

Boone Soil and Water Conservation District Five-Year Soil and Water
Resource Conservation Plan (2021-2025)

Preparer Information: Boone SWCD, Conservation Assistant, 1602 Snedden Drive 515-432-2316

Taxpayer Information: N/A

Return Document To: See above

Grantors:

Grantees:

See pg. 2

Legal Description:

N/A

YOU ARE HEREBY NOTIFIED that the Boone Soil and Water conservation District has adopted a 5-year soil and water resource conservation plan which was approved by the State soil Conservation Committee and signed by the director of the Division of Soil Conservation in 1946. The plan is available for your inspection during normal business hours, Monday – Friday 8:00 a.m. – 4:00 p.m., at the District office located at the address listed above. This notice is given pursuant to the requirements of Iowa Code section 161A.7n(2), or as subsequently amended.



Boone
Soil & Water Conservation District
Five-Year Soil & Water Resource Conservation Plan
2021-2025

*1602 Snedden Drive
 Boone, IA 50036*

Phone: (515) 432-2316

Soil health and water quality not only determine the quality of human life, but whether human life is possible. Conservation and restoration of our soil and water resources benefits everyone and requires community-wide involvement. The Boone Soil and Water Conservation District (SWCD) invites everyone to get involved in preserving our essential natural resources for future generations.



Mission & Vision of the Boone Soil and Water Conservation District

It is the mission of the Boone SWCD to assist producers and landowners in adopting practices that protect and improve soil and water quality.

The Priority Goals for the Boone Soil and Water Conservation District are as follows:

The priority goals were established in collaboration with input from a Local Working Group (consisting of farmers, local business owners, and other residents of the community), Boone Commissioners and Natural Resources Conservation Service staff.

- | | |
|-----------------------|---|
| Priority goal: | Improve awareness of, and involvement with, Boone SWCD. |
| Priority goal: | Promote and encourage the adoption of practices that improve soil health, such as cover crops and reduced tillage practices. |
| Priority goal: | Promote and improve Boone County’s wildlife habitat, such as woodlands, pollinator habitat, buffers, rivers and waterways |
| Priority goal: | Partner with organizations doing similar work in Boone County to increase effectiveness at achieving goals. |

Who We Are and How We Operate

The Boone Soil and Water Conservation District (SWCD) was organized at the request of residents interested in soil and water conservation. The Boone SWCD was officially formed in 1946. A charter was issued under the provisions of the Soil Conservation Districts' Law, Code of Iowa, Chapter 467A, on November 20, 1942. In the state of Iowa, the geographical boundaries of the County and Conservation District are usually the same. There are a total of 100 Conservation Districts in the state of Iowa.

The SWCD Board is composed of five elected Commissioners. They hold monthly meetings that are open to the public. They also conduct periodic Local Working Group meetings to obtain input and investment of community members and organizations. Their conservation efforts include education and outreach, and they form partnerships that protect and improve the soil and water resources of the District.

What We Do and Who We Serve

The Soil and Water Conservation (SWCD) Board's purpose is to be aware of the soil and water issues of the District and work with the community and related organizations to address them. SWCD Boards serve and support individuals, organizations, farmers, urban residents, local school districts' conservation curriculum and the community-at-large in their work.

What is in the Plan

The Soil and Water Resource Conservation Plan (SWRCP) represents the state of soil and water resources of the Boone SWCD District and the priority goals to focus on for the next five years to protect and promote natural resources. The Board also uses the SWRCP to formulate their annual plans. The SWRCP includes a brief history of the District, an inventory of the District's resources, and an in-depth description of the SWCD Board's goals and credits.



Diana
Wright



Jeremy
Gustafson



Missy
Rice



Steve
Carlson



Rosie
Wurpts

Boone Assistant Commissioners

April Burch

David Weaver

(See Appendices A through H for specific information about the goals, actions, and timeframes.)

**Boone Soil & Water
Conservation District (SWCD)
Five-Year Soil & Water Resource Conservation Plan
2021-2025**

Preface

“Man, despite his artistic pretensions and his many accomplishments, owes his existence to a six-inch layer of topsoil and the fact that it rains.” ~ Author Unknown

The lands and water we enjoy in the Boone Soil & Water Conservation District are resources borrowed from future generations. We are responsible for their care. This Five-Year Soil and Water Resources Conservation Plan (SWRCP) recognizes that obligation. We have created it with the belief that we can enjoy the benefits of land and water stewardship today, while ensuring environmental security for tomorrow. Your involvement in the plan’s success is your gift to the future.

“Someone’s sitting in the shade today because someone planted a tree a long time ago.” - Warren Buffett

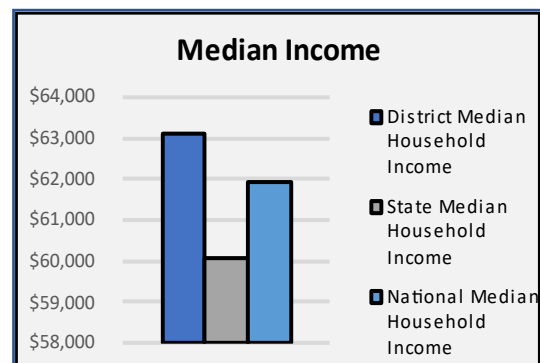
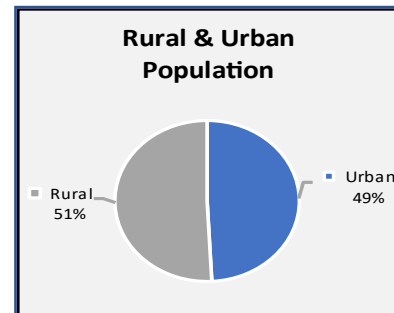
General Description of the Boone Soil & Water Conservation District

The total area of the District is approximately 469 square miles or 300,224 acres. Roughly 99 percent of the total acres in the District are land, and the other one percent is in water. Roughly two-thirds of the population lives in rural areas. Urban land usage is less than one percent in the District. Agricultural tendencies of the Boone District have seen pastures, hay ground, and timber ground converted to row crop production. There is one lake in the District. Towns and rural areas in the District rely on wells for their water supply. There are various other creeks and ponds in the District.

