

What's clean water worth to you?

Governor Dayton's goal:

improve
water quality
in Minnesota

25%

BY 2025

#WaterActionMN

What can you do at the local level?

You're invited

25BY25

COMMUNITY WATER MEETING

AUGUST 29 7-9 PM

The Legacy Room, Anoka Ramsey Community College
11200 Mississippi Blvd., Coon Rapids

Meeting Hosts:

The League of Women Voters Upper Mississippi River Region
Anoka County Water Task Force • Anoka Conservation District
Anoka Ramsey Community College and Anoka Technical College

Community Water Conversation – Anoka Ramsey Community College – August 29, 2017
 Analysis and Synthesis (G.Sabel, August 31, 2017)

Question 1 – What do you view as the most pressing water issues, at the state, local or neighborhood level?

There were 45 responses to this question.

Number of responses that mention the theme	Frequently mentioned themes
8	Environmental literacy/water education
11	Reducing pollution
2	Capturing and reusing runoff
6	Improved agricultural practices
9	Improved storm water practices
2	Protection of drinking water supplies
3	Water conservation/efficiency

Unique responses
Improve cross-agency communications
Lack of desire for behavioral change due to ineffective education and/or lack of cultural buy-in
The money to support positive reinforcement for positive actions
Reduce land use impacts on water sources

Question 1 – What do you view as the most pressing water issues, at the state, local or neighborhood level?

(transcribed responses)

Best practices – ag and urban (place-based)

Capturing runoff, etc

Reusing runoff

Reducing nutrients and sediment >> Pollutants and other contaminants

Both nutrients and sediment are currently 'targeted' but there are others not treated (salt, pharmaceuticals)

Environmentally literate citizenry – water education needed

Reduce contaminants such as: ag and urban runoff, road salt, phosphoruns, nitrogen, industrial contaminants like from oil pipelines

Water education for youth and the public

Improve cross-agency communications

Pollution - dog poop, littering, goose poop.

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Lack of knowledge – raking leaves into streets/lake

Use of chemicals and salt to melt ice

Education – state curriculum

Storm water improvement and retrofits

Protection of drinking water supplies

Water capture and reuse - local issues like fertilizer, too much watering, salt going into sewers and lakes

Agricultural runoff improvement

Surface water quality

Reduce land use impacts on water sources

Water conservation (efficiency)

Reduction in pollutants

Lack of desire for behavioral change due to ineffective education and/or lack of cultural buy-in

Lack of treatment of agricultural and urban storm runoff

Increase in demand of aging infrastructure and lack of long-term management plans

Uncontrolled runoff into streams and rivers

Ground water pollution – industrial waste, etc

Pollution control

Erosion control

Public policy and education

Water quality

Farming practices – polluting waters

Water conservation to deal with scarcity issues

Reduce pollutants in run-off

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Improve lake water/recreational water quality by reducing invasive species

More efficient use of water

The money to support positive reinforcement for positive actions

Working with farmers to reduce pollution such as draintile reduction, cover crops

Education – use of water

Chemical and biological pollution

How our behavior impacts water quality and enforcement of regulations

Water Quality

Farming Practices

Water Conservation

Uncontrolled runoff into streams, rivers

Groundwater pollution

Safe drinking water

- Aquatic invasives leading to poor water quality
- Emerging pollutants such as microbeads and pharmaceuticals

Reduction of water pollutants and water protection in/on ag land

- Controlling ag runoff
- Aquatic invasives due to poor water quality
- Support of organic and conservation farming methods

Water conservation and water protection education in urban areas

- Extreme weather and rain events for wetlands
- Storm drain education/watershed
- Regulatory changes to support innovation and technology changes with city planning, greywater and wastewater

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Question 2 – What actions need to be taken to address the top three issues for your table?

There were 62 responses to this question.

