| | Approved February 18, 1988 Date | |
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| MINUTES OF THE <u>HOUSE</u> COMMITTEE ON <u>EN</u> | IERGY AND NATURAL RESOURCES | · |
| The meeting was called to order byRepresentati | ve Dennis Spaniol Chairperson | at |
| 3:30 %系/p.m. on February 9 | , 19 <u>8</u> 8in room <u>526-S</u> of the Capi | tol. |
| All members were present except: | | |
| Representative Barr (excused) Representative Rezac (excused) | | |
| Committee staff present: | | |
| Laura Howard, Research Dept. Raney Gilliland, Research Dept. Theresa Kiernan, Revisor's Office | Ramon Powers, Research Dept. Paul West, Research Dept. Betty Ellison, Committee Sec. | |

Conferees appearing before the committee:

Robert L. Meinen, Secretary, Department of Wildlife and Parks

Chairman Spaniol called the meeting to order.

Laura Howard of the research staff gave a detailed overview of the situation relative to nonpoint source pollution in Kansas. The Conservation Reserve Program (CRP) was explained. This is a voluntary federal program which encourages farmers to stop growing crops on highly erodible cropland by establishing permanent grass, wildlife cover, or trees through ten-year contracts with USDA. Legislation enacted in Iowa in 1987 was discussed, as well as the 1987 Clean Water Act of Kansas. It was noted that assessment and management reports were to be submitted to the Environmental Protection Agency (EPA) by August 4, 1988. Also described was "chemigation, which is defined as any process whereby pesticides, fertilizers, or other chemicals are added to irrigation water applied to land or crops, or both, through an irrigation distribution system. (Attachment 1)

The Chair asked if any committee members had requests for further information from staff. Representative Patrick indicated that he would like to have someone from the State Board of Agriculture discuss chemigation and what is being done in that area. Chairman Spaniol invited any interested parties to testify during the generic hearings on this subject.

Final action on Senate Bill 475--Deer hunting on licensed game bird controlled shooting areas.

Representative Freeman explained an amendment which he had drafted.

(Attachment 2) He noted that the amendment addressed the concern regarding fee hunting as well as the concern about changing the distribution policy. Representative Freeman moved passage of the amendment to Senate Bill 475. Representative Sifers seconded. Secretary Meinen responded to numerous questions of committee members during discussion. Chairman Spaniol commented that hopefully through the cooperation of Wildlife and Parks and the Legislature, sound deer management policy would be implemented and Senate Bill 475 would not be needed in the forseeable future. Responding to a question of Representative Shore, Secretary Meinen offered to do research on the number, size, and types of shooting preserves. A vote was taken and the motion on the amendment passed. Representative Freeman, seconded by Representative Holmes, moved that Senate Bill 475 as amended, be reported favorably for passage. The motion carried.

CONTINUATION SHEET

MINUTES OF THE HOUSE COMMITTEE ON ENERGY AND NATURAL RESOURCES,
room 526-S, Statehouse, at 3:30 xxxx/p.m. on February 9 , 19_88

House Bill 2729--Nonresident deer permits.

Staff explained amendments shown in balloon. (Attachment 3) On page 4, language on lines 166-170 was stricken and new language inserted, which would guarantee any landowner a deer permit for hunting only on his own land. It also would simplify the procedure of securing the permit. It was noted that on line 166, the word "may" had been changed to "shall", thus guaranteeing the deer permits for the landowners. Representative Guldner commented that the landowner's permit should show a distinction between mule deer and white tail deer. Secretary Meinen stated that this distinction was made in some areas of the state for deer management purposes.

On page 2, staff noted that fees of not less than \$10 nor more than \$100 for additional resident deer hunting permits had been inserted and the maximum fee for nonresident and nonresident landowner big game hunting permit had been reinserted at \$400. Subsection (f) had been stricken and the fee for an additional resident deer hunting permit inserted. Staff commented that there was an "any season, any deer" permit, which might speak to Representative Guldner's concern. Secretary Meinen agreed that there is still such a permit and it is utilized quite a bit in an effort to accommodate the landowners. Chairman Spaniol noted that in every case in these amendments, Wildlife and Parks are given the authority to use their discretion in reacting to these situations. They need the flexibility to set the regulations on an annual basis. The only exception to this being the language inserted on page 4 assuring a resident landowner who was unsuccessful in obtaining a regular season deer permit of being issued a permit to hunt deer on his land only.

Secretary Meinen made a recommendation that the word "secretary' be changed to "commission", but staff saw no problem with the wording because the Secretary adopts the rules and regulations.

The Chairman began examination of the balloon item by item. At the top of page 2, a category for a second deer hunting permit was being created with a fee of not less than \$10 nor more than \$100. Staff explained that the Department cannot adopt temporary rules and regs for fees so a set fee has to be established each year. The \$50 amount was arbitrarily put in until the Department can adopt their code of rules and regs. Secretary Meinen said that he did not wish to address the issue of fees at this time. The Department's regulations for fees are permanent and if this bill is adopted, legislative direction would be needed. He noted that the fee for the first deer permit is \$30, but made no recommendation for the fee for the second permit. Representative Grotewiel felt that due to the overpopulation of deer, there seemed to be no reason to raise the fee from \$30. There was committee concensus on this opinion.

