Jackson County Resource Assessment

2017



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I. Introduction and Background

Throughout 2017, the Jackson County Conservation District (JCCD) distributed a resource survey to individuals who live in Jackson County. The purpose of this survey was to learn more about what residents think are the most important natural resource issues in our area. The results of the surveys help provide a framework for programs and services offered by JCCD in the future. The Michigan Department of Agriculture and Rural Development (MDARD) requires all Conservation Districts to complete this Resource Assessment once every five years.

The mission of the Jackson County Conservation District (JCCD) is *to promote wise land use decisions, based upon the capability of the natural resources of Jackson County, through technical assistance and education*. Established in 1948, the District is a locally elected nonpartisan entity of State government operating under Soil Conservation District Law 297—P.A. 1937 as amended. JCCD is one of 79 county Conservation Districts throughout Michigan. Michigan's Conservation Districts are unique local units of State government that utilize State, Federal and private sector resources to solve today's conservation problems. The guiding philosophy of all Conservation Districts is that decisions on conservation issues should be made at the local level, by local people, with technical assistance provided by government. The types of programs and staff at each Conservation District in Michigan vary greatly because of the diversity in landscape and natural resource problems and needs. In Jackson County, the District serves as a "gateway" to conservation services and information relevant to our area. We work in partnership with other organizations to establish local conservation priorities, develop and distribute educational materials, and provide technical assistance to Jackson County residents.

II. County Characteristics

Demographics

Jackson County has a population 161,432 people, an increase of .73% from the 2010 Census: 24.5% of the population is under the age of 19, and 23.4% of the population is 60 years old and over. The population is made up of 49% females and 51% males. The population age 25 and over consists of 83.9% that are high school graduates, and 20% that have a Bachelor's degree or higher.

There are 68,993 housing units in Jackson County, with occupied dwellings consisting of only 62,796 units. The ownership rate of 65.7%. The median household income is \$48,008 per year. In Jackson County, 19.7% of households make \$20,000 or less.

Land Use and Natural Resources

Jackson County has an area of about 717 square miles, or 458,880 acres. There are 1,073 farms in the county occupying 183,111 acres, which is about 40 percent of the county. 80% of Jackson County farms are between 1-179 acres. Only 3% of farms are over 1000 acres. About 20 percent of the land in the county is woodland. Urban and built up land makes up about 12 percent of the county.

Around 8 percent of the land is idle, and about 4 percent is used for parks and other recreation uses. (NASS, 2012)

There are 62 different kinds of soil in Jackson County (Jackson County Soil Survey, 1981). About 60 percent of the soils in the county are well drained. Somewhat poorly drained soils make up about 9 percent. Poorly drained and very poorly drained mineral soils make up 10 percent. Very poorly drained organic soils make up about 17 percent. Urban land complexes, miscellaneous areas, and water areas make up the rest.

About 700 lakes and ponds are scattered throughout the county, ranging in size from less than 3 acres to over 800 acres. There are three major drainage systems in Jackson County: the Grand River, the North and South Branches of the Kalamazoo River, and the River Raisin.

In winter the average temperature is 24.7 degrees F, and the average daily minimum temperature is 17.4 degrees F. In summer the average temperature is 69.8 degrees with an average daily maximum temperature of 80.9 degrees F. The total annual precipitation in the County is 29.7 inches. Of this, 17.7 inches—or 60 percent—usually falls in April through September. Thunderstorms occur on about 40 days each year. Average seasonal snowfall is 37.4 inches. The sun shines 68 percent of the time during the summer and 36 percent of the time in the winter (USDA ,1981).

Protecting Jackson County's Natural Resources

The framework for natural resources protection in the County mainly consists of the Jackson County Master Plan and the Upper Grand River Watershed Management Plan. In addition, natural resources information is incorporated at the township level in many parts of the County. For instance, Henrietta, Leoni, and Waterloo Townships have all undergone full natural resource inventories and planning and zoning reviews funded by the JCCD under the Upper Grand River Implementation Project.

JCCD is also fortunate to have many dedicated environmental partner organizations working to protect natural resources in the County, including The Dahlem Conservancy, Grand River Environmental Action Team, Henrietta Conservation & Recreation Conservancy, Legacy Land Conservancy, and the Upper Grand River Watershed Alliance. Furthermore, there are local chapters of several statewide and national environmental nonprofit groups—such as the Audubon Society, Ducks Unlimited, the Nature Conservancy, and Sierra Club—that are involved in natural resource issues in Jackson County.