Population & Employment

General Population & Employment	
Total Population Estimate	26,381
Working Population	13,619
Median Household Income	\$ 63,099.00
Female Population	50%
Male Population	50%
Caucasian	96.6%
Black or African American	0.4%
Native American or Native Alaskan	0.3%
Asian	0.4%
Native Hawaiian or Pacific Islander	0.7%
Hispanic or Latino	3.0%

2010 US CENSUS

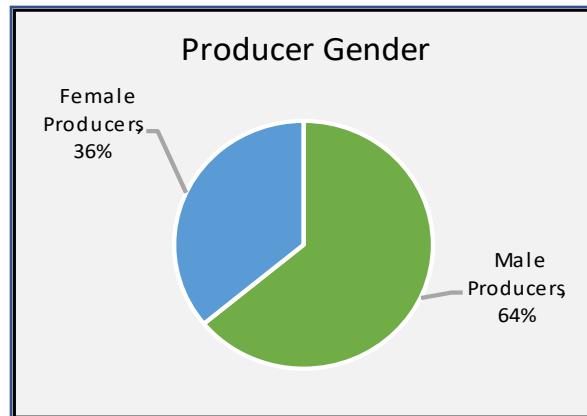


2010 US CENSUS

Producer Information

Producers	
Total Producers	1617
Primary Occupation: Farming	590
Primary Occupation: Other	1019
Average Age	59.5
Caucasian Producers	1602
Native American or Native Alaskan	1
Asian	1
Black or African American	2
Hispanic or Latino	8

2010 US Census



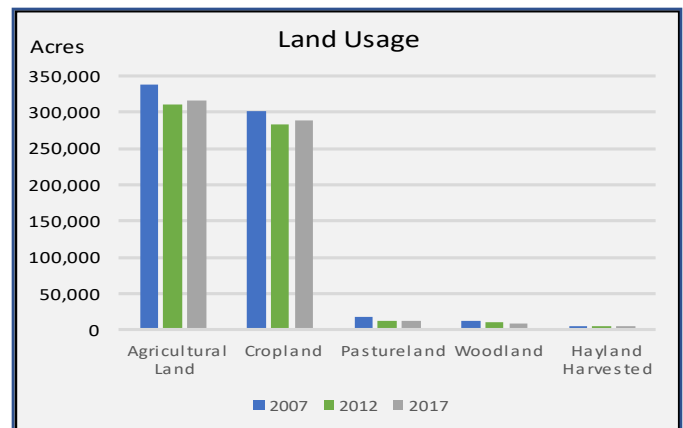
Nass.usda.gov

Soil & Water Resources

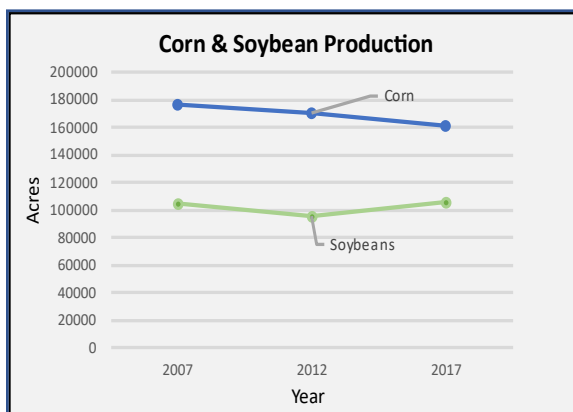
Existing Land Use

Existing Land Use	
Total Land (Acres)	367,200
Urban Usage (Acres)	6,144
Rural Usage (Acres)	359,680
Number of Farms	967
Median Farm Size (Acres)	70
Land in Farms (Acres)	315,061
Percent of District Land in Farms	86%
CRP (Acres)	13,066
Farm-Owned (Acres)	65,203
Farms-Rented (Acres)	153,850
Organic Operations	4

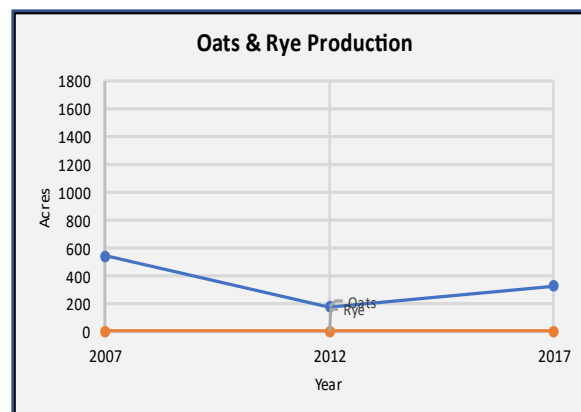
Nass.usda.gov (2007-2017) Data



Nass.usda.gov



Nass.usda.gov



Nass.usda.gov

Other Significant Crops

Crop	Acres Produced (2017)
Corn, Grain	171923
Soybeans	96605
Hay & Haylage	15273
Oats	679

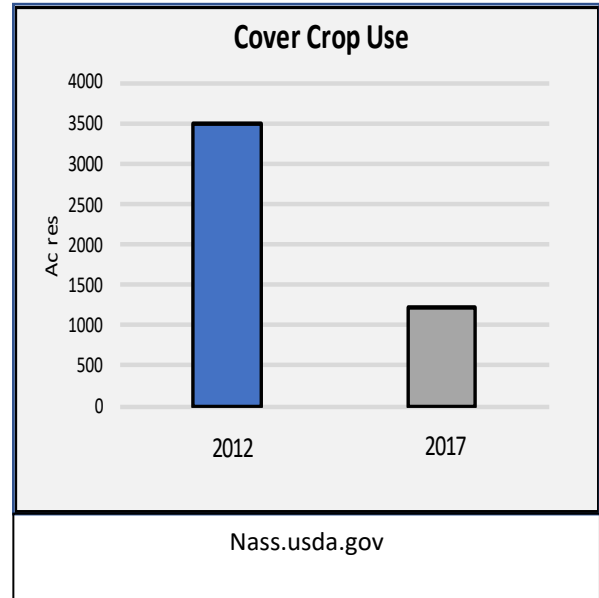
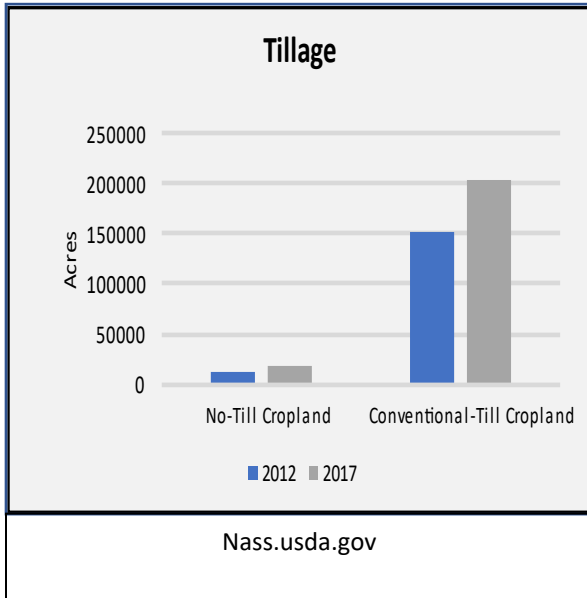
Nass.usda.gov