Moving to page 3 of the balloon, the Chairman noted that the insertion simply gave the Secretary the authority to issue more than one deer permit to any resident whenever the total number of applicants for deer permits is less than the number of permits authorized. These permits could be any combination of archery or firearms. There was concensus that permits currently are applied for by game area—this would remain the same, leaving it to the discretion of the Secretary if there were sufficient deer in a certain game area to justify issuing some second permits.

CONTINUATION SHEET

MINUTES OF THE HOUSE COMMITTEE ON ENERGY AND NATURAL RESOURCES, room 526-\$ Statehouse, at 3:30 xxxx./p.m. on February 9 , 19_88

During discussion relative to the fee structure on page 2 of the balloon, Representative Holmes proposed that on line 81, the fee for nonresident landowner remain at not less than \$30 nor more than \$400. Nonresident permits only would be not less than \$300 nor more than \$400. He felt that this would address the concerns of Representatives Sallee and Sutter by setting the fee high enough to discourage nonresident hunters from hunting in Kansas. The Chair directed attention to page 3, lines 155-159. This language takes care of the resident hunter, both for the first and second licenses. This definitely would not be on a state-wide basis, but only in certain deer management units. If there is an overabundance of permits which cannot be sold to residents of a certain deer management unit, the Department has the flexibility to issue nonresident permits. This is strictly discretionary and requires that the Kansas resident be taken care of first. Representative Holmes, seconded by Representative Sutter, made a motion to strike "Nonresident and" on line 80, so that it would read "Nonresident landowner big game hunting permit--not less than \$30 nor more than \$400." Also to insert a line 82 which would read "Nonresident, nonlandowner big game hunting permit--not less than \$300 nor more than \$400." Secretary Meinen advised the committee that his Department does check hunters relative to this issue. A vote was taken on the amendment and it passed.

During discussion of the language inserted on page 4, Representative Guldner expressed the hope that the agency would work with the landowner in issuing a license for the type of deer which was on his land. There was committee concensus on this section of the balloon.

Relative to the insertion on line 120 of page 2, it was agreed that the calendar year mentioned should read 1988—it then would be in effect for the season of 1989.

Representative Shore mentioned receiving complaints regarding the process of getting a deer hunting permit. He agreed to defer discussion on this matter until after the new Wildlife and Parks Commission comes before the committee on February 18. The Chairman noted that the committee could work with the Secretary or introduce a committee bill if necessary to address this issue after February 18.

Responding to a question of Representative Fry, Secretary Meinen gave a brief report on the meeting held at Hays on February 8. There were more than 300 people in attendance and a lot of concern was voiced on the nonresident hunting issue. Responding to a question of staff, the committee agreed to establish a nonresident, nonlandowner fee for 1988 at \$400.

Representative Holmes, seconded by Representative Lacey, moved that House Bill 2729 as amended be reported favorably. The motion carried.

Secretary Meinen was reminded of Representative Shore's request to provide the committee with information on the game preserves.

The meeting was adjourned at 5:30 p.m.

The next meeting of the House Energy and Natural Resources Committee will be held on February 10 at 3:30 p.m. in Room 526-S.

Date: Feb. 9, 1988

GUEST REGISTER

HOUSE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

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Date: Feb. 9, 1988

GUEST REGISTER

HOUSE

COMMITTEE ON ENERGY AND NATURAL RESOURCES

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MEMORANDUM

February 9, 1988

TO: House Energy and Natural Resources Committee

FROM: Kansas Legislative Research Department

RE: Nonpoint Source Pollution

Background

In "The Kansas Water Quality Standards," nonpoint source pollution is defined as "a diffuse source of water pollution including, but not limited to, runoff from agriculture, mining, construction activity, saltwater intrusion, deposition of residual waste and disposal of pollutants on land or in subsurface excavations." The Environmental Protection Agency (EPA), in providing guidance for implementation of the 1987 Clean Water Act Amendments, defines nonpoint source pollution as any source of pollutants not regulated as a point source. In its statement of guidance, EPA identifies 45 specific subcategories of nonpoint pollutant sources. The significant nonpoint source pollutants include bacteria, dissolved and suspended solids, oxygen demanding substances, nutrients, and pesticides.

In another context, EPA defines nonpoint pollution as occurring when the rate of pollutants entering a receiving water body from nonpoint sources exceeds the natural rate of pollution. The agency has not defined this statement and has left its interpretation to the states. As it presently stands, the Kansas Department of Health and Environment (KDHE) is working on the state nonpoint source assessment report required under the 1987 Clean Water Act (which must be submitted to EPA by August, 1988) and a considerable amount of effort is being spent in developing a defensible definition of nonpoint source pollution that has operational meaning.

