KRWW STARTUP: ENTHUSIASTIC AND EDUCATIONAL
Kentucky River Watershed Watch Kickoff Exceeds Expectations

On April 26, the Sierra Club, working with the Kentucky Waterways Alliance, the Kentucky Water Watch Program, and the Kentucky River Authority, had 40 trained survey teams on site in the Kentucky River Basin canoeing, hiking and doing stream habitat assessments.

The project, titled Kentucky River Watershed Watch, or KRWW, planned to add conservation work to the already well-established Sierra Club Cumberland Chapter’s outings program. The initial goal was to have 100 people at work somewhere in the basin on “Reclaim the River” day. The KRWW organizers were caught by surprise when 160 people signed up to be trained to do stream habitat assessment using USEPA forms and methods, and more than 170 people participated in the “Reclaim the River” events.

From Eagle Creek in Grant Kentucky and the Kentucky River main stem in Henry and Carroll Counties to the North Fork in Breathitt, Perry and Letcher Counties to the South Fork in Clay County, volunteer survey teams— with a survey team leader, an expedition leader, and a water sampling kit to test for pH and dissolved oxygen—looked carefully at a part of the Kentucky River Basin.

These survey teams were assembled at training programs held in Monterey, Midway, Hazard, Richmond and Lexington, with training conducted by the Kentucky Division of Water’s Water Watch Program and Kentucky River Authority staff. Participants included Sierra Club members, students from Lexington Community College, Midway College, and Henry Clay High School, avid fishermen, and some people who could not remember the name of the Sierra Club, but who care about that portion of the Kentucky River nearby. The survey teams were trained in rain, sunshine and hail without any apparent loss of enthusiasm.

The primary purpose of the first “Reclaim the River” event was to conduct stream habitat assessments. This represents a relatively new aspect of stream water quality evaluation, based upon the following reasoning: we have many years of experience trying to assess water quality by measuring the chemistry in the water and assessing so-called “conventional pollutants” such as “total suspended solids” and color. Measuring and sometimes controlling these pollutants helped reveal a new set of pollutants, “toxic” pollutants in the water. Even measuring and trying to control these did not always result in a healthy stream. Now, water quality advocates realize that more is involved than simply measuring the chemicals present in the water.

Other ways to measure water quality include toxicity testing, sediment quality and biological integrity. The measure of biological integrity requires an assessment of what living things should be present and what are actually present. For example, if we have paved a stream by putting concrete and gabion along the sides, we should not expect certain aquatic species that need a natural habitat to be present. But if we have a natural habitat that should be conducive to those species and they are not present, then water pollution may be the problem. The problem with this more sensitive method of water quality measurement is that it needs lot of eyes. That is where the Kentucky River Watershed Project comes in.

The April 26 startup of “Reclaim the River” was the beginning of a year’s worth of volunteer work in the Kentucky River Basin. In May, survey teams turned in their completed habitat assessment forms and photographs. In early June, survey team leaders will meet for training on water grab sampling to take samples to test for pesticides. In late June (June 21) all KRWW volunteers will be urged to participate in the Kentucky River Authority’s Clean Water Sweep. Survey teams may rest in July. In August, survey teams will prepare to take comprehensive water quality samples for a time scheduled in September. In November (or January/February 1998) KRWW, along with project sponsors, will host a conference on

(continued on page 2)
ENCOURAGING STEWARDSHIP OF FOREST RESOURCES

The proposed Kentucky Forest Stewardship Act included provisions for logger and landowner education along with an incentive program to assist landowners with stewardship plans and practices. These components are a cornerstone of this proposal for the following reasons:

Kentucky’s forests can provide much needed economic benefits, clean water, biodiversity, clean air, and scenic value. Forests are a renewable resource, but only if communities and landowners make informed choices that plan for the viability of diverse, productive and healthy forests.