Soil Resources

Practice	2012	2017
Tile Drained	197248	8242
Artificially Drained via Ditch	7329	6476
Under Conservation Easement	1056	102095
No-Till Cropland	11985	17939
Intensive-Till Cropland	152007	202657
Cover Crop Used	3510	1220

Nass.usda.gov

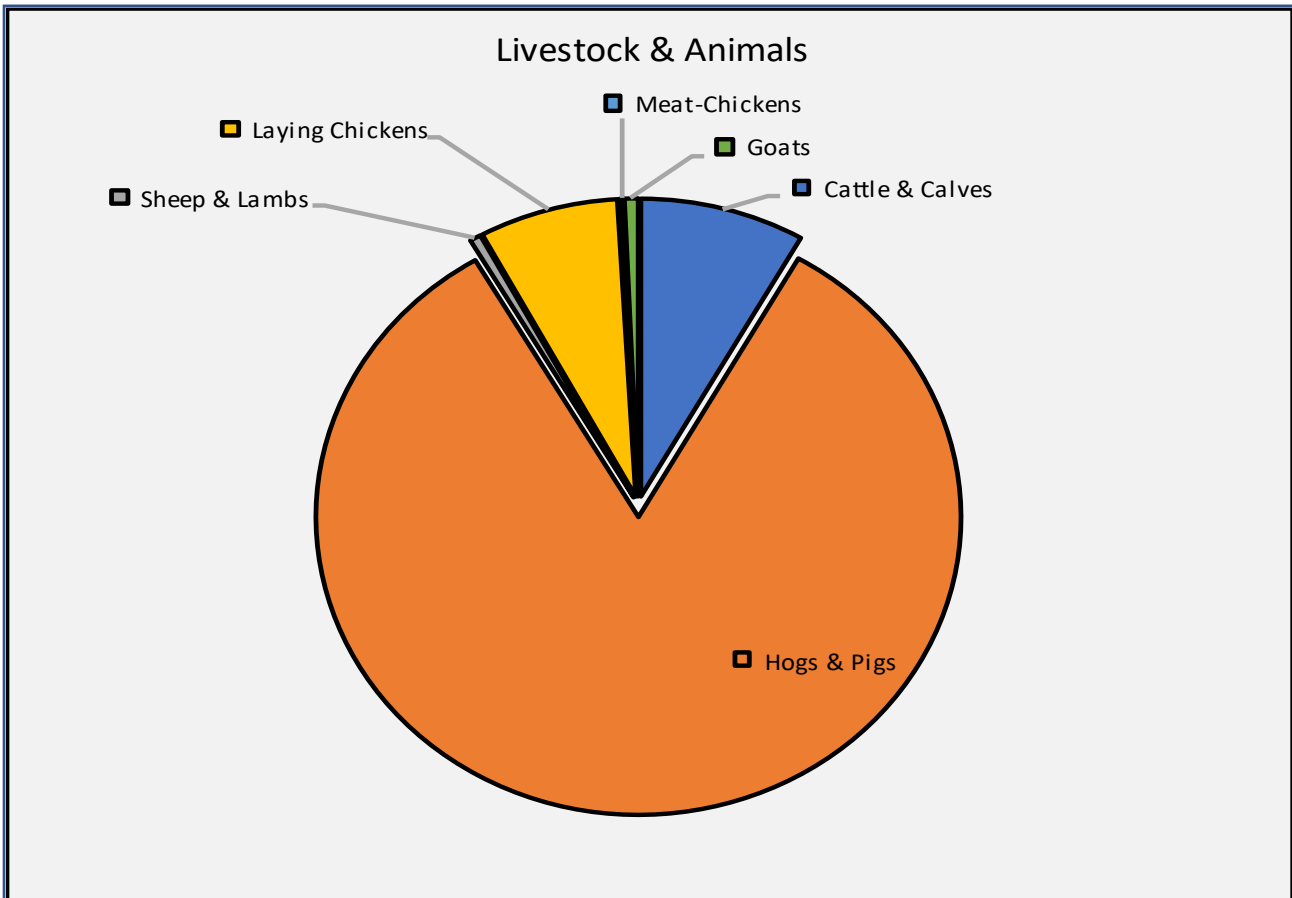


Highly Erodible Land	
Total Acres	365,824
Highly Erodible Land Acres (HEL)	30,387
Potentially HEL Acres	NA
HEL Percentage of Total	8%
Potentially HEL Percentage of Total	NA

FSA 2019

Livestock & Animals	
Livestock/Animals (2017)	Number
Cattle & Calves	14,378
Hogs & Pigs	144,977
Sheep & Lambs	966
Laying Chickens	12,144
Meat-Chickens	402
Goats	1189

FSA.USDA.GOV



Nass.usda.gov 2017

Water Resources

List of Water Bodies:

Beaver Creek, Big Creek, Des Moines River, Bluff Creek, Ioway Creek, Jay Carlson (south), Don Williams Lake, Jay Carlson Pit (west), Dickcissels Lake, Jay Carlson Pit (east), Fraser Pit, McHose Park Pond

Watershed Management Authorities:

