Write a personal water conservation area plan for your operation
- Voice your opinions at your local groundwater management district board or annual meetings

## First Steps

Pay attention to the keys to success as you assemble your group. Reach out for assistance early on — there is no reason to go it alone or reinvent the wheel.

## Writing Your Plan

This can be the hardest part of a locally led group conservation effort – and the most rewarding. Use your common goals and values to refocus your work. If discussions become heated, avoid taking things personally. A good facilitator makes this much easier.

You will likely need to balance between competing values as you write your conservation plan. These values may include:

**Stewardship:** Caring for groundwater resources and leaving a positive legacy for the next generation.

**Community:** Maintaining positive relationships with your neighbors and supporting local farms, businesses, schools, and hospitals.

**Fairness:** Trying to make sure that everyone shares in the benefits and sacrifices of groundwater conservation, without creating huge burdens on any one group of people.

**Responsibility:** Supporting producers to make their own farm-management decisions and to reap the positive and negative consequences of those choices.

**When making decisions, keep in mind that: Consensus is valuable.** Making decisions by consensus means your entire team can stand united behind every aspect of your plan. If somebody disagrees with

part of the plan, ask them to propose an alternative. Repeat the process until you come up with a decision that everyone can live with.

**Be good enough.** No plan is perfect, but you can create a plan that is good enough. Focus on your common goals and values when figuring out a compromise.

**Manage emotions and conflicts.** Avoid personal attacks. Remember your common goal. Take time at every meeting to celebrate how far you have come.

**Get help and advice.** State and local agencies can help you learn how to resolve difficult situations.

## Initial Public Outreach

**Present the plan to your community:**

**Make sure everyone receives an invitation.** The Division of Water Resources and/or your local groundwater management district can provide a mailing list of water right holders in your area.

**Personally invite people who you know** and whose knowledge and experience will add to the discussion. Remind them before the event with a phone call or text.

**Ask for feedback:**

**Listen carefully** to all feedback.

**Be willing to make changes** to the plan to address legitimate concerns. Small changes might make a big difference in community buy-in.

**You cannot please everyone.** There may be some people in your community who just cannot support your plan. Do not take this personally, and do not let a small group indefinitely delay planned action.

## Implementation

**Get your plan approved:**

- WCAs need approval from the chief engineer. The Kansas Department of Agriculture, Division of Water Resources can help prepare the document.
- LEMAs need approval from both the local groundwater management district board and the chief engineer. This is the local groundwater management district's responsibility.

**Ongoing outreach:**

- Have another community presentation to explain your final, approved plan.
- Continue personal outreach to producers to encourage participation.

## Celebrate Your Success

Take time to celebrate accomplishments and recognize the contributions of each person on the team.



## References

1. Golden, B. (2016). Monitoring the impacts of Sheridan county 6 local enhanced management area. Available at: [http://agmanager.info/sites/default/files/pdf/SheridanCounty6\\_LEMA\\_2013-2017.pdf](http://agmanager.info/sites/default/files/pdf/SheridanCounty6_LEMA_2013-2017.pdf)
2. Department of Water Resources (2020). Wichita County WCA. Available at: [agriculture.ks.gov/divisions-programs/dwr/managing-kansas-water-resources/wca/wichita-county-wca](http://agriculture.ks.gov/divisions-programs/dwr/managing-kansas-water-resources/wca/wichita-county-wca)
3. Wilson, B.B. & Li, D. (2004). Water Right Development in Kansas. Kansas Geological Survey. Available at: <http://www.kgs.ku.edu/HighPlains/maps/index.shtml>
4. Lauer, S. & Sanderson, M. (2019). Producer attitudes toward groundwater conservation in the U.S.-High Plains. Groundwater. [doi.org/10.1111/gwat.12940](https://doi.org/10.1111/gwat.12940)

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