III. Survey Methods

The Resource Assessment survey was distributed as both a hard copy and as a web-based version using Survey Monkey. JCCD received 48 hard copies back and 12 online responses, for a total of 60 completed surveys.

Paper copies of the survey were distributed at the Jackson County Conservation District annual meeting in January and at the Jackson County Fair in August. The survey was also distributed in the several issues of JCCD's online newsletter. The electronic version of the survey was sent to the JCCD email list, posted in the online newsletter, and on JCCD's website to be accessible to the general public.

There were ten questions included on the survey:

- 1. What is your zip code?
- 2. How long have you lived in Jackson County?
 - □ Less than 1 year
 - \Box 1-5 years
 - □ 6-10 years
 - □ More than 10 years
- 3. How much property do you own in Jackson County?
 - □ None (renter)
 - □ Less than 1 acre
 - □ 1-5 acres
 - □ 6-10 acres
 - □ 11-40 acres
 - □ 41-100 acres
 - □ Over 100 acres
- 4. How would you describe the setting in which you live?
 - □ Urban/City
 - □ Suburban
 - □ Rural Residential (non-farm)
 - □ Farm
- 5. How close do you live to the nearest lake or river?
 - □ Waterfront—my property borders a lake or river
 - □ Less than 1 mile
 - □ Between 1-5 miles
 - $\hfill\square$ More than 5 miles
- 6. What are your main sources of staying informed on natural resource issues in Jackson County? Choose up to 3 answers.
 - □ Jackson Citizen Patriot
 - □ Other local newspapers
 - □ Local television
 - □ Radio stations
 - □ Meetings of local government agencies
 - Membership in local environmental organizations (The Dahlem Conservancy, Upper Grand River Watershed Alliance, GREAT, Audubon, etc.)
 - □ Membership in agricultural organization (Farm Bureau, Ag Council, etc.)
 - □ Internet
 - Other:
- 7. Please select the top 3 land use issues that you think will be of the most concern in Jackson County over the next 5 years.

- □ Agricultural preservation
- □ Natural areas/open space preservation
- □ Urban sprawl/development issues
- □ Adequate planning & zoning by local government
- Downtown revitalization
- □ Flooding/drainage issues
- □ Poor soil quality/soil degradation
- Other: ______
- 8. Please select the top 3 <u>water quality</u> issues that you think will be of the most concern in Jackson County over the next 5 years.
 - □ Stormwater management
 - □ Erosion/sedimentation
 - □ Drinking water/source water protection
 - □ Failing septic systems/bacterial contamination
 - □ Residential fertilizer/pesticide use
 - □ Agricultural fertilizer/pesticide use
 - □ Loss of wetlands
 - □ Lake management/water quality of lakes
 - □ River management/water quality of rivers
 - Other: ______
- 9. Please select the top 3 <u>wildlife and habitat</u> issues that you think will be of the most concern in Jackson County over the next 5 years.
 - □ Loss of native habitat/fragmentation
 - □ Overpopulation of wildlife
 - □ Decreasing wildlife numbers/biodiversity
 - □ Invasive animal species control
 - □ Invasive plant species control
 - \Box Forestry—diseases, pests, etc.
 - □ Wildlife damage to property
 - □ Wildlife/habitat focused recreation opportunities
 - □ Protecting threatened and endangered species
 - Other: ______
- 10. Would your household support a permanent household hazardous waste collection site in Jackson County?
 - □ Yes
 - □ No
- 11. Would your household support a millage to improve the recycling process in Jackson County such as a permanent household hazardous waste collection site?
 - □ Yes
 - □ No
- 12. Do you recycle in your household or housing community?
 - □ Yes
 - □ No

- 13. How satisfied are you with the Jackson County Recycling program?
 - □ Very satisfied
 - □ Somewhat satisfied
 - □ Neither satisfied or dissatisfied
 - □ Somewhat dissatisfied
 - □ Very dissatisfied
- 14. What programs/services do you think the Jackson County Conservation District should focus more on over the next 5 years?

IV. Survey Results

The results of the Resource Assessment are included in Table 1.