Beaver Creek WMA, Ioway Creek WMA

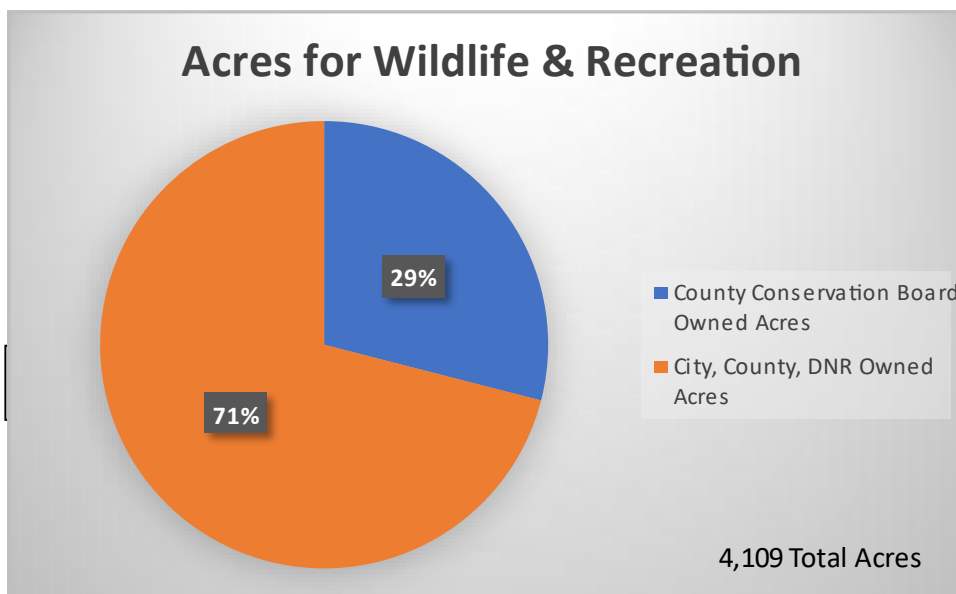
Public Water Sources:

All towns and rural areas in the District rely on wells for their water supply.

Water Bodies	
Acres of Waterbodies	262
Miles of Perennial Streams	198.85
Acres of Wetlands	3,061

lowadnr.gov 2019

Recreation and Wildlife Resources



Maps and Additional Documents

The maps and charts included provide further information/understanding about the soil and water resources of the District, and they appear in Appendices F through K.

Priority Goals

The SWCD Board determines their goals from an inventory of the natural resources of the district (above), input of the Local Working Group and the public. The goals for the SWCD for the next five years are listed and described thoroughly in Appendices A through E.

Purpose of the Planning Process

Planning enables District Commissioners and Staff to take positive, proactive steps to preserve and improve our natural resources.

During the SWRCP planning process, the SWCD Board utilized current information about the states of the soil and water in their District. The Commissioners also requested input from the community through the formation of a Local Working Group, and public involvement in public board meetings about the natural resource issues for the District. The Board established goals for the next five years, seeking partnerships with individuals and organizations that share their concerns and objectives.

The finished Five-Year Plan provides Information about the soil and water issues the District faces, and what the SWCD Board strives to implement to preserve and improve our natural resources. It is also an invitation to everyone in the community to get involved in the conservation of the District's natural resources.

Priority Goals

The SWCD Board determines their goals from an inventory of the natural resources of the district (above), input of the Local Working Group and the public. The goals for the SWCD for the next five years are listed and described thoroughly in Appendices A through E.

Credits for Information/Resources

These are the individuals and organizations who provided materials, data, and resources for the information provided in this plan.

- Natural Resource Conservation Service
- Iowa Department of Agriculture & Land Stewardship
- Conservation Districts of Iowa
- Iowa Department of Natural Resources
- National Agricultural Statistics Service
- Farm Service Agency
- US Census Bureau

Credits for Input

These are the individuals and groups that provided input concerning the conservation issues and potential goals for the District.

- Local Working Group Members (Residents of Boone County)
- District Staff
- Elected Commissioners

Organization & Authority

The Boone Soil and Water Conservation District was organized at the request of local citizens interested in soil and water conservation. A charter was issued under the provisions of the Soil Conservation Districts' Law, Code of Iowa, Chapter 467A, on November 20, 1942. The boundaries of the district and the county are the same, (the exception is Pottawattamie County being divided into two districts). Boone consists of 16 townships. The District is a subdivision of state government governed by five locally elected commissioners, who are elected on the general ballot and serve four-year terms. District Commissioners are charged by the Iowa General Assembly with the restoration and conservation of the soil, water, and the related natural resources of the county (Chapter 161A.5). The District receives support services from the Iowa Department of Agriculture and Land Stewardship. Commissioners can appoint as many Assistant Commissioners as they deem necessary. At this date, there are currently two Assistant Commissioners serving Boone.

Additional authorities have been given to the Soil and Water Conservation District since it was founded in 1942. Some of these additional authorities are:

1. Sub-districts (Chapter 467A, Sec. 13-41) of a soil and water conservation district may be formed for the purpose of carrying out watershed protection and flood prevention programs with the sub-district, but may not be formed solely for the purpose of establishing or taking over the operation of an existing drainage district.
2. The Commissioners of the Soil and Water Conservation District shall adopt reasonable regulations (Chapter 467A, Sec. 42-53) to establish a soil loss limit or limits for the District and provide for the implementation of the limit or limits, and may subsequently amend or repeal their regulations as they deem necessary. Chapter 467A also provides for mandatory erosion control after due process.
3. The Soil and Water Conservation District (Chapter 467B) advises and consults with counties and sub-districts upon the request of any of them or any affected landowners, and is authorized to cooperate with other state subdivisions, or instrumentalities and affected landowners, as well as with the federal government or any department or agency thereof, to construct, operate, and maintain suitable projects for flood or soil erosion control.
4. Under Chapter 467C, the County Board of Supervisors can establish districts having for their purpose of soil conservation and the control of flood waters. The establishment of these districts requires the approval of the Soil and Water Conservation District along with the Department of Natural Resources. This section includes the role of the District in representing the rural as well as urban interests in the administration of the Erosion Control Law and other programs in which the District is involved. Consultative assistance is provided to both cities and the county upon request. Also, these authorities are within the Code of Iowa, Chapter 467E – Agricultural Energy Management and Chapter 467F – Water Protection Projects and Practices. However, the ultimate responsibility for soil erosion control rests with the District pursuant to Chapter 161A, Subchapter V. The District is authorized to request assistance from and enter into Memorandums of Understanding between themselves and other federal, state, and local entities to carry out their assignment and leadership role in the conservation, development, and productive use of the county's soil, water, and related natural resources.