Nonpoint source pollution is a major factor in preventing the nation from achieving the goals of the Clean Water Act of 1972 which called for providing that all the nation's waters be fishable and swimmable by 1990. In a 1985 national survey, a total of 165,000 river miles, 8.1 million lake acres, and 5,400 estuary square miles were identified as impaired by nonpoint source pollution. Lakes and estuaries are particularly vulnerable because they form natural "sinks" for river-transported pollutants.

Agricultural activities are the most widespread contributors to pollutants in rivers and lakes, and agriculturally-derived pollutants are the primary source in 64 percent of the river miles affected by nonpoint source pollution and 57 percent of the lakes affected by such pollution. Agriculture, by virtue of being the largest land use activity in Kansas, is the largest source of nonpoint source pollutants.

Nonpoint source pollution and groundwater pollution have been treated as separate issues because the federal government's programs for groundwater protection were developed under the Safe Drinking Water Act and the nonpoint source pollution management programs under the Clean Water Act. The intermingling of surface and groundwater make such distinctions difficult to sustain. Agricultural practices, in particular, can pollute groundwater when fertilizers and

pesticides leach into aquifers. Salts and metals have leached into groundwater tables as a consequence of irrigation. Runoff from farmland into streams may pollute waters in hydrologically connected aquifers.

Strategies developed by states to protect groundwater from nonpoint source pollution have not necessarily been considered part of a nonpoint source pollution strategy. The distinction between a nonpoint pollution prevention strategy and a groundwater protection strategy will become less marked as the definition of nonpoint source pollution is refined under the 1987 Clean Water Act amendments.

The following are the adverse affects of nonpoint source pollution: (I) the destruction of lakes, which silt in and act as traps for pollutants; (2) an increase in the cost and difficulty of water treatment for public use; and (3) potential adverse health effects on humans, fish, and wildlife.

A variety of dissolved and suspended pollutants are carried in the Suspended solids are the primary pollutant which runoff from agricultural land. agricultural management practices are designed to control, and the assumption is that those management practices also control other pollutants, such as pesticides The authors of the "Revision to Kansas Water Quality Manage-(January, 1984), state that drinking water supplies in Kansas suffer ment Plan" from various problem sources including nonpoint source contamination caused by the runoff of fertilizers and pesticides. Water quality monitoring and fish tissue analysis reveal persistent concentrations of some pesticides in Kansas waters. The 1987 Inventory of Contaminated Sites in Kansas, prepared by the Bureau of Environmental Remediation of KDHE, identified 332 sites in the state where contamination has placed Kansas soil, surface water, or groundwater in jeopardy. In 320 of these identified sites, groundwater is affected, in some cases along Pesticides are cited as the source of contamination with soil and surface water. Remediation activities, particularly with in 31 of these groundwater sites. The average cost of an respect to groundwater, -are time-consuming and costly. aquifer cleanup is \$8 million, with a two and one-half to ten-year time frame from initial site identification to actual remedial implementation.

Several studies have been done assessing the extent of contamination of both groundwater and surface water in Kansas and extensive monitoring of quality has been performed. Several studies have focused on the incidence and effect of pesticides in Kansas waters. Surface water quality monitoring activities have included sampling of streams, lakes, and public water supplies. sampling began at some stream locations in 1973. Currently, 110 fixed locations across the state are sampled at least annually. Since 1973, 22 pesticides have been detected in streams and rivers; atrazine, the most highly-used pesticide in Kansas, has been detected most frequently and at the highest concentrations of Atrazine is detected in approximately 25 percent of all samples. all pesticides. The concentrations at which these pesticides are found are not known to be hazardous to aquatic life, humans, or livestock. Lake sampling has also occurred since 1975 at 20 to 30 lakes across the state each year, with 120 total lakes The pesticides most commonly found in lakes are monitored on a rotating basis. the same as those found in rivers and streams. The concentrations found in lake sampling are lower, but more consistent, than the concentrations found in stream Under the Safe Drinking Water Act of 1974, public water and river sampling. supplies using surface water must monitor the incidence of pesticides in finished drinking water every three years. A partial survey conducted by KDHE of some

of these systems supplied by lakes identified the same pesticides in nearly as high concentrations as those found in lakes and streams, although the determined levels are below current health protection guidelines for pesticides in drinking water.

Groundwater monitoring studies have also been conducted by KDHE to assess the quality of groundwater in Kansas. The Kansas Groundwater Quality Protection Strategy establishes nondegradation as the goal and policy of groundwater protection in the state. The policy is applied to all groundwater supplies where the natural quality of the aquifer meets standards for a public drinking water supply. In 1976, a fixed network of monitored wells was established to evaluate water quality of the principal aquifers of the state; currently, 246 wells are included, with 40 sampled annually. Since 1976, approximately 300 pesticide samples have been analyzed. Pesticides have been detected in only four cases. However, it is difficult to generalize the results of this monitoring in that wells sampled are of good quality and removed from local sources of contamination in order to provide an indication of regional aquifer quality.