Kentucky is 50% forested, with over 90% owned by private nonindustrial landowners. Ninety-four percent of the 400,000 private owners hold 100 acres or less of timberland. Collectively, these private lands supply the timber to an industry that ranks third among all the states in hardwood production. These same forests provide habitat for both game and non-game wildlife and provide a sylvan setting for much of the State's tourism.

It is estimated that only one in ten woodland owners has a management plan for their woodland or utilizes the services of a professional forester when harvesting their timber. How can woodland owners realize the full economic benefit of their timberland and plan for a healthy and productive forest? They must be able to make informed choices!

It is estimated that 80% of woodland owners do not know the value of their timber. It is difficult to realize full economic benefit from one's woodland when the value of the product is unknown.

While forest growing stock has increased from 2,000 board feet per acre in 1952 to 3,700 board feet per acre in 1992, the quality of this growing stock has remained poor, with 70% grade three and below. The causes are wildfire, and “high grading” – the practice of cutting the best trees and leaving the rest. With proper management not only is there potential to double present stocking levels, but to double the amount of high quality timber. The net result is a healthier and more productive forest with greater dollar returns. There could be an estimated 200% increase in returns to private landowners with associated benefits to the forest industry. This would make Kentucky more attractive to high value added forest industry.

Opportunities for Kentucky’s forests are significant. The direction for the future should:

• promote understanding of the value of the timber resource;
• increase forest management on private forest land;
• advocate forest protection for all Kentucky forests; and
• encourage the use of best management practices.

The proposed Kentucky Forest Stewardship Act charts a course that encourages stewardship of our forest resources.

Don Girton
Kentucky Woodland Owners Assn.

RESOURCE EDUCATION AXED

The president’s budget did not include funding for the Renewable Resources Extension Act, RREA. RREA has been a USDA Cooperative State Extension Service mainstay for extension education related to forest wildlife resources.

Here in Kentucky, the funding has been less than $70,000 annually, but this money has funded diverse education programs including wildlife management programs, forest stewardship and logger education.

Recently, there have been numerous initiatives exploring ways to realize more fully the potential of Kentucky’s vast forest resources. A repeated theme is the need for more and better landowner and logger education.

We all recognize the budgetary constraints and the need to balance the federal budget. However, it seems ironic that while there appears to be unanimous agreement about the need for more and better landowner resource education this is the program that was axed. We need to let our Congressional delegation know that we need to count on our partners at the Kentucky Cooperative Extension Service for continued assistance with this vital mission. RREA funding is essential to this effort.

Please write your Representative and Senators asking them to give careful consideration to funding the Renewable Resources Extension Act in the USDA appropriations bill.

KRWW START-UP (continued from front page)

Kentucky River Watershed Protection. KRWW members will be asked to make recommendations regarding protection of the Kentucky River. Where action by KRWW is recommended, hopefully, KRWW will take action.

Hank Graddy
KRWW Project Coordinator
The Environmental Quality Commission (EQC) held a press conference on April 21, 1997, to release the findings of their Water Quality Trends report. This report is the fifth in the EQC State of Kentucky’s Environment series designed to monitor environmental trends and conditions.

The press conference was held on the eve of the 27th anniversary of Earth Day. Earth day is a time to renew our commitment to protecting the environment. Poll after poll reveals that Kentuckians are truly concerned about their waterways, ranking water pollution among the top environmental problems facing the Commonwealth.

Kentucky’s waterways are a vital resource, supplying water for drinking, economic activity, and recreational uses. While many waterways have been degraded by pollution, there are continuing signs of improvement. Federal and state efforts to control water pollution appear to be paying off. Consider these facts from the report:

- Water quality of monitored waterways continues to improve. Sixty-nine percent of the monitored waterways are now considered clean enough for fishing, swimming, or for use as a drinking water supply, compared to only 29% in 1972.
- Reported releases of industrial toxic chemicals to waterways are down 77% since 1988, and
- Eighty-six of the 120 public lakes monitored for pollution are considered clean and safe to use. But problems remain. For example, the EQC Water Quality report found that:
  - Nearly one-third of the monitored streams and rivers are still degraded by pollution.
  - The number of swimming advisories issued due to bacteria contamination increased during 1996.
  - Pesticides are finding their way into groundwater, and
  - Toxic chemicals have been detected in fish at several public lakes some at unsafe levels.