Number of responses that mention the theme	Frequently mentioned themes
22	Develop curriculum or provide more education
5	Provide grants and/or incentives to encourage good practices
3	Require education (mandatory for K-12)
5	Funding
7	More stringent requirements and more strict enforcement
14	Societal change, political will

Unique responses
<p>Best practices for ag & urban</p> <ul style="list-style-type: none"> • Increasing storm water BMPs based on site-specific factor and impermeable surfaces (rain gardens, restored wetlands, diverting storm sewers to retention ponds, increased ponding on land, swales.) • Community planning and zoning should be consistent, stringent • Codes to allow/encourage raingardens and native plants • Planning and permits for water quality (required) • Community and political will
<p>Environmentally literate citizenry – water education</p> <ul style="list-style-type: none"> • Start young – target youngest with hands-on, inquiry learning. Incorporate environmental themes in science and other learning outcomes. Develop continuity, not “everyone creates their own curriculum”. • Empower groups like lake associations, community groups, river groups, etc – Give them a voice and process; help them work together. • Professional development opportunities for groups with large water impact (farmers, parks, water treatment, industry) focused on how it can benefit them or work for them (\$, time, etc.) vs “another regulation”.
<p>Education of public in general – water has to be a non-partisan life issue</p>
<p>Set firm goals:</p> <ul style="list-style-type: none"> • Improve quality of water gardens by at least 25% • Reduce number of trouble wells by 25% • Capture 25% more rain water to recharge aquifers • Increase number of leak detection technology for water mine pipes • Reduce phosphorus levels by 25% • Increase funding for storm water ponds by 25% to clean water
<p>Actions needed to implement erosion control:</p> <ul style="list-style-type: none"> • Plant structures (roots) – trees, vegetation, etc near and around waterways; ground cover

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<ul style="list-style-type: none"> • Physical structures – retaining walls, pervious parking lots and driveways • Strengthen approval processes for development and redevelopment of land used for both commercial and residential construction
<p>To improve state agency coordination, have a water czar to coordinate water efforts with a board to help upgrade software and communication.</p>
<p>Actions needed to implement public policy and education</p> <ul style="list-style-type: none"> • Establish priority for early education for potable water, fertilizer use, link to city council and watershed education, permits-ecologically beneficial, ground cover • Neighborhood network and education; signage, decrease chemical use • Policy makers must understand SCIENCE as condition of appointment to boards
<p>Actions for improving farming practices – push ag water quality program much harder. Engage farm organizations to push.</p>
<p>How to pay for programs and incentives – We the people demand the right to vote for local municipalities to own cannabis dispensaries and distribute the wealth to that to help rebuild infrastructures and improve water quality.</p>
<p>Protection of Drinking Water Supplies</p> <ul style="list-style-type: none"> • Capping of wells and inspections; more inspection of septic systems
<p>To improve education: - more water curriculum for students that involves kids in community projects and – outreach to families and the public</p>
<p>Actions to reduce uncontrolled runoff into streams and rivers</p> <ul style="list-style-type: none"> • Ponding • Rain gardens • Buffers on private waterways • Capturing rainwater • Education • Use pervious surfaces • Enforcement of regulations
<p>Change in policies</p> <ul style="list-style-type: none"> • Plowing, salting • Enforcement • Rates, increase water rates • Geese removal
<p>Analyze where, when and who, then increase training and education for water systems and human impact. Example:</p> <ul style="list-style-type: none"> • Bump up school water ed required standards • Train local and government agencies plus business owners on water strategies

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- Support collaborative efforts for training on innovative green technologies affecting homeowners, businesses, cities
- Teach economic benefits of water education

Question 2 – What actions need to be taken to address the top three issues for your table?
(transcribed responses)

Solutions to removing contaminants: increase grants for innovative projects, tax rebates for permeable pavers, green roofs, more regulation to protect water

To improve education: - more water curriculum for students that involves kids in community projects and – outreach to families and the public

To improve state agency coordination, have a water czar to coordinate water efforts with a board to help upgrade software and communication.

To improve water quality:

- Education – state curriculum
- Stormwater improvement and retrofits
- Protection of drinking water supplies

Actions – education

- State curriculum for water (make it a requirement)
- If not a requirement, make it an elective at the middle or high school level and/or include it into an environmental course

Stormwater improvement and retrofits

- Funding, Low impact development (LID)

Protection of Drinking Water Supplies

- Capping of wells and inspections; more inspection of septic systems

Consider long-term vs short—term gain

Use technology to improve efficiency and effectiveness of quality

Subsidize farmers for more CRP, etc.