A farmstead well study was conducted in two phases in 1986 and 1987 under a cooperative project between KDHE and Kansas State University. study was undertaken because farmstead domestic water supply wells were believed to be at an increased risk of contamination than the groundwater of the state as a whole, because of the age, depth, and location of these wells. intent of the project was to identify the level and extent of farmstead well contamination and to gain information about the characteristics of these wells which increase the contamination risk. Samples from 104 wells in 50 counties were analyzed for pesticides, volatile organic chemicals, and inorganic compounds. The most commonly found contaminant of farmstead wells was nitrate. percent of wells sampled, nitrate concentrations exceeded those of the National Approximately 8 percent of the wells con-Primary Drinking Water Standard. tained detectable amounts of pesticides, and 2 percent contained volatile organic One well contained pesticides above the level considered safe for long-term consumption (Kansas Action Level). A second phase of the study was conducted selecting wells based on hydrogeology, well construction, and farmstead characteristics in order to determine if high-risk wells and factors contributing to contamination could be identified. Sampling of 100 wells, including 20 from Phase I, indicated nitrate levels exceeding drinking water standards at Eleven wells contained some synthetic contamination, 32 percent of the wells. Seven wells were contaminated in and nine contained one or more pesticides. concentrations above the Kansas Action Level. Preliminary conclusions suggest that older, more shallow, and hand-dug wells are likely to experience greater levels of contamination than more recently-constructed wells.

A project to screen public water supply wells for pesticides was conducted by KDHE from January to May, 1987 involving 128 wells believed to be highly vulnerable to pesticide contamination. Twelve wells were detected as containing pesticides; in three cases, the wells tested exceeded levels defined as contaminated (Kansas notification level); however, none exceeded the level for safe drinking water. In most cases, concentrations were low and intermittent in nature.

Since 1980, KDHE has also analyzed fish tissue for the presence of toxic pollutants; pesticides are most frequently detected. Chlordane is detected most frequently and in the highest concentrations of any pesticide. The highest

detected levels have been on major rivers near or downstream of urban areas. Chlordane is an insecticide currently utilized primarily for subterranean termite control. Highest concentrations have been identified along the Kansas River from Manhattan to Kansas City. In June, 1986, KDHE issued a health advisory for the consumption of fish caught between Lawrence and Eudora, advising the limiting of human consumption to 8 ounces of carp per day. At 52 percent of stations sampled statewide, chlordane guidelines for the protection of predators (avian and mammalian consumers) have been exceeded, particularly in the eastern part of the state. Chlordane was banned for agricultural use in 1978; its continued frequency of occurrence in fish suggests it is still entering the environment from its variety of urban uses.

The authors of KDHE's Water Quality Assessment Report, "Kansas Water Quality, 1984-1986" state that "All Kansas streams are affected or threatened by nonpoint pollution." In the matter of runoff from crop and rangeland, the report notes that the state's nonpoint source pollution control policy is preventive in nature and assumes that treatment of agricultural land to meet soil conservation standards will likewise provide for attainment of water quality goals of the federal Clean Water Act. The policy is based on the assumption that voluntary participation in soil conservation practices is appropriate if adequate financial and technical resources are available. With regard to assessing pollution from nonpoint sources, the report states:

Determining problem areas through water quality monitoring has proven to be difficult. The possible exception may be the detection of pesticides in many streams and rivers, but the data base is very limited. Sediment is the most frequently cited agricultural runoff pollutant. Kansas has no numerical water quality criterion for suspended sediment. There is considerable uncertainty with respect to sediment as a carrier of other pollutants. The interaction of upland sediment production and stream bank erosion compounds the sediment damage issue.

Runoff from livestock containment areas, septic tank failures, urban runoff, construction erosion problems, and acid mine drainage are all part of KDHE's nonpoint source pollution strategy in addition to agricultural runoff.

Large livestock operations are regulated under the National Pollutant Discharge Elimination System of the Clean Water Act as point sources; however, the small livestock facilities are considered as nonpoint sources and are controlled under a state permit and certificate system.

The Bureau of Water Protection, Division of Environment of the Kansas Department of Health and Environment, is responsible for permitting confined livestock feeding operations. Because technical advancement in the agricultural sector brought about significant development of large commercial livestock feeding facilities in the 1960s, there arose a need to regulate livestock feeding facilities in the state. Along with this development came environmental problems. Extensive fish kills and water pollution incidents occurred on our streams and lakes. Water and air pollution problems called for a comprehensive regulatory feedlot program.

The provisions of K.S.A. 65-164 et seq., charged the Division of Environment with investigation, evaluation, and authority to order the abatement of water pollution incidents. Regulations were adopted in 1968 for confined livestock feeding operations including the registration of livestock operations which have a water pollution potential. If the confined livestock feeding operation requires water pollution control facilities, a permit is required prior to operation.