While we have come far in protecting and restoring our waterways, much more must be done to reverse the negative trends in pollution.

Highlighted below are several findings from the EQC Water Quality Report. To determine if water quality is improving in Kentucky, EQC reviewed data from the state’s 44 ambient stream stations and other monitoring data. Unfortunately, these stations can only provide a picture of only 7% of the 89,000 plus miles of waterways in the state. Still, this data does give us a general indicator of water quality trends and pollution sources in the state.

- In 1995, 31% of the monitored streams in the state were impaired by pollution, compared to 42% in 1993. Improvements are the result of the Clean Water Act and other federal and state laws and regulations enacted to protect water quality.
- Coal mining is a leading source of water pollution. About 43% of pollution problems caused by coal mining are due to acid mine drainage which is primarily associated with abandoned coal mines.
- Polluted runoff from agriculture is the second leading source of water pollution in the state. Placing third is pollution from poorly operated wastewater treatment plans followed by failing on-site sewage septic systems and the improper disposal of waste.
- Kentucky has 13 major river basins. Some of these waterways are more degraded than others. For example, the Big Sandy, Kentucky, Green, Upper Cumberland, and Ohio Rivers lead the state with the most miles of polluted waterways. The Division of Water reports that for many impaired waterways, pollution levels are actually decreasing, particularly for chlorides, a pollutant associated with oil and gas drilling. This attributed to stepped up enforcement at oil well sites as well as a reduction in oil production in Kentucky, from a high of 7.7 million barrels in 1985 to 3.4 million barrels in 1996.
- Of the 120 lakes assessed in 1995, 34, or 28% were impacted by pollution. Restoring water quality of polluted lakes has been a slow process. Agricultural practices have been identified as the leading source of lake pollution. Additional attention has also been focused on addressing the problem of boat sewage on some of our most popular public lakes. A survey of 17 public lakes found more than 4,000 houseboats, 40% of which were docked at Lake Cumberland. But legal and other problems have limited the state’s ability to adequately enforce boat sewage disposal laws.
- As EQC reported in previous reports, groundwater quality still remains relatively unknown even though it supplies 1.1 million Kentuckians with drinking water. However, the state is making progress in gaining a better understanding of groundwater quality and pollution threats. In
1995, the Division of Water established a network to collect groundwater data at 100 wells and springs across the state.

⇒ Wastewater treatment is also a problem in Kentucky. EQC found that in 1995, 60% of the more than 3,000 wastewater treatment plants operating in the state had violations of regulatory requirements. While a majority of the 50,000 violations documented in 1995 were reporting and monitoring infractions, 26% were for exceedances of permit limits set to protect public health.

⇒ On-site sewage disposal also remains a problem in Kentucky. Only 56% of the state’s households are connected to sewers. In 36 counties, less than 25% of the households are connected to public sewers.

⇒ Sewage pollution is responsible for many of the swimming advisories issued in the state. In 1996, more streams and river miles were off limits to swimming than in any previous year.

⇒ EQC is happy to report that industries are doing a better job in reducing the generation and release of toxic chemicals to waterways. The amount of industrial chemicals reported discharged to waterways have declined 77% since 1988. During 1994, industries reported releasing 403,000 pounds of toxics to waterways in 31 counties. Forty-four percent of those reported releases occurred in Marshall County.

⇒ The number of fish killed in pollution incidents have increased from previous years after several years of declining trends. During 1994 and 1995, thirty-one pollution incidents killed 172,000 fish. Oil and chemical spills were the leading source, although close to half of the incidents were of unknown origin.

