

Carlyle Lake Watershed - At a Glance

Carlyle Lake Watershed Ecosystem Partnership

- Gale Meseke, Chairman
- Karen Sanders, Secretary
- Carlyle Lake Assoc.
- Bond County SWCD
- Clinton County SWCD
- Effingham County SWCD
- Fayette County SWCD
- Marion County SWCD
- Shelby County SWCD

TMDL Meeting Scheduled

By Tony Pals

As you probably know, the IEPA has been doing Total Maximum Daily Load (TMDL) studies on impaired water bodies in the state. These studies determine the substances causing the impairment, and then calculate the amounts of those substances that can enter that water body on a daily basis before that water body is impaired. They then come up with recommendations on how to reduce the pollution to those amounts. The IEPA then meets with the citizens in those watersheds to discuss their findings. In the Carlyle Lake Watershed, we have had three TMDL's identified: Vandalia Lake, East Fork Kaskaskia, and North Fork Kaskaskia. They did the studies on the East and North Fork Kaskaskia. They did the studies together since they were adjoining watersheds with similar problems. The final rec-

ommendations from that study are completed and will be presented to the public on June 20th at 6:00 PM at the Patoka Village Civic Center at 210 West Bond St., Patoka. The IEPA would like as much public participation as possible. The map should give you an idea of where those watershed boundaries are and if you live within those boundaries. If you do live within these watersheds, please mark your calendar and plan to attend. The system works best with lots of public participation and input.

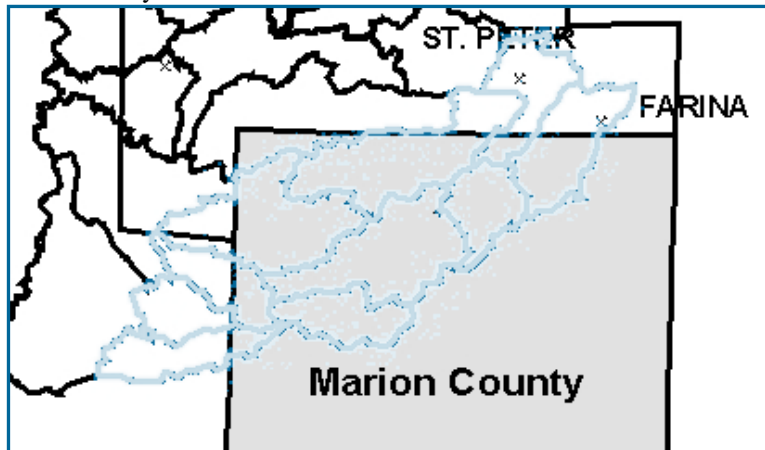


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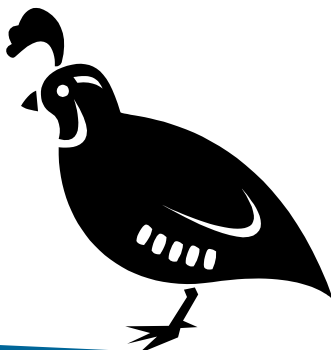
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Another Quail Habitat Buffer Signup

By Tony Pals

Good news! Illinois has been given funding for another 30,000 acres of Quail Habitat Buffer. The Quail Habitat Buffer is a part of the continuous Conservation Reserve Program (CRP) signup that allows you to plant a field border strip from 30 to 120 feet wide on qualifying fields. The area is seeded to a native grass and forbs mixture excellent for ground nesting birds such as Northern Bobwhite Quail. Since it is the CRP program, you will get an annual rental payment for ten years for the land taken out of crop production. That rate is based on the average cash rental rates for the soil types in the buffer area. There is also a one-

time signing incentive payment of \$10.00 per acre. And wait, there's more. There is also a 40% practice incentive payment, which, along with the usual 50% installation cost-share, means you will be getting 90% of the cost of the seed cost, seeding, and spraying. In my opinion, this is one of the best cost-share programs ever from the USDA. You will be paid to establish quail habitat on your least productive land (up against timber and fencerows). It's a continuous signup, so it's first-come, first-served until they have 30,000 acres signed up. If you're interested, stop by your local FSA office to apply or get more information.