The Division of Environment enforces the mandatory registration of confined livestock feeding operations. The following livestock operations are subject to regulatory requirements:

- any confined livestock operation which provides capacity for more than 300 head of cattle, hogs, sheep, or a combination of all three:
- 2. any livestock operation, irrespective of size, that utilizes wastewater control facilities, i.e., manure pits, ponds, lagoons, or other devices:
- 3. upon notification by departmental personnel any livestock operation which presents a potential water pollution problem including but not limited to the following:
 - a. open lots fenced and located across or immediately adjacent to creeks, streams, intermittent waterways, or other conveyance channels or devices;
 - b. any livestock operation with a discharge line to a road ditch, creek, or other conveyance channel which precludes the control of discharged wastewater upon the operator's property; and
 - c. any livestock operation observed to practice improper disposal of livestock wastes.
- 4. any commercial poultry house with flock size in excess of 1,000 birds:
- 5. existing sale barns and collection centers which provide capacity for more than 300 head or are utilized more frequently than once per week:
- 6. livestock truck wash facilities irrespective of size;
- 7. other aspects associated with existing livestock operations which present a water pollution potential including but not limited to seepage from ensilage in trench silos, improper use and/or disposal of pesticides or other toxins associated with livestock facilities, improper disposal of dead animals within waterways or tributaries thereof, and similar concerns; and

8. any other animal feeding operation whose operator(s) elects to come under these regulations.

Septic tank problems are managed by KDHE in the following manner:

- 1. investigate reports of failed septic tank systems;
- 2. encourage local officials (health departments, city and county governments) to initiate corrective action;
- 3. provide technical assistance by advising of appropriate solutions and availability of financial assistance; and
- 4. initiate enforcement procedures where public health hazard or environmental damage can be documented and local authorities fail to act.

The urban runoff program is designed to control pollutants from urban stormwater sources through:

- 1. additional stormwater monitoring to determine the need for additional water quality control;
- 2. investigation of the effects on adjacent land of the quality/quantity of urban stormwater systems; and
- 3. assistance to municipalities for resolution of stormwater runoff and pollution problems.

KDHE encourages voluntary use of pollution control practices and measures at construction sites to control off-site erosion and sedimentation damages. Technical assistance is provided by the Department to local governments, designers, and developers.

Finally, mining activity in southeast Kansas has contributed pollution to streams in the area, and KDHE is studying the extent and sources of ground-water and surface water contamination and potential remedial actions that might be taken to remedy the situation.

A 200 square mile area of Cherokee County with surface and ground-water contamination from heavy metals from mining excavation and surface runoff is included on the National Priority List for remedial cleanup under the federal Superfund. The U.S. Environmental Protection Agency is developing and implementing the remediation strategy for this area; a state match of 10 percent funding is required for actual remediation. A 10 percent match of \$500,000 is included in the Governor's FY 1989 budget recommendation for KDHE for the cleanup of one subsite in the Galena area where the quality of the shallow water aquifer has been adversely affected and the deep aquifer, the Roubidoux Formation, is threatened. Activities of the Mined Land Division of the Kansas Corporation Commission (KCC) also address mining pollution in southeast Kansas. Monthly inspections are conducted at all active and inactive coal mining sites.

The Mined Land Program has prepared a Kansas Abandoned Mined Land Inventory to identify the land and waters of the state adversely affected by past coal mining practices. Federal abandoned mined land funds are utilized for reclamation activities at affected sites; for FY 1989, \$2,500,000 in expenditures for planning and construction at six sites is anticipated.

State and Federal Legislation and Regulation

The Kansas Water Quality Management Plan was adopted by the Kansas Legislature in 1979. Agricultural runoff was identified as the primary source of contamination of the state's water resources, and a separate section of the State Water Plan addresses that subject. Since the 1979 Plan, increased attention has focused on nonpoint source pollution, and in 1985 KDHE revised its surface water quality standards to provide that when the Department finds that nonpoint sources cause or may cause a violation of the water quality standards, suitable pollution control measures can be required.

In 1986 a separate subsection of the State Water Plan was entitled "Non-Point Source Pollution." In preparing the subsection of the Plan on nonpoint source pollution, the Kansas Water Office established the Technical Advisory Committee on Surface Runoff composed of representatives from the State Conservation Commission, the Department of Health and Environment, the former Fish and Game Commission, the Division of Water Resources of the State Board of Agriculture, and the federal Agricultural Stabilization and Conservation Service, the Soil Conservation Service, the Corps of Engineers, and the Bureau of Reclamation. The recommendations of the 1979 Water Quality Management Plan were reviewed and additional criteria were established for identifying nonpoint source pollution problem areas:

- 1. areas defined by water quality standards violations as measured at some downstream water use point;
- 2. areas where the estimated annual erosion rate exceeds the tolerable erosion rate "T":
- the need to protect sensitive water resources such as lakes, high value fisheries, special aquatic life use streams and outstanding natural resource waters (the erosion rate in these areas should not exceed .75 T);
- an identified need to prevent loss of reservoir storage volume so that actual reservoir sedimentation rates do not exceed the design rate; and
- 5. the detection of pesticides in ground and surface water sources.

KDHE adopted these criteria to identify nonpoint source pollution problem areas.