Incentivize solutions

Actions needed to implement erosion control:

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- Plant structures (roots) – trees, vegetation, etc near and around waterways; ground cover
- Physical structures – retaining walls, pervious parking lots and driveways
- Strengthen approval processes for development and redevelopment of land used for both commercial and residential construction

Actions needed to implement public policy and education

- Establish priority for early education for potable water, fertilizer use, link to city council and watershed education, permits-ecologically beneficial, ground cover
- Neighborhood network and education; signage, decrease chemical use
- Policy makers must understand SCIENCE as condition of appointment to boards

Education/public relations in schools and industries

Legislation to reduce pollutants

Financial incentives

Buffer zones + rain gardens

Funding for water related issues

BMP's

Education

Legislation

Better fertilizer – less polluting

Native prairie instead of grass

Ban use of fertilizers on lakeshore properties

Low flow fixtures

Education – sustainable landscaping/irrigation/fertilizer/grass clippings reduction

Farming practices – push ag water quality program – better promotion

Riverbank crossings/mitigation – apply buffer law to residential properties, too.

Actions to reduce uncontrolled runoff into streams and rivers

- Ponding
- Rain gardens
- Buffers on private waterways

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- Capturing rainwater
- Education
- Use pervious surfaces
- Enforcement of regulations

Actions to reduce groundwater pollution

- Replace road salt
- Better monitoring to detect and map pollution sources
- Cap wells

Educate the public

Provide funding

Encourage actions for clean water (reduce impacts by individuals/groups)

Education

- Schools – teach the kids
- Community events
- Social media
- Ads, billboard articles

Change in policies

- Plowing, salting
- Enforcement
- Rates, increase water rates
- Geese removal

Funding

- Local funding for rainbarrels
- Native plants

Barriers to costs of raising water equals economics problems for low income

Inappropriate application of resources

Lack of acceptance of reliable scientific facts

Education of public in general – water has to be a non-partisan life issue

Set firm goals:

- Improve quality of water gardens by at least 25%
- Reduce number of trouble wells by 25%
- Capture 25% more rain water to recharge aquifers
- Increase number of leak detection technology for water mine pipes
- Reduce phosphorus levels by 25%

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- Increase funding for stormwater ponds by 25% to clean water

Effective methods to educate citizens; make (education) a required part of public education

Analyze where, when and who, then increase training and education for water systems and human impact. Example:

- Bump up school water ed required standards
- Train local and government agencies plus business owners on water strategies
- Support collaborative efforts for training on innovative green technologies affecting homeowners, businesses, cities
- Teach economic benefits of water education

Increase incentives for green innovation

- Reduction of waste / plastic bags / pollutants
- Train elected officials, policy makers, businesses on new tech to update regulations and permitting processes

Develop a statewide clearinghouse of accurate water info for engineers, policy-makers, permitters, naturalists, etc to all access for stronger decision making

How to pay for programs and incentives – We the people demand the right to vote for local municipalities to own cannabis dispensaries and distribute the wealth to that to help rebuild infrastructures and improve water quality.

Environmentally literate citizenry – water education

- Start young – target youngest with hands-on, inquiry learning. Incorporate environmental themes in science and other learning outcomes. Develop continuity, not “everyone creates their own curriculum”.
- Empower groups like lake associations, community groups, river groups, etc – Give them a voice and process; help them work together.
- Professional development opportunities for groups with large water impact (farmers, parks, water treatment, industry) focused on how it can benefit them or work for them (\$, time, etc.) vs “another regulation”.

Best practices for ag & urban

- Increasing stormwater BMPs based on site-specific factor and impermeable surfaces (rain gardens, restored wetlands, diverting storm sewers to retention ponds, increased ponding on land, swales.)
- Community planning and zoning should be consistent, stringent
- Codes to allow/encourage raingardens and native plants
- Planning and permits for water quality (required)
- Community and political will

Ag efforts – tillage, buffers, work with farmers for site-specific solutions

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Actions for reducing nutrients and sediments - Increase of cover crops, no-till, buffers, perennials, bank stabilization, native plants

Actions for addressing pharmaceuticals – community drop-off for unused drugs. Require drug stores to take back drugs. Improve wastewater treatment for pharmaceuticals.