CLIMATE

Taken from the Carlyle Lake Watershed Plan

In winter, the average temperature is 29.4 degrees F and the average daily minimum temperature is 20.4 degrees. The lowest temperature on record, which occurred at Effingham on January 18, 1977, was -24 degrees. In summer, the average temperature is 74.9 degrees and the average daily maximum temperature is 86.8 degrees. The highest recorded temperature, which occurred at Effingham on July 14, 1954, was 111 degrees. Growing degree-days are shown in Table 4, Temperature and Precipitation, located in the Appendix. They are equivalent to "heat units." During the month, growing degree-days accumulate by the amount that the average temperature each day exceeds a base temperature (40 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in

spring and the first freeze in fall. The total annual precipitation is 39.93 inches. Of this, 21.9 inches, or nearly 55 percent, usually falls in April through September. The growing season for most crops falls within this period. In 2 years out of 10, the rainfall in April through September is less than 16.05 inches. The heaviest 1-day rainfall during the period of record was 5.66 inches.

The average seasonal snowfall is 21.9 inches. The greatest snow depth at any one time during the period of record was 16 inches. On the average, 33 days of the year have at least 1 inch of snow on the ground. The number of such days varies greatly from year to year.

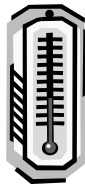
The average relative humidity in mid-afternoon is about 64 percent.



Humidity is higher at night, and the average at dawn is about 83 percent. The sun shines 70 percent of the time possible in summer and 47 percent in winter. The prevailing wind is from the south-southwest. Average wind

speed is highest, 13.8 miles per hour, in March and gradually declines to a minimum in August and then begins to increase.

Table 4, (see Appendix on Page 80) Temperature and Precipitation, gives data on temperature and precipitation for the survey area as recorded at Effingham in the period 1961 to 1990. Table 5, Freeze Dates in Spring and Fall, shows probable dates of the first freeze in fall and the last freeze in spring. Table 6, Growing Season, provides data on length of the growing season.



LEARNING FROM CONSEQUENCES

By Della Moen, Earth Team Volunteer, NRCS/Stephenson Soil and Water Conservation District

Experience is the best teacher. Or is it? Do we need to experience the consequences of our actions or can we learn enough to anticipate the consequences and change our actions before we have to experience the consequences?

In the past, we experienced the epidemics caused by the manner in which we treated human waste and then we began to apply better methods for handling wastewater. We experienced the dust bowl and then we researched better management practices for caring for the soil. We destroyed wetlands and experienced the pollution of our water resources; now we are beginning to restore wetlands to help protect surface and ground water. You probably have examples of your own that show how experiencing consequences changed human activity.

Current energy use is adding carbon dioxide to the atmosphere worldwide in larger quantities than every before in history. The amount of carbon dioxide added to the atmosphere is measurable. Only five percent of the world's population lives in the United States, but our country produces about one-quarter of the world's carbon dioxide pollution. Six

Midwest states alone are responsible for twenty percent of our country's carbon dioxide pollution and five percent of the world's. One-third of the pollution comes from burning coal to generate electricity. Driving a car releases about 20 pounds of carbon dioxide per gallon of gas consumed. Changing energy use can greatly reduce carbon dioxide emissions.