Table 1. 2017 Survey Responses

	# of	# of	
Survey Question	Responses –	Responses –	Total # of
	Hard Copy	Electronic	Responses
What is your zip code?	49201 (19)	49201 (5)	49201 (24)
······································	49202 (2)	49202	49202 (2)
	49203 (7)	49203 (2)	49203 (9)
	49204 (1)	49204	49204 (1)
	49234 (1)	49234	49234 (1)
	49240 (6)	49240 (2)	49240 (8)
	49241 (1)	49241 (1)	49241 (2)
	49246 (1)	49246	49246 (1)
	()	49269	• • •
	• • •		· · /
	49272 (2)	49272	49272 (2)
Here have been the discharge Orange (2	49277 (5)	49277 (2)	49277 (7)
How long have you lived in Jackson County?			
Less than 1 year	2	1	3
• 1-5 years	1	1	2
• 6-10 years	2	1	3
 More than 10 years 	43	9	52
• More than to years		0	02
How much property do you own in Jackson County?			
None (renter)	1	1	2
Less than 1 acre	11	2	13
 1-5 acres 	20	3	23
• 6-10 acres	7	2	9
• 11-40 acres	4	2	6
	1	1	2
• 41-100 acres	4	1	5
Over 100 acres	-	1	5
How would you describe the setting in which you live?			
Urban/City	4	1	5
	17	5	22
Suburban	17	4	21
Rural Residential (non-farm)	10	2	12
• Farm	10	2	12
How close do you live to the nearest lake or river?			
• Waterfront – my property borders a lake	5	2	7
or river	Ĭ	-	·
Less than 1 mile	26	4	30
	15	4	19
Between 1-5 miles	2	2	4
More than 5 miles	<u> </u>	<u> </u>	-

What are your main sources of staying informed on			
natural resource issues in Jackson County? Choose			
up to 3 answers.			
 Jackson Citizen Patriot 	25	8	33
Other local newspapers	11	2	13
Local Television	23	10	33
Radio Stations	16	6	22
Meetings of local government	18	2	20
Membership in local environmental	14	1	15
organizations			
Membership in agricultural organization	9	1	10
 Internet 	14	1	15
Other	1	5	6
• Other			
Please select the top 3 land use issues that you think will be			
of the most concern in Jackson County over the next 5 years.			
of the most concern in Jackson County over the next 5 years.			
A Annioultural procession	22	6	28
Agricultural preservation	30	6 7	28
Natural areas/open space preservation			
Urban sprawl/development issues	15	5	20
 Adequate planning and zoning by local 	18	6	24
government	10	<u>_</u>	0.4
 Downtown revitalization 	18	6	24
 Flooding/drainage issues 	18	4	22
 Poor soil quality/soil degradation 	3	1	4
Other	3		3
Please select the top 3 water quality issues that you think			
will be of the most concern in Jackson County over the next 5 years.			
 Stormwater management 	14	4	18
Erosion/sedimentation	12	4	16
Drinking water/source water protection	27	11	38
Failing septic systems/bacterial	13	3	16
contamination		-	
Residential fertilizer/pesticide use	11	2	13
Agricultural fertilizer/pesticide use	10	2	12
 Loss of wetlands 	16	3	19
Loss of wetlands Loss of wetlands Lake management/water quality of lakes	13	2	15
• • •	18	4	22
River management/water quality of rivere			
rivers	0	0	0
Other	-	-	-
Please select the top 3 <u>wildlife and habitat</u> issues that you			
think will be the most concern in Jackson County in the next			
-			
5 years.	24	6	30
Loss of native habitat/fragmentation		6	
 Overpopulation of wildlife 	12	2	14 9
	0		
Decreasing wildlife	8	1	9
 Decreasing wildlife numbers/biodiversity 	8	1	9

