

IOWA SOURCE WATER AGRICULTURAL COLLABORATIVE

Scope: State

Location: Iowa

SCOPE:

Provide source water protection (SWP) information, education and outreach to:

- » Agri-business
- » Farm operators/owners
- » Women landowners
- » Conservation agencies, organizations and groups (local, state, federal)
- » Iowa section of the American Water Works Association (AWWA)
- » City Administrators/City Councils/Staff
- » Iowa Agricultural sector/organizations
- » Community Water Supplies/Rural Water Associations
- » Farm Management Companies

CONTACT INFORMATION:

Iowa Department of Natural Resources
Source Water Protection Program:
<http://www.iowadnr.gov/Environment/WaterQuality/SourcewaterProtection.aspx>

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COLLABORATIVE FORMATION:

- » Initiated by the Iowa Department of Natural Resources (DNR) Source Water Protection (SWP) Program for Targeted Community Water Supplies in April 2014
- » The Collaborative was launched as a result of several SWP workshops held across the state from 2010 to 2014
- » The Collaborative is a culmination of Iowa Agriculture, Conservation, and Iowa's Section of AWWA's desire to connect in an effort to bring awareness of SWP as it pertains to the Iowa Nutrient Reduction Strategy
- » Approximately 90% of Iowa's municipal wells are located in agricultural areas within crop fields and may potentially be impacted by row crop production. The need for an Agricultural Collaborative to focus on SWP was deemed valuable

MEMBERS:

- » Heartland Co-op
- » Brinkman Ag Solutions
- » Iowa Certified Crop Advisors (CCAs)
- » Iowa Corn Growers Association
- » Iowa Soybean Association
- » Iowa Department of Agriculture and Land Stewardship (IDALS)
- » Iowa State University
- » U.S. Department of Agriculture (USDA)
- » Natural Resources Conservation Service (NRCS)
- » USDA-Farm Service Agency (FSA)
- » Iowa Department of Natural Resources
- » Iowa section of the American Water Works Association
- » Agri-business Association of Iowa
- » U.S. Environmental Protection Agency (EPA)
- » Additional members included over time

WATER CONCERNS:

- » Examples of concerns identified by the Collaborative
 - Increased nitrate levels in public wells
 - Current available resources are insufficient to address and implement practices to decrease contaminant risk
 - Education and outreach efforts for SWP to the agricultural sector are needed
 - Climate variation and water quantity are beginning to be a concern

STRATEGIES:

- » Establish framework for outreach, communication, and partnerships with landowners/operators/agricultural retailers/conservation agencies and groups.
- » Develop innovative and effective practices to reduce risk to susceptible public wells
- » Target highly susceptible community water system (CWS) capture zones and prioritize resources to address concerns around public drinking water wells
- » Target highly susceptible areas with existing watershed projects, to use project resources to support SWP
- » Further connecting watershed projects (local, state, federal) with the highly susceptible Community Water Systems (CWSs) on a county and/or watershed basis
- » Establish partnership with Iowa State University (ISU) Extension program, IDALS, NRCS to include SWP success stories for the Iowa Nutrient Reduction Strategy

RESULTS:

- » Planning additional SWP Informational, Educational and Outreach workshops in each quadrant of the state with assistance from a planning committee, including landowners/operators/city administrators/water operators/agribusinesses, certified crop advisors, USDA/NRCS, and others.
- » Developing online web access for agricultural retailers, conservation agencies and groups to assist them in conservation planning in the public wells' capture zone areas by using the DNR SWP Program capture zone maps
- » Established partnership with Iowa Department of Agriculture and Land Stewardship (IDALS) to provide SWP information on their website: www.cleanwateriowa.org
- » Established partnership with the Heartland Certified Crop Advisors to provide best management practice (BMP) implementation assistance in Western Iowa's Priority SWP Projects.
- » Initiated project with USDA-NRCS to develop a process that incorporates capture zone maps into conservation planning efforts
- » Initiated project with landowner, Dordt College, USDA-NRCS, IDALS, SWCD, and the Leopold Center for Sustainable Agriculture at Iowa State University to develop field trial research resulting in identifying an additional best management practice option that can decrease nitrate risk while sustaining viable farming operation
- » Reduced nitrate levels in municipal well by 40% at the Remsen, Iowa SWP project by converting row crops to native grasses in a priority area of the municipal well's capture zone [insert link to pdf]
- » Installed wetland in Elliot, Iowa's municipal well capture zone, to reduce elevated nitrate levels [insert link to pdf]
- » Using USDA-NRCS Conservation Innovation Grant to incorporate cover crops in the Griswold, Iowa municipal well capture zone, and using SWP program funds to install monitoring wells to assess results over time
- » Developing partnership with Women and Land Legacy/Women, Food and Ag Network Groups regarding SWP