Active Memorandums of Understanding have been signed with:

- Iowa Dept. of Agriculture and Land Stewardship-Division of Soil Conservation & Water Quality
- USDA – Natural Resources Conservation Service

District Policies

Some of the duties, authorities, and responsibilities of the district commissioners are to provide guidance for soil and water conservation in the District. This includes but is not limited to conducting surveys, investigations, demonstrations, and help to determine research needs relating to soil and water problems. To collaborate with other agencies, governmental or otherwise, and with landowners/operators; to promote the development of comprehensive programs of planning, application, and maintenance soil erosion control and conservation practices. Our activities are intended to benefit the people of the district, the state of Iowa and our nation to ensure our natural resources are here for the next generations.

The Boone County Soil and Water Conservation District is an equal opportunity provider and employer in line with all state and federal opportunity guidelines.

Boone SWCD reserves the right to modify the Five-Year Soil & Water Resource Conservation Plan as needed for the best interest of our Natural Conservation Goals.



Statement of Adoption

We, the Commissioners of Story Soil and Water Conservation District, adopt this program on the

_____ day of **October 2021**.

Jeremy Gustafson
Chair, Story SWCD

Statement of Approval

This *5-Year Soil & Water Resource Conservation Plan* of the Boone Soil and Water Conservation

District was reviewed and approved by the Iowa Department of Agriculture and Land Stewardship

Division of Soil Conservation & Water Quality

on October 11th, 2021.



Susan Kozak

**Director of Soil Conservation & Water Quality Division
Iowa Department of Agriculture & Land Stewardship**

Appendix A

1. Priority Goal: Improve awareness of, and involvement with, Boone SWCD.

<i>Actions planned</i>	<i>Timeframe</i>	<i>Milestones</i>
Build and update website	Start exploring options by September 2021	Consult with staff and stakeholders regarding technology capabilities; create initial outline of appropriate content; secure samples of current Iowa SWCD websites.
Create Facebook/social media plan	Monthly agenda	Develop social media content plan that combines Boone SWCD updates/events with list of shared partner groups; develop short, more frequent social media posts after monthly meetings; work to sustain community awareness of district activities
Participate in outreach events	Monthly; on-going	Identify local county events and schedules; secure contact lists; reach out for opportunities to participate
Host field days	Annual planning, starting February 2022	Develop schedule that secures cooperation from local producers; plan speaker and event agendas
Annual Report/Annual Plan	Annual planning, starting February 2022	Continue highlighting Boone SWCD activities and budget of the previous year in the Annual Report; in addition, create an "Annual Plan" – those activities and events the district intends to pursue in the upcoming yearly period; publicize the availability of both Annual Report and Annual Plan, make easily accessible
Coverage in the media	Contact I.D. August 2021	Identify media contacts; present information as it becomes available; secure contributions to local media each quarter
Develop and distribute electronic newsletter	First half 2022	Secure and expand email lists for distributing information; design and develop content for a periodic newsletter that promotes district staff and commission activities to the community

Year	Actions Completed, (Date)	Revisions to Goals, Actions	Additional Goals/Actions
1			
2			
3			
4			
5			

Appendix B

2. Priority Goal: Promote and encourage the adoption of practices that improve soil health, such as cover crops and reduced tillage practices.

<i>Actions planned</i>	<i>Timeframe</i>	<i>Milestones</i>
Determine that the district is fully using all cost-share money allocated to Boone; making sure money is actually being used	On-going	Closely monitor cost-share funding, including follow-up
Signage	Potential funding options identified November 2021	Promote properties cost-shared by Boone SWCD; explore funding options, possibility of grants
Field days and outreach activities from Goal #1	Annual, starting February 2022	List of outreach activities district has recently done (prior to pandemic year); include those activities joined with other participants/other organizations

Yearly Goal Updates

Year	Actions Completed, (Date)	Revisions to Goals, Actions	Additional Goals/Actions
1			
2			
3			
4			
5			

Appendix C

3. Priority Goal: Promote and improve Boone County's wildlife habitat, such as woodlands, pollinator habitat, buffers, rivers and waterways.

<i>Actions planned</i>	<i>Timeframe</i>	<i>Milestones</i>
Promote the "Boone County brand" as a natural resource-rich county.	Fall 2021 determine mission/brand	Develop slogan/logo that captures the district mission; include branding message on all external communications; create electronic poster and brochure promoting mission, staff and commission that can be updated
Target habitat along DSM River, riverbank stabilization, roadside management, rare or endangered species in Boone County.	Summer 2021 internship	Seek cooperation and data collection from Prairie Rives of Iowa; Boone County Conservation; NRCS staff and internship; develop outreach plan for private landowners;
Promote edge of field practices	On-going	Execute through NRCS staff and internship program
Encourage better habitat maintenance after installation	On-going	Execute through NRCS staff and internship program

Yearly Goal Updates

Year	Actions Completed, (Date)	Revisions to Goals, Actions	Additional Goals/Actions
1			
2			
3			
4			
5			