	47		
 Invasive animal species control 	17	3	20
 Invasive plant species control 	29	8	37
 Forestry – diseases, pests, etc. 	22	7	29
 Wildlife damage to property 	4	1	5
 Wildlife/habitat focused recreation 	6	2	8
opportunities			
Protecting threatened and endangered	7	2	9
species			
Other	1	0	1
Would your household support a permanent household			
hazardous waste collection site in Jackson County?			
• Yes	36	8	44
• No	10	4	14
		-	
Would your household support a millage to improve the			1
recycling process in Jackson County such as a permanent			
household hazardous waste collection site?			
• Yes	27	8	35
• No	17	3	20
			20
Do you recycle in your household or housing community?			
• Yes	40	10	50
• No	5	2	7
	Ũ	-	
How satisfied are you with the Jackson County Recycling			
program?			
Very satisfied	10	1	11
Somewhat satisfied	18	4	22
 Neither satisfied nor dissatisfied 	17	5	22
 Neither satisfied nor dissatisfied Somewhat dissatisfied 	2	2	4
	1	0	1
Very dissatisfied	'		
What programs/services do you think the Jackson County	See Section	See Section	n/a
Conservation District should focus more on over the next 5	V	V	
years?			

V. Interpretations and Conclusions

The survey results indicate that Jackson County residents rely on fairly traditional methods to stay informed about natural resources, mainly the local newspaper and television stations. However, memberships in environmental and agricultural organizations are also very important, and the Internet provides a lot of residents with natural resource information as well. Survey respondents listed other methods of staying informed on natural resource issues in the County, such as the word-of-mouth from neighbors and other environmentally-minded people. Additionally, many people identified the specific environmental organizations that they receive information from (Jackson County Farm Bureau, The Dahlem Conservancy, and the Grand River Environmental Action Team).

Based on the survey results, the top natural resource issues of concern in Jackson County are:

Land Use Issues

- 1. Natural areas/open space preservation
- 2. Agricultural preservation
- 3. Adequate planning & zoning by local government; Downtown revitalization; Flooding/drainage issues (tied)

Water Quality Issues

- 1. Drinking water/source water protection
- 2. River management/water quality of rivers
- 3. Loss of wetlands

Wildlife and Habitat Issues

- 1. Invasive plant species control
- 2. Loss of native habitat/fragmentation
- 3. Forestry- diseases, pests, etc.

Survey respondents also exposed natural resource issues of concern that were not listed on the survey:

- Mandatory recycling
- Hunting opportunities
- Loss of pollinator habitat
- Protection of bees

Jackson County Recycling efforts in Jackson County have improved due to the Recycling Coordinator and increased education. Survey results show that 78% of participants do recycle in their home or housing community and that 73% are interested in a permanent household hazardous waste collection site, however, only 58% of those surveyed would support a millage to pay for it. Most people are either somewhat satisfied or neither satisfied or dissatisfied with the recycling program in Jackson County. The final survey question asked for guidance from the community as to what programs and services JCCD should focus on more over the next five years. The surveys revealed numerous ideas for additional programs and services:

- Water quality/cleaning up the lakes and rivers [2]
- Bridging rural and urban concerns with water quality
- Trail clean-ups and preservation efforts
- Maintain wetland habitats
- Teach sustainable farming
- Plant more trees [2]
- Hunter Access Program (HAP)
- More public education on resource conservation
- Recycling education
- Familiarize public with JCCD and its functions within community
- Mandatory recycling (at least with plastic and Styrofoam)
- Hazardous waste recycling more readily available [2]
- More recycling drop-off centers [3]
- Habitat restoration
- Monitoring rivers and wetlands
- Weed control in local lakes
- Minimize pollution. Educate public to avoid harm to environment--waterways, land, air.
- buffers areas for runoff from agricultural and residential areas
- Work with the DNR and other agencies to control predators
- Work with DNR to get an open hunt on sandhill cranes
- Supporting the regional agricultural industry.
- Continue to be a leader in conservation in the county, a place where people can find information.
- Wildlife destruction
- Diseases and pests
- Cover crops
- Erosion
- Minimizing the number of sandhill cranes, deer, and turkey
- Promotion of native species
- Local foods
- Work with Farm Bureau to help educate landowners
- Environmental education with landowners and school-aged kids

Trends and Recommendations for Future Efforts

There were definite trends among the survey responses that should guide future efforts led by JCCD. Drinking water and source water protection and river management issues are of top concern to Jackson residents, thus JCCD should remain active in these areas and seek additional funding and partnerships to protect water resources. JCCD should also become more involved with Jackson County farmland preservation efforts, as agricultural and natural areas preservation are a high priority for County residents. Invasive species control is of great concern to residents as well. JCCD is currently working with the DNR and several local partners to secure an Invasive Species grant to help in this effort. Also, other funding sources to continue to improve recycling efforts will be sought.

Sources

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