To reduce nonpoint source pollution, the authors of the State Water Plan state that intensive pollution control measures such as land conservation and erosion controls, elimination of improper application of fertilizers and

pesticides, reduction of land conversion, and use of watershed structures (especially above large reservoirs) must be adopted. A recent National Conference of State Legislatures (NCSL) publication entitled, Agriculture, Economics, and Environmental Protection notes that state and federal policies to control soil erosion have existed for over 60 years; however, the effectiveness of policies has been limited. The problem is that the policies for control of soil erosion are often contradicted by other agricultural policies and the reliance on voluntary compliance for the implementation of the soil erosion control measures. According to the author of the NCSL publication "Soil is eroding at rates unsuitable for responsible agricultural management, and agricultural policy must share some of the blame."

Criticisms of federal and state conservation programs include:

- 1. lack of coordination and cooperation among administrative agencies and programs;
- 2. failure to target conservation measures to lands with the greatest soil erosion problems;
- 3. overemphasis on voluntary programs;
- 4. separation of soil conservation programs among different agencies in the United States Department of Agriculture (USDA);
- 5. promotion of engineering measures that have had dubious effects on soil conservation; and
- 6. relegation of conservation objectives to secondary importance to USDA's primary objective of maximizing production.

According to NCSL, 24 states had enacted erosion and sediment control statutes prior to 1985 when the federal government passed the Food Security Act with its conservation reserve, cross-compliance, and sod buster provisions. At least 14 states provide public cost-share funds to individual landowners to implement conservation programs.

Conservation Reserve Program

One recently initiated federal program that will have significant impact on water quality and water pollution is the federal government's Conservation Reserve Program (CRP). The CRP is part of the conservation provisions of the Food Security Act (Farm Bill) of 1985. The CRP is a voluntary program encouraging farmers to stop growing crops on highly erodible cropland by establishing permanent grass, wildlife cover, or trees through ten-year contracts with USDA.

Some of the benefits of the CRP are to reduce wind and water erosion, protect the nation's long-term capability to produce food and fiber, provide permanent vegetative cover, reduce sedimentation, improve water quality, create better habitat for fish and wildlife through improved food cover, curb

production of surplus commodities, and provide needed income support for farmers.

The CRP has been a very popular program in Kansas. Kansas ranks second nationally, behind only Texas, with 1,980,000 acres enrolled in CRP during the first five signups. The benefits from the first five CRP signups in Kansas include: nearly \$104 million in annual rental payments to 18,700 participants, a reduction of nearly 1,443,000 acres of cropland base, and an annual soil erosion savings of 32.6 million tons (over 16 tons/acre/year). The erosion reduction from CRP cuts the annual cropland erosion rate in Kansas by 19 percent.

Recently federal officials indicated that before the program's end, they hope to have a little more than four million acres taken out of production in the state. This is approximately 7.6 percent of the state's 30 million plus acres of cropland. (Kansas ranks second in the number of cropland acres in the U.S.) As has previously been noted, the intent of this legislation is not only to take farmland out of production, but also to reduce sedimentation and improve water quality. Cover crops will help to prevent soil erosion and since crops will not be produced, significantly reduced amounts of fertilizers and pesticides will be used, all of which could deteriorate water quality.

State Conservation Commission

The major state programs are designed to eliminate or reduce soil erosion and retain water on the land that is administered by the State Conservation Commission. The Commission administers the Water Resources Cost-Share Program under which 60 percent of an annual appropriation is distributed equally among all 105 conservation districts. The remaining 40 percent is distributed on the basis of a formula designed to target funding for districts with high erosion potential. For FY 1989, the Governor recommends the expenditure of \$1,360,000 for this Program; the agency had requested \$2,500,000. In FY 1988, the Legislature appropriated \$1,451,579 for the Water Resources Cost-Share Program. addition, the Commission administers the High-Priority Cost Share Assistance Program which provides cost-share moneys to targeted high priority areas with high erosion potential as identified in the water planning process. The Governor recommends \$230,000 to continue the High-Priority Cost-Share Program; the agency had requested \$4,500,000 for the Program. In FY 1988, \$231,357 was The Commission's programs of State Aid for appropriated for the Program. Watershed Dam Construction and the Multi-Purpose Small Lakes can be considered as part of the state's strategy to prevent nonpoint source pollution.

Chemigation

One of the recent endeavors taken to prevent pollution of the groundwater has been the enactment of legislation in 1985 to monitor and regulate the application of pesticides and fertilizers through irrigation systems. This process is called chemigation. "Chemigation" is defined as any process whereby pesticides, fertilizers, or other chemicals are added to irrigation water applied to land or crops, or both, through an irrigation distribution system.

The chemigation law is administered by the Kansas State Board of Agriculture, and requires persons applying any chemical by the chemigation

process to: (1) register with the Secretary of the State Board of Agriculture; (2) use anti-pollution devices; and (3) keep records and make reports as deemed appropriate by the Secretary. The application fee for a chemigation user's permit is set at \$50 and is deposited in the Chemigation Fee Fund.

The bill also establishes the following illegal acts: (1) engaging in chemigation without first obtaining a permit; (2) engaging in chemigation on a suspended or revoked permit; (3) tampering with, or otherwise damaging, equipment specified in the law; and (4) failing, on the part of a permit holder, to immediately notify the Secretary of any actual or suspected accident resulting from the use of chemigation. Any person found guilty of any of these illegal acts would be subject to a fine of up to \$500.