Appendix D

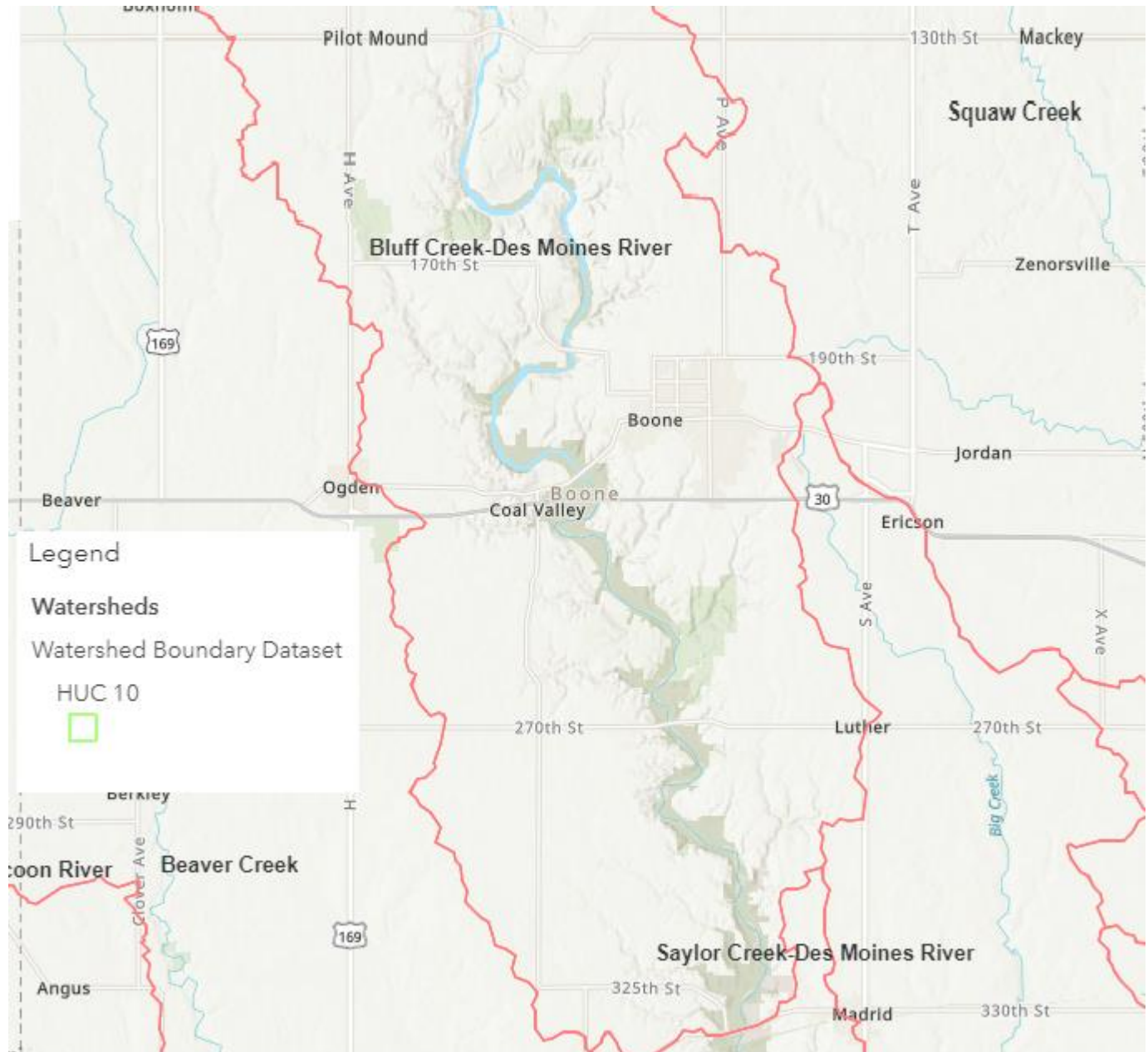
4. Priority Goal: Partner with organizations doing similar work in Boone County to increase effectiveness at achieving goals.

<i>Actions planned</i>	<i>Timeframe</i>	<i>Milestones</i>
Organizations can include: Watershed Management Authorities, neighboring SWCDs, the Department of Natural Resources, Boone County Conservation Board, nonprofits such as Prairie Rivers of Iowa, Practical Farmers of Iowa, Pheasants forever, and Iowa Natural Heritage Foundation, etc., and local Ag businesses.	Annual plan February 2022	Local Working Group follow-up; assist in implementation; local group communication; sharing newsletter, Annual Report, and Annual Plan – Annual Plan is a wish list of what the district wants to do in the coming year; generate interest in partnering; host annual banquet of stakeholders, partner organizations; access other communications organizations are putting out, identify where the district can “plug in”; create focused, annual communications specific to some of the groups: “Here’s what the district accomplished last year, here’s what we want to do this year; let us know if there’s anything you’d like to collaborate on”; leverage the email list for the public hearing and expand – a great resource for e-blasts, coordination of projects, getting ideas, sharing, etc.
Co-host field days	Annual plan February 2022	Identifying host field days opportunities and participating producers
Support programs happening in Boone County with promotion and outreach, letters of support, and sponsorships. Invite their participation, input, and guidance on our activities.	Annual plan February 2022	Include ad-hoc groups that may want to contribute – not necessarily formal groups, but ancillary interested parties; compile information from other partnership sources

Yearly Goal Updates

Year	Actions Completed, (Date)	Revisions to Goals, Actions	Additional Goals/Actions
1			
2			
3			
4			
5			