⇒ Toxic chemicals are also being increasingly detected in fish. Tests at nine public lakes in the past few years have found various levels of lead, PCBs, mercury, and other chemicals in fish tissue. Some of these tests have led to fish consumption advisories. Currently, there are state fish consumption advisories in effect along 788 miles of waterways, one lake, and five ponds.

Water quality improvements are a result of enforcement of state and federal clean water rules. In 1995, close to 14,000 inspections were conducted by the Division of Water’s 60 field inspectors at permitted plants and in response to complaints. During 1995, 814 violations of water quality regulations were cited and 94 fines were assessed against polluters.

Trends reveal that the number of water inspections, violations, and penalties are declining in Kentucky. This decline is attributed to a reduction in the number of field inspectors, a decrease in oil production, and a move toward technical assistance as part of the Cabinet’s customer service initiative.

Carrying out pollution control programs requires adequate resources. However, budget shortfalls resulted in a loss of $3 million in state appropriated general funds for water programs between 1992 and 1993. Since then, funding trends have remained fairly flat. The Division of Water lost close of 30 positions since 1992. The state budget appropriated to water programs in fiscal year 1998 of $10.5 million amounts to per capita expenditure of $2.66 per Kentuckian to protect water.

The EQC Water Quality Report shows that water pollution laws have led to cleaner waterways across the Commonwealth. A strong commitment to enforcing these laws is necessary if we are to continue to make progress. But much more also needs to be done to tackle the pressing problems that remain, particularly in regard to polluted runoff from farms, mines, and urban areas, as well as improper sewage discharges.

EQC strongly supports recent efforts by the Division of Water to target these problems by watershed. The premise of the watershed initiative is to target priority pollution problems, involve various agencies and the public in the design of effective solutions, and measure success through monitoring and data gathering.

In the summer of 1997, the state will embark on the Kentucky River Basin Watershed Management Initiative. Such a watershed-based approach should go a long way in restoring water quality. Let’s hope the state will see fit to fund other watershed initiatives and invest the resources necessary to ensure clean water for all Kentuckians.

EQC will also embark on its own clean water campaign to call attention to the water pollution problems in the state. The commission will hold public forums across the state during the next several months to focus on many of these critical water quality issues and develop recommendations. ■
CHALLENGING A "FONSI"

Attorney Joe F. Childers of Lexington provided some advice on how to challenge a Finding of No Significant Impact (FONSI). This information is particularly pertinent to challenging the US Forest Services planned timber sales in the Daniel Boone National Forest.

Under the National Environmental Policy Act (NEPA), 42 U.S.C. 4321(note), 4321, 4331, 4335, 4341, 4347, et seq., any federal agency proposing “major Federal actions significantly affecting [the] quality of the human environment.” shall prepare an Environmental Impact Statement (EIS) detailing the environmental effects of the proposal. NEPA, Section 102 (c). Prior to preparing an EIS, “which is very costly and time-consuming to prepare and has been the kiss of death to many a federal project,” federal agencies will first prepare an Environmental Assessment (EA), “a rough-cut, low-budget environmental impact statement designed to show whether a full-fledged (EIS) . . . is necessary.” Cronin v. Dept. of Agriculture, 919 F.2d 439, 443 (7th Cir. 1990).

In preparing a timber sale, the United States Forest Service (USFS) first prepares an Environmental Assessment. If, as a result of the EA, the USFS determines that the project is not a major federal action significantly affecting the quality of the human environment, then the agency prepares a Finding of No Significant Impact (FONSI) and does not develop a full-fledged EIS. In order to challenge a FONSI, it is necessary to show that in fact the project will have a significant impact on the quality of the human environment pursuant to NEPA.