As a part of the regulatory practices of the Board of Agriculture's Chemigation Program, the Pesticide Use Section of the Division of Plant Health initiated a groundwater monitoring program for selected chemigation sites throughout the state.

The agency wanted to establish a baseline for water quality at selected chemigation sites to determine if chemigation safety requirements (antipollution devices, supervisions, etc.) as outlined by the Chemigation Safety Law are sufficient to prevent the contamination of groundwater. As a long-term goal, the agency wanted to determine the efficacy of chemigation as a method of agri-chemical application relative to environmental protection. Using records and reports submitted by chemigation users, the agency hopes to determine if there is any correlation between agri-chemical practices near a well site and groundwater quality. Also, the state's Groundwater Quality Protection Strategy developed by KDHE requires the Board of Agriculture to initiate a monitoring program for chemigation wells in cooperation with KDHE.

Sampling started around the first of July, 1987, and continued until early September.

In several instances, "high" concentrations of sulfate and nitrate were found. Sulfate readings ranged from 4.7 ppm to 1,710 ppm and nitrate (nitrogen) readings ranged from less than 0.1 ppm to 23 ppm. In at least one instance, high levels of both nitrate nitrogen and ammonia may indicate the actual back-siphoning of nitrogen-based fertilizer.

To date, all samples have been screened for the presence of the following pesticides: alachlor, atrazine, butylate, chlorpyrifos, disulfoton, metolachlor, propachlor, propazine, and trifulraling. Screening for the remaining nine pesticides will be performed as time and analytical methodology allow. The results of this study will be reported at a later date.

A major mid western state enacted legislation in 1987 to improve and protect groundwater quality; that state was lowa. The comprehensive lowa statute imposed extensive regulations on those activities that might affect groundwater quality.

First, the Act contains a finding that "Groundwater is a precious and vulnerable natural resource. The vast majority of persons in the state depend on groundwater as a drinking water source. Agriculture, commerce, and industry also depend heavily on groundwater Protection of groundwater is essential

to the health, welfare, and economic prosperity of all citizens of the state." The preamble goes on to state that "Any detectable quantity of a synthetic organic compound in groundwater is unnatural and undesirable." Among the list of groundwater protection policies is the provision that the "Education of the people of the state is necessary to preserve and restore groundwater quality."

The Department of Natural Resources is the primary state agency authorized to protect Iowa's groundwater. The Department is charged with developing a comprehensive groundwater monitoring network, annually reporting groundwater contamination, completing a groundwater hazard map of the state, developing a natural resource geographic information system, and developing a program for educating seventh and eighth grade students in water quality issues.

The lowa Environmental Protection Commission is directed to propose groundwater standards for the state and all state agencies are to consider groundwater protection in their program planning and implementation.

A groundwater protection fund is created to provide for groundwater monitoring and the implementation of groundwater quality standards. A tonnage fee on solid waste disposal is imposed and the moneys are to be used for various purposes including a program to develop and maintain the small business assistance center for the safe and economic management of solid waste and hazardous substances, administration of the public health agency, development of groundwater monitoring at landfills, abatement and cleanup of landfills where the operator cannot do such cleanup, and implementation of demonstration projects for alternatives to solid waste disposal in landfills. Numerous provisions in the bill provide for the allocation of moneys from the assessment on solid waste which include the testing of private water supply wells and closure of private abandoned wells, incentive programs related to agricultural drainage wells and sinkholes, projects regarding alternative practices in the remediation of noxious weed or other vegetation within highway rights-of-ways.

Each county board of health is directed to adopt standards for private water supplies and private sewage disposal facilities, and each board of health must regulate the private water supply and private sewage disposal facilities located within the county board's jurisdiction. The Department of Natural Resources would have concurrent jurisdiction over such private water supply and private sewage disposal facilities. The Commission would make grants to the counties for programs for testing private rural water supply wells and on proper closing of abandoned wells.

The Department of Agriculture and Land Stewardship would establish rules for reporting pesticide poisoning and illnesses and publish an annual report. Poisonings will be reported to the Department of Public Health.

A groundwater protection fee is imposed upon nitrogen-based fertilizers.

The Secretary of the Department of Agriculture and Land Stewardship would develop, in conjunction with the cooperative extension service, courses regarding pesticide best management practices.

The Secretary, in cooperation with municipalities, is directed to determine the proper notice to be given to commercial or public applicators to

occupants of adjoining properties in urban areas prior to or after the exterior application of pesticides. The municipalities would have to cooperate in reporting infractions on the requirement.

Education and demonstration programs to promote management practices to protect groundwater are mandated in the lowa law.

The State Board of Regents is directed to establish a Center for Health Effects of Environmental Contamination at the University of Iowa. The lowa Cooperative Extension Service is to publish material on soil tests including material on the danger to groundwater from overuse of fertilizers and pesticides. The Leopold Center for Sustainable Agriculture is created to research the environmental and socio-economic impacts of present agricultural practices. The Department of Natural Resources is directed to develop and implement a program for the acquisition of wetlands and conservation easements on and around wetlands to eliminate groundwater contamination caused by the use of agricultural drainage wells. All agricultural drainage wells must be registered with the Department of Natural Resources by January 1, 1988. Additional regulations are imposed on existing and future drainage wells.