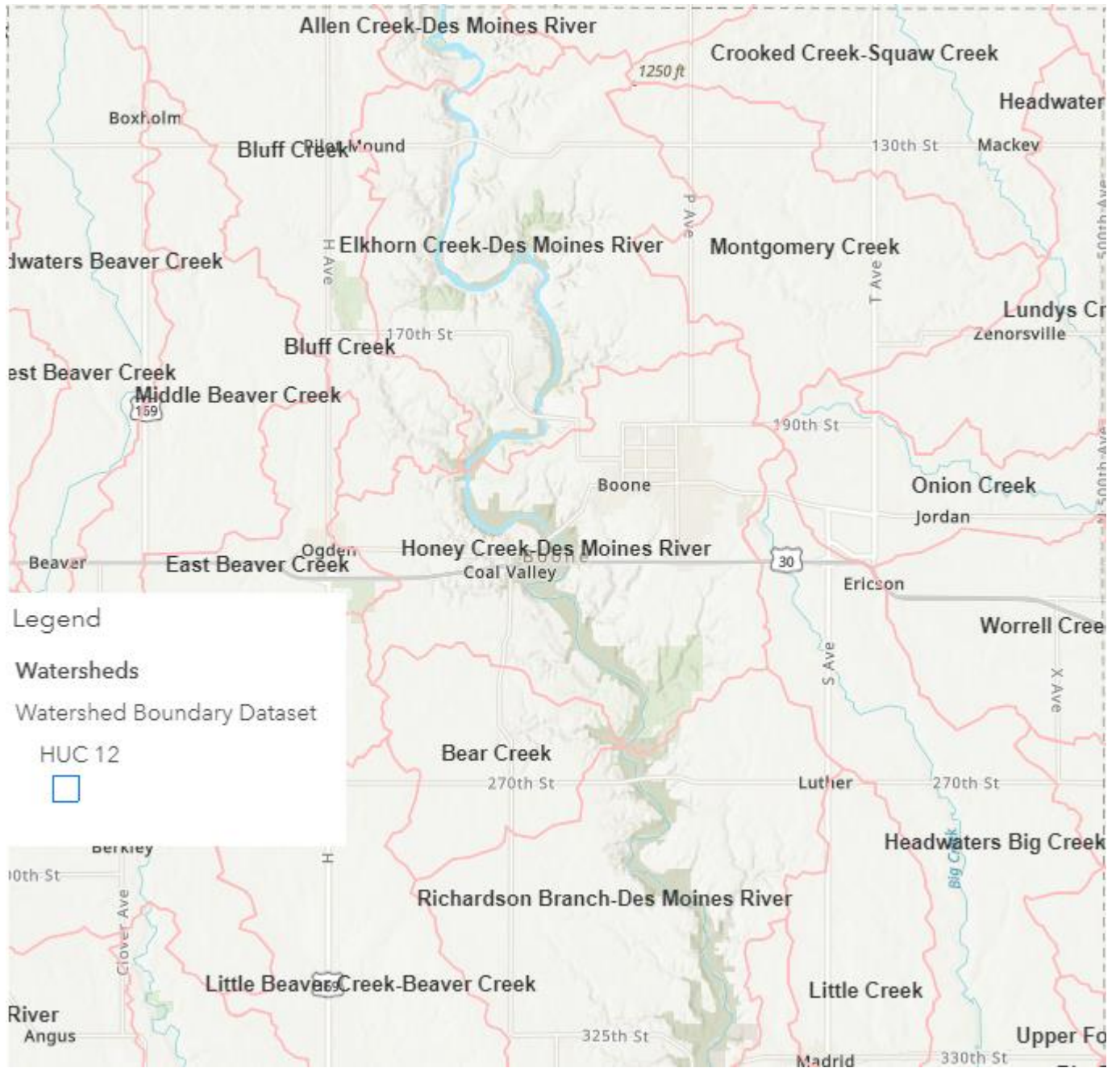
Hydrological Unit Code Watersheds Maps: show the full areal extent of surface water drainage for the U.S. using a hierarchical system of layered hydrologic units at various scales, each with an assigned hydrologic unit code (HUC). HUCs are delineated and georeferenced to U.S. Geological Survey. HUC 8 maps the subbasin level, analogous to medium-sized river basins and a HUC 10 covers the drainage area for a watershed, typically 40,000 and 250,000 acres in size.



[Interactive HUC 10 Watershed Map](#)

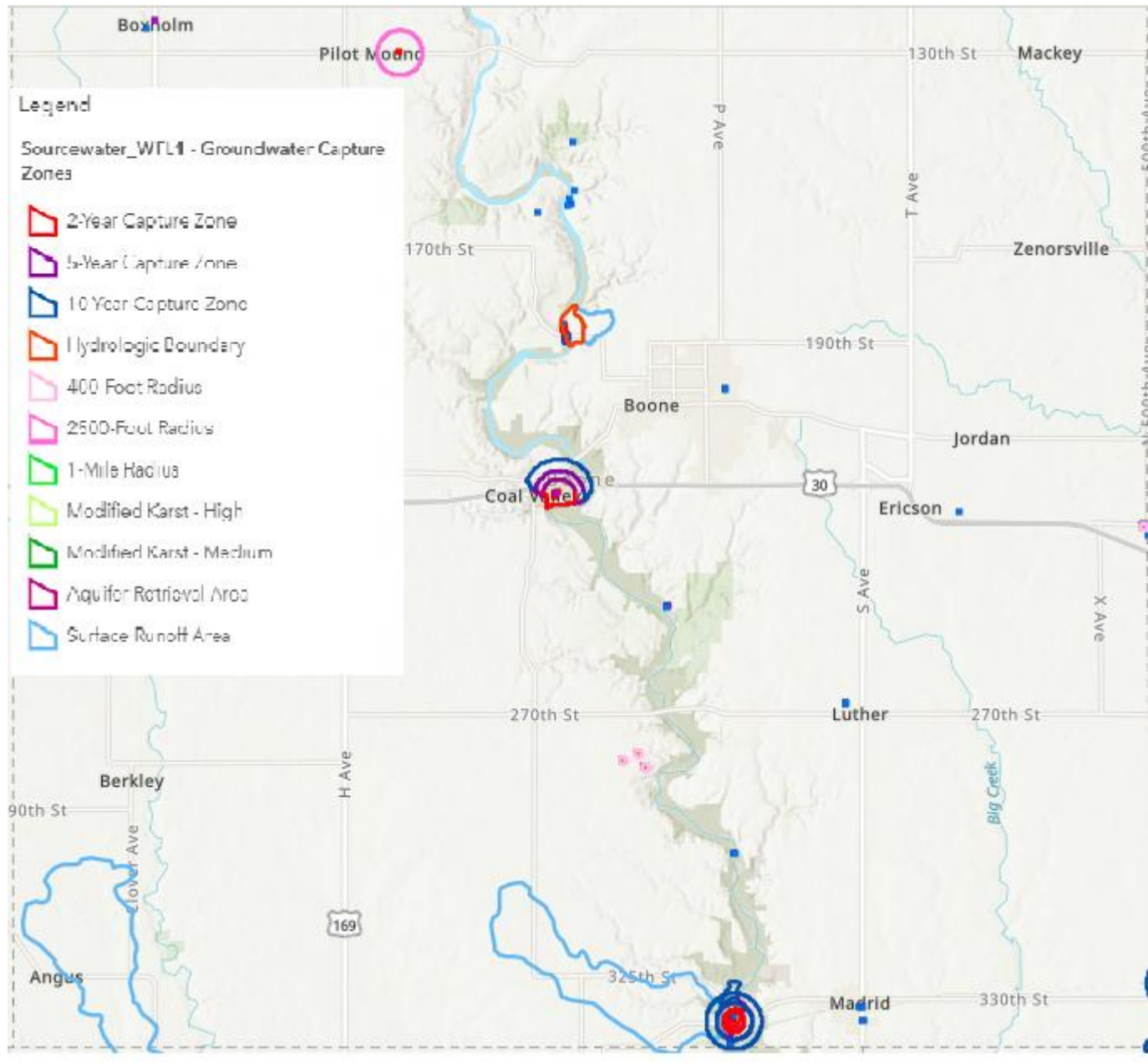
Appendix F

HUC 12 Watersheds



[Interactive HUC 12 Watersheds Map](#)