Many such changes require cooperative efforts between consumers and businesses/industries. The Environmental Law and Policy Center (ELPC), founded in 1993 in the Midwest (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin), works to make available legal, economic, and scientific resources devoted to important environmental and energy policy issues and to provide a regional perspective. Energy, transportation, and forest and land conservation issues are increasingly regional in scope, complex, and require coordinated strategies to shape public policy. The Center advocates public policy that effectively links environmental progress and economic development in mid-

western communities. Gradually we are learning about the possible consequences of continuing to add more carbon dioxide to the natural systems that keep us supplied with fresh water and survivable temperatures. ELPC suggests policy steps that will lessen atmospheric pollutants including:

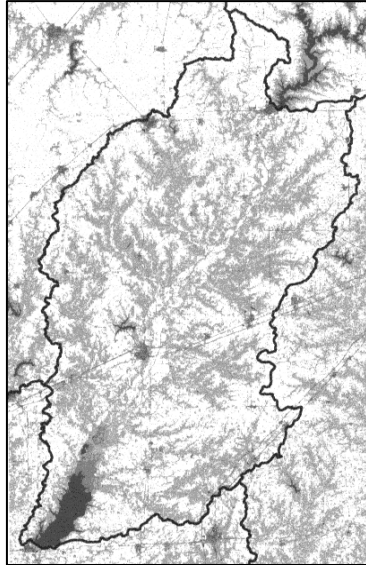


manufacturing more efficient cars with fewer emissions; investing in renewable energy; implementing energy efficiency in commercial processes and residential and commercial buildings; reducing emissions from coal powered electric plants; building high-speed rail; and funding and expanding mass transit. Future generations will learn when they experience the consequences of our actions. A better way would be for us to learn now and take steps to protect our grandchildren from these consequences. We can set an example for future generations by linking environmental progress and economic development. Information is from The Environmental Law and Policy Center, www.elpc.org.

SOCIAL PROFILE

Taken from the Carlyle Lake Watershed Plan

The Carlyle Lake watershed is largely rural. Ninety-four percent of the land is farmland. About 53,000 people-- less than 1% of the state's population -- live in the watershed. See Table 1. The population density of Fayette and Shelby counties is 29 persons per square mile, compared to the state population density of 205.6 persons per square mile. The urban population in the watershed is less than 30%. Communities include Vandalia (population 6,114), Pana (5,796), and Shelbyville (4,943). See Table 2 (page 66).



nessee and Europe. People describe their communities as hard working and helping each other. Like many rural areas in Illinois, churches and schools are the main focus of community life. A strong volunteer spirit characterizes core groups of citizens.

Demographics

The population in the Carlyle Lake watershed is older than in Illinois as a whole. About 12% of Illinois citizens are 65 years of age or older; in the Carlyle watershed 18 to 24% of people are 65 or more. With 98% of the population being white, the watershed is also less racially diverse. Residents have a somewhat lower per capita income compared to the state. Per capita income in the watershed ranges from about \$9,000 to \$12,000, compared to the state per capita income of \$15,201. The median value of owner-occupied housing is similarly lower-- around \$30,000 to \$40,000 compared to the state median of \$80,900. See Table 3, page 67.



Despite its rural character, the Carlyle Lake watershed is situated near several of downstate Illinois' large urban areas. Decatur, Springfield and the St. Louis metropolitan region are 50 or fewer miles from the basin. Closer still are the growing communities of Taylorville, Mattoon, Effingham, Centralia and Mt. Vernon.

Community Trends

Urban growth is increasingly influencing the people who live, work and recreate in the Carlyle Lake watershed. This is particularly evident in the southern half of the watershed. For example, in the City of Carlyle residential development is shifting the center of the county's population westward, and local government is changing accordingly. Newcomers and the traditional agricultural residents are being elected into local government.

Traditionally, the people are largely of French and German ancestry. Watershed communities were platted in the early decades of the 19th century by settlers from Kentucky, Ten-

Employment and Local Economy

The 5 to 6 percent unemployment rate in the watershed is comparable to that of the state. Top industries include agriculture, manufacturing, retail, education and correctional services. Some residents tend to commute to jobs in the Springfield, Decatur and St. Louis metropolitan areas.

Tourism is becoming more important to the economy in some parts of the watershed. Carlyle Lake is in Fayette, Clinton and Marion counties, about 50 miles east of St. Louis. At the present time out-of-town visitors far outnumber local users of the lake. During a holiday weekend, the lake can attract more than a 250,000 visitors. Particularly in Carlyle, local



(Continued on page 4)

Overwhelmed with Acronyms? Here's some help...