The Department must initiate a pilot demonstration and research projects concerning the elimination of groundwater contamination caused by agricultural chemicals.

A landowner or agent of the landowner is prohibited from drilling or constructing a new water well without obtaining a permit. Persons requesting the permit must register all wells on that person's property including abandoned wells and all existing wells. Authority to issue permits for water wells could be delegated to the county board of supervisors. The lowa statute directs that all abandoned water wells must be properly plugged.

A program for the safe and sanitary disposal of solid wastes is established. The statute directs that the land burial or disposal of wet sludge in a sanitary landfill is prohibited. Rules and regulations on closure, postclosure, leachate control and treatment, financial assurance standards, and minimal levels of financial responsibility must be adopted for landfills.

The law provides that after July 1, 1997, no new landfill permits will be issued unless the applicant certifies that the landfill is needed as a part of an alternative disposal method, or unless the applicant provides documentation which satisfies the Director of the Department of Natural Resources that alternatives have been studied and are not either technically or economically feasible.

The Department is to designate the various household hazardous materials by regulation, and retailers must have a permit to sell such materials. In addition, such household hazardous materials must be clearly labeled on the display areas of a store, and retailers must also provide booklets on the proper use of hazardous household materials. Household hazardous wastes could be handled through "Cleanup Days" designated by the agency.

The law provides for a pilot project for the collection of used oil, and the leaking underground storage tank program is established.

1987 Clean Water Act

The Bureau of Water Quality in KDHE is responsible for developing and implementing the state program for control of nonpoint source pollution as required under Section 319 of the Water Quality Act of 1987. The Act requires the state to conduct an assessment and prepare a management report for nonpoint source pollution control. The assessment is a report including the following elements:

- 1. identify navigable waters not expected to meet water quality standards without controlling nonpoint sources;
- 2. identify nonpoint sources causing environmental problems;
- 3. develop a state process to specify control measures; and
- 4. describe state and local programs to control nonpoint source pollution.

The management report is a program plan detailing implementation over a four-year period for controlling nonpoint sources of pollution, including the following elements:

- 1. Identify pollution control practices (Best Management Practices (BMPs)) for each nonpoint source category. The impact of each pollution control practice on groundwater quality must also be considered.
- 2. Identify regulatory and nonregulatory programs for enforcement, technical assistance, financial assistance, education, training, technology transfer, and demonstration projects that will be used to achieve corrective action by each pollutant source category.
- 3. Include an implementation schedule.
- 4. A certification by the Attorney General or chief attorney of the state water pollution control agency that the state has adequate authority to implement the management program.
- 5. Identify non-Clean Water Act sources of financial assistance.
- Identify federal financial assistance programs and development projects which the state will review for their effect on water quality.

The assessment and management reports are to be submitted to the EPA by August 4, 1988. Kansas has completed the inventory of surface water bodies within the state and has begun to identify and assess pollutants of concern and establish reasonable and defensible criteria for identifying problems in various types of bodies of water.

Increased federal funding will be made available to the states in FY 1989 for implementation of these required initiatives. The Governor's FY 1989 budget recommendation includes three new federally funded positions (\$103,741) for the Bureau of Water Quality for activities related to control of nonpoint source pollutants, toxic pollutants, and sludge management. Additional operating expenses are also recommended from federal sources.

In summary, federal and state water pollution, erosion, and sediment control regulations have exempted agricultural practices in the past; however, it is uncertain whether such exemptions will be continued in the future given the increased pressure for more effective conservation and environmental laws.

SOURCES

- I. Kansas Water Plan, Quality Section, "Non-Point Source Pollution," FY 1988. Approved by the Kansas Water Authority, September, 1986,
- 2. State of Kansas, "Revision To Kansas Water Quality Management Plan 1984." Kansas Department of Health and Environment, Topeka, Kansas, January, 1984, 6-32.
- 3. State of Kansas, Water Quality Assessment Report, "Kansas Water Quality, 1984-1986," Kansas Department of Health and Environment, Topeka, Kansas, 1986, 48-55.
- 4. Ibid., 51.
- 5. Ibid., 52.
- 6. Ibid., 53.
- 7. Kansas Water Plan, "Non-Point Source Pollution," 2.
- 8. Gordon Meeks, Jr. <u>Agriculture, Economics, and Environmental Protection</u>. Denver, Colorado: National Conference of State Legislature, December, 1987, 21-26.
- 9. Ibid., 21.
- 10. "Water Quality Act of 1987," Public Law 100-4 Feb. 4, 1987, 100th Congress, 101 Stat., Section 316.
- 11. Kansas Department of Health and Environment budget, FY 1989.

Proposed Amendment to SB 475

On page 1, in line 28, following the period, by inserting "No permit or game tag issued to a licensee pursuant to