Appendix G
Source Water

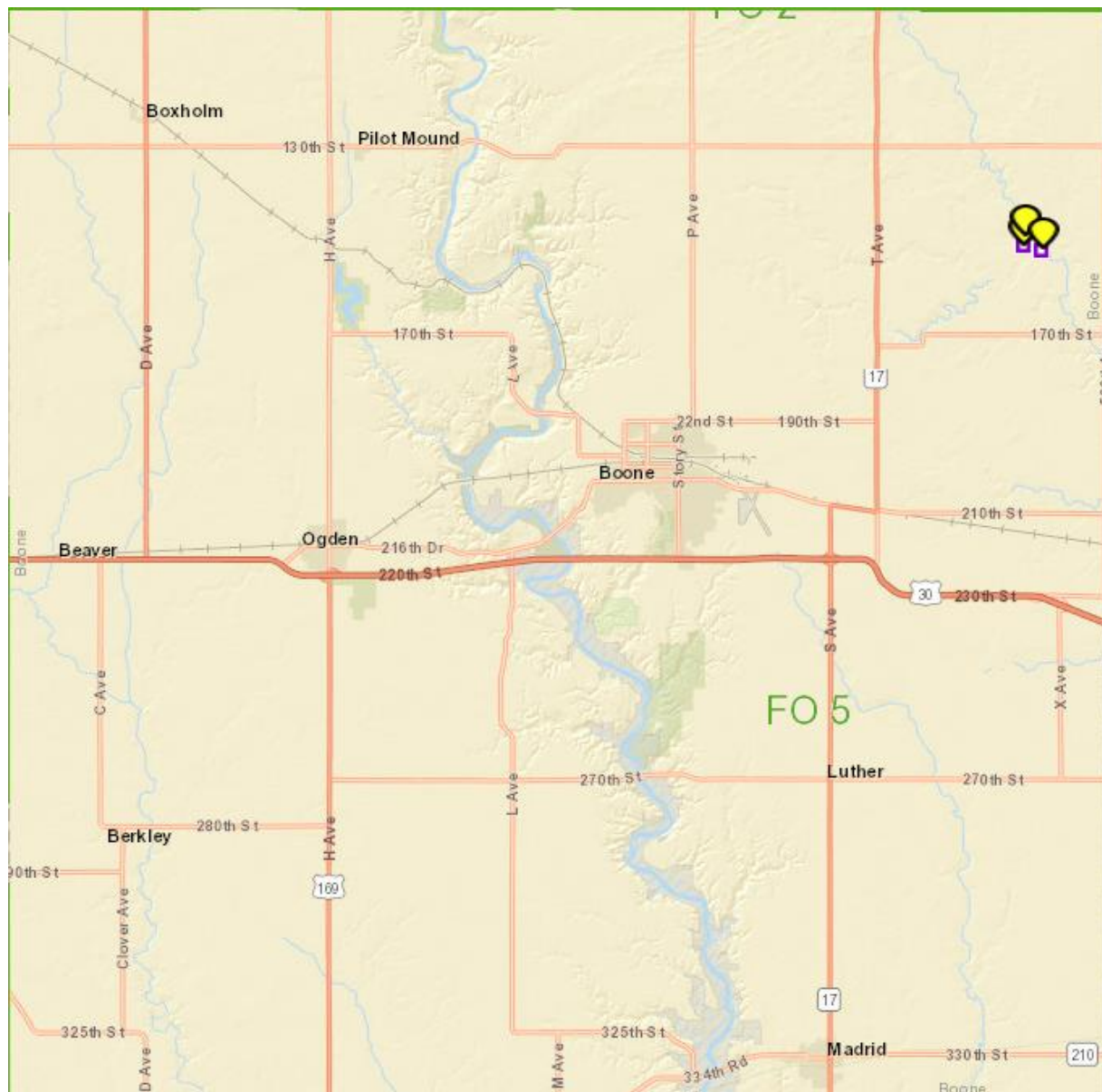


[Interactive Source Water Map](#)

Appendix H

Mining and Mineral Resources (2020)

Facility ID	Facility Name	Address	Programs
312051315	Bassett Pit	WEST OF 2298 A50TH STREET Ames, IA 50014	Wastewater-NPDES General Permit #5 - Quarries- IAG140486
312047908	Heins Pit	3847 - 190TH STREET Gilbert, IA 50105	Wastewater-NPDES General Permit #5 - Quarries- IAG140035
312055259	Leininger Pit	456 W Ave Ames, IA	Wastewater-NPDES General Permit #5 - Quarries- IAG140532



Local Working Group

What is a Local Working Group?

Local Working Groups are composed of agricultural producers, owners/operators of non-industrial private forest land, professionals representing agricultural and natural resource interests, and individuals representing a variety of disciplines in the soil, water, wetland, plant, forestry, and wildlife sciences who are familiar with agricultural and natural resource issues in the local community.

Role of Local Working Groups

Local Working Groups provide recommendations to the District Board of Commissioners, the District Conservationist and the State Conservationist on local natural resource priorities and criteria for conservation activities and programs.

Membership

Local Working Group membership aims to be diverse and focus on agricultural interests and natural resource issues existing in the local community. To ensure that recommendations of the Local Working Group take into account the needs of diverse groups served by USDA, membership shall include, to the extent practicable, individuals with demonstrated ability to represent the conservation concerns of particular historically underserved groups and individuals including, but not limited to, minorities; women; persons with disabilities; and socially and economically disadvantaged groups.