<i>SWCD</i> – Soil and Water Conservation District	<i>KWA</i> - Kaskaskia Watershed Association
<i>CLA</i> – Carlyle Lake Association	<i>CLEP</i> - Carlyle Lake Ecosystem Partnership
<i>NRCS</i> – Natural Resources Conservation Service	<i>QU</i> - Quail Unlimited
<i>ACOE</i> – Army Corps of Engineers	<i>NWTF</i> - National Wild Turkey Federation
<i>IDNR</i> – Illinois Department of Natural Resources	<i>WRDA</i> - Water Resource Development Act
<i>C-2000</i> – Conservation 2000 Grant Program	<i>LKSI</i> - Lower Kaskaskia Stakeholders, Inc.

The stated mission of the Carlyle Lake Watershed Ecosystem Partnership is:
“To protect, enhance and restore the natural resources and habitat of the Carlyle Lake Watershed”

Carlyle Lake
Watershed – At a Glance
C/o FAYETTE COUNTY SWCD
301 South Third Street
Vandalia, IL 62471
618-283-1095, Ext. 3
Fax: 618-283-4962

Non Profit Organization
Permit #53
Vandalia, IL



To contact one of the Soil and Water Conservation Districts, please call:
Bond County SWCD
618-664-0555, ext. 3
Clinton County SWCD
618-526-7919, ext. 3
Effingham County SWCD
217-342-6855, ext. 3
Fayette County SWCD
618-283-1095, ext. 3
Marion County SWCD
618-548-1337, ext. 3
Shelby County SWCD
217-774-5564, ext. 3

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tax revenues and locally owned businesses depend on this traffic.

Farmers too have an interest in Carlyle Lake. Anecdotally, few farmers recreate at Carlyle, but management of the lake's water level is of paramount concern, especially to adjacent landowners. Some citizens-- farmers and non-farmers alike-- see recreational use of the lake as incompatible with agriculture flood control.

In the north-central area of the watershed there is less of an urban influence. Communities here are not growing as much as those further south because they're too far to attract an urban population. Some parts of the watershed are 25 miles from the nearest doctor or dentist. The state and federal correction facilities are the biggest employers. Some residents still commute up to 50 miles to work in Decatur factories. Vandalia has a few smaller operations including Crane Stationary, Brockway Bot-

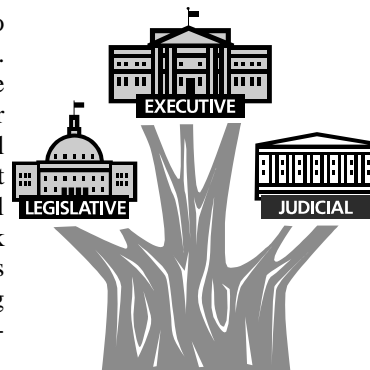
ting, GSI Grain bins and others.

POLITICAL JURISDICTION

The major portion of the watershed, Fayette, Bond, Clinton and Marion Counties, lies in the 20th U.S. Congressional District. The Shelby County and Effingham County portion of the watershed lies in the 19th U.S. Congressional District.

Illinois Senatorial District 55 and Representative District 109 include Fayette, Bond, Clinton, and Marion Counties. Illinois Senatorial District 51 and Representative District 102 include portions of Shelby County and Effingham County that lie in the watershed.

TABLES: If you are interested in seeing any of the follow-up information from this article please visit the Fayette County SWCD at 301 South Third Street, Vandalia, IL 62471 or call 618-283-1095 ext. and we would be happy to send you a copy.



Soil & Water Conservation Districts do not discriminate against any person on the basis of race, color, national origin, religion, sexual orientation, gender, age, marital status, veteran status, or disability. This policy covers all programs, services, and procedures of the district, including employment.