Actions for road salt – develop more widespread salt-reduction strategies

Actions for water capture and reuse

- Education
- Comprehensive planning/regulation at an appropriate resource based scale
- Technical and financial assistance – encourage system approach, targeted

Actions for agricultural runoff improvement

- Programs – restore to natural conditions
- Smart farming – cover crops and soil health
- National farm policy – conservation

Actions for improving surface water quality

- Education
- Comprehensive planning/regulation at an appropriate resource based scale
- Technical and financial assistance – encourage system approach, targeted

Actions for improving pollution control

- Educate people and stores on use and disposal products for lawn, gardens, home equipment care and maintenance, fertilizers, home chemicals, vehicle maintenance, greywater, agriculture
- Biological mitigation: landscape, plantings, snow plowing early to reduce salt use
- Rethink water recreation – boat motors and users cause pollution

Actions for improving education in lawn maintenance

- Sustainable landscaping
- Irrigation usage
- Run off fertilizer
- Grass clippings

Actions for improving farming practices – push ag water quality program much harder. Engage farm organizations to push.

Actions for riverbank erosion/mitigation practices. Buffer law to apply to residential properties, too.

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Question 3 – What barriers exist to prevent this?

There were 68 responses to this question.

Number of responses that mention the theme	Frequently mentioned themes
22	Funding is needed, not enough money
5	Cultural differences (different values), language differences
10	Lack of public buy-in, apathy
10	Barriers to education – general public
6	Barriers to education – K-12
11	Lack of government cooperation / regulation ineffective
2	Stronger laws needed

Unique responses
<p>Barriers to erosion control</p> <ul style="list-style-type: none"> • Funding – Perception that initial investment is greater than future costs for prevention and control • Belief that individual rights/wishes/desires trump community benefits • Zoning and permits need better control and cooperation, may include higher taxes
<p>Barriers to water education</p> <ul style="list-style-type: none"> • The required curriculum is huge already • Time constraints • Many kids and families have no experiences on the water
<p>Barriers to policymakers understanding SCIENCE</p> <ul style="list-style-type: none"> • State and Federal government implementing policy/appointments to stifle science • Failure to admit climate change is here and costing dollars, health and life. Bible is used to justify non-science positions. • Education barriers that prevent kids from learning and participating in science projects that teach about creating better water quality for themselves and their children.
<p>Behavior change and habits are hard to change</p>
<p>Barriers to best practices for ag/urban, capturing run-off for reuse</p> <ul style="list-style-type: none"> • Cost, funding, start-up and maintenance • Maintenance – manpower, on-going • Political will, political continuity • Inertia – how we’ve always done it • Denial of Science, “truth” • Climate change • Increasing population
<p>Opposition to increasing taxation</p>

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Barriers to protection of drinking water supplies <ul style="list-style-type: none">• Lack of good state statute language
Legislators have a hard time knowing what issues to prioritize and get accurate info on issues
Barriers to taking individual actions <ul style="list-style-type: none">• Lack of education• Fear of non-conformity• Loss of profits• Refusal to adapt to new practices• Social and cultural values• Specialized groups and their influence over mass audiences• Selective media consumption
Barriers to reducing nutrients and sediment <ul style="list-style-type: none">• Cost, funding, \$\$• Climate change changes 'baseline'• Population increase• Ignorance – denial of science• Technology may not exist for some needs (R&D), need new knowledge• Maintenance – ongoing (of new) and also existing infrastructure (drain tiles, ditches, etc)• Natural geology of certain areas and waterbodies exacerbate mitigation
Change emphasis in education to science

Question 3 – What barriers exist to prevent this?
(transcribed responses)

Barriers to reducing contamination:

- Funding
- Big corporations and legislators
- Changing social norms
- Enhance technology for alternative products, like road salt, permeable pavers, farm fertilizer

Barriers to water education

- The required curriculum is huge already
- Time constraints
- Many kids and families have no experiences on the water

Barriers to improving cross-agency communication

- Funding, Leadership, Legislative buy-in

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Barriers to erosion control

- Funding – Perception that initial investment is greater than future costs for prevention and control
- Belief that individual rights/wishes/desires trump community benefits
- Zoning and permits need better control and cooperation, may include higher taxes

Barriers to policymakers understanding SCIENCE

- State and Federal government implementing policy/appointments to stifle science
- Failure to admit climate change is here and costing dollars, health and life. Bible is used to justify non-science positions.
- Education barriers that prevent kids from learning and participating in science projects that teach about creating better water quality for themselves and their children.