In analyzing the term significantly, it is necessary to place the proposed federal action in context to determine its impact, both long and short term, on society as a whole, the affected region, the affected interests and the locality. In cases of site specific actions, such as timber sales, more emphasis is placed on the effects on the locale. Furthermore, the intensity of the proposed action is important, however severe the impact on the environment is likely to be. In determining intensity, it is important to examine whether the geographic area is in proximity to ecologically critical areas, such as habitat for endangered species, wetlands, wild and scenic rivers, or important historic or cultural resources. Other considerations are whether the effects are highly controversial, involve unknown risks, the extent to which precedence will be established, and the cumulative impact of the proposed action. See 40 CFR Section 1508.27.

Finally, it is extremely important to closely examine the administrative record created by the USFS to see exactly what the agency has relied upon in making its FONSI determination. Often the USFS will rely on “independent substantiation” of its decision by the U.S. Fish and Wildlife Service (USFWS). Close examination may reveal that the USFWS simply rubber-stamped the proposal without taking the “hard look” required by several cases. Ask whether there was an informal or formal consultation with the USFWS. Items to review include the Environmental Assessment, the Biological Opinion, the USFWS’ correspondence or reports, and any scientific studies relied upon by the US Forest Service.

On March 21, 1997, at the Sierra Club Cumberland Chapter President’s Dinner, the Sierra Club awarded the Harry Caudill Award to the Frank Elsen and to the memory of Mary Bingham. Hank Graddy presented the award to Frank and cited his committed work as a volunteer environmental activist. Frank’s noteworthy accomplishments included serving on the Lake Cumberland Trust Board; his precedent setting work as a citizen member of the Lake Cumberland Technical Advisory Committee—working with dischargers and regulators to investigate pollution reduction and prevention alternatives; and his work as leader of the Kentucky Waterways Alliance.

The Earth Needs a Friend in Frankfort

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Ways I will help KCC include:
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Kentucky Conservation Committee  
PO Box 1152  
Frankfort, KY  40602

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<thead>
<tr>
<th>DATE</th>
<th>EVENT</th>
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<tr>
<td>May 28 - 6:00 pm CDT (Wednesday)</td>
<td>Public Hearing on Environmental Impact Study of Cagle Inc. locating a Chicken Processing Plant in Clinton County. The purpose of the hearing is to review the findings of the Environmental Impact Study for locating a chicken processing plant near Albany, KY. The hearing will be held at Clinton County High School. For information contact Betsy Bennett or Hank Graddy at (606) 873-1340.</td>
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<tr>
<td>May 29 - 6:00pm CDT (Thurs.)</td>
<td>Second Public Hearing on EIS of Cagle Inc. Chicken Project in Franklin, KY (see above). The hearing will be held at Franklin-Simpson High School in Franklin.</td>
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<tr>
<td>June (All month)</td>
<td>RIVERS MONTH - For a calendar of events (there are many), contact 1 (800) 928-359-3977.</td>
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<td>June 6-8</td>
<td>Kentucky River Watershed Watch (KRWW) - the second “Reclaim the River” event. Water grab samples are to be gathered by survey teams and taken to designated lab(s) to be tested for pesticides. CONTACT: KRWW Headquarters at (606) 873-1340 or (800) 928-0045 Ext. 473.</td>
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<td>June 21 (Saturday)</td>
<td>Ohio River Sweep - from Pittsburgh, PA to Cairo, IL. Includes 25 Kentucky counties. Sponsored by Ohio River Valley Water Sanitation Commission (ORSANCO). Contact: Jeanne Isom - 1-800 359-3977. Kentucky River Sweep - 7th Annual Cleanup. It’s time once again to roll up your sleeves and help the Kentucky River Authority (KRA) and ORSANCO clean the Kentucky River. Contact: Sue Ann Elliston, KRA - (502) 564-2866.</td>
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<tr>
<td>September 27 (Saturday)</td>
<td>Kentucky Conservation Committee’s Annual Meeting - Shakertown at Pleasant Hill.</td>
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PLEASE MARK YOUR CALENDAR NOW!