Apathy/perception

Development pressures

Money and political will

Public engagement/personal buy-in

Inconvenience

Funding

Lack of incentives to use or find alternatives

Public awareness

Apathy, not a priority

Cultural differences

Language differences

Political pushback

Lack of funding or prioritization of funding

Opposition to increasing taxation

Getting information to individuals about what needs to happen, especially at the individual level

Finding ways to translate to individual the information they need to take action

Not enough funding from the state for conservation projects

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Public can be hard to educate and understand complex issues

Money is always tight for local governments

Some cities did not plan ahead with their water, hard to penalize these cities

Poorly designed projects make it harder to sell to people

Behavior change and habits are hard to change

Legislators have a hard time knowing what issues to prioritize and get accurate info on issues

Not enough inspectors in some industries

Age!

Coordination of government efforts

Change is slow

Water resource variability

Lack of funds

Lack of enforcement

Lack of tools to measure effectiveness

Getting people engaged

Barriers to education

- Getting the Department of Education on board as partner
- Funding the program

Barriers to stormwater improvements and retrofits

- Funding – limited grant program (need to loosen grant rules of criteria)
- Land availability to make retrofits

Barriers to protection of drinking water supplies

- Lack of good state statute language

Barriers to best practices for ag/urban, capturing run-off for reuse

- Cost, funding, start-up and maintenance
- Maintenance – manpower, on-going
- Political will, political continuity

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- Inertia – how we've always done it
- Denial of Science, "truth"
- Climate change
- Increasing population

Barriers to reducing nutrients and sediment

- Cost, funding, \$\$
- Climate change changes 'baseline'
- Population increase
- Ignorance – denial of science
- Technology may not exist for some needs (R&D), need new knowledge
- Maintenance – ongoing (of new) and also existing infrastructure (drain tiles, ditches, etc)
- Natural geology of certain areas and waterbodies exacerbate mitigation

Barriers to environmentally literate citizenry

- Political partisan divide, no unified consistent message (when did the environment become a political issue?)
- Ignorance, denial of science, denial of climate change
- \$\$
- Social media – could go either way – may spread ignorance
- No unified, cohesive plan for education, training – everyone creates or protects their own turf
- Inertia
- Kids don't get outside!

Funding

Coordination and communication

Technology for local agencies and organizations

Ignorance, apathy

Plumbing codes

Change emphasis in education to science

Benefit to be understood

Political will

Cultural differences

Money

Political will – priority

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Personal accountability

Public perception about the impact of the individual

Misalignment between funding and the will to act

Barriers to reducing contaminants

- Funding
- Changing social norms
- Big corporations – enhance technology for alternatives

Barriers to education

- Required curriculum
- Time constraints
- Experiences on the water

Barriers to improving cross-agency communication

- Funding
- Leadership
- Legislative buy-in

Barriers to improving pollution control

- Lack of will and resistance to change to accept new scientific information to benefit present and future generations
- Misuse of Bible – Jesus is coming – no reason to protect the earth
- Lack of funds

Barriers to taking individual actions

- Lack of education
- Fear of non-conformity
- Loss of profits
- Refusal to adapt to new practices
- Social and cultural values
- Specialized groups and their influence over mass audiences
- Selective media consumption

Barriers to taking local actions

- Zoning restrictions that harm water resources
- Lack of education and priority for elected officials
- Lack of funding

Barriers to state action

- Lack of funding
- Lack of priority for elected officials
- Division and lack of coordination of agencies
- Bureaucratic insufficiencies

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- Bipartisanship
- Lack of monetary values assigned to natural resources

Barriers to desire for behavioral change due to ineffective educational and/or cultural buy-in

- Curriculum development of young (K-12) children
- Stronger tie with public, make the problem more personal – how it affects human/public health
- Mandatory regulations

Barriers to improving treatment of agricultural and urban storm runoff

- Agricultural and NPS regulations, increase accountability for violators
- Consumer food changes by choosing farms that are certified in proper ag runoff practices
- More incentives to restore with better and new resource (money) management

Barriers to meeting the increase in demand of aging infrastructure and lack of long-term management plans

- Lack of long-term management plans
- Utility fees to fund management plans where they lack with a more proactive strategy
- Reduce the demand of infrastructure by utilizing BMPs upstream of the problem or smarter water conservation
- Better promotion of LID and better localization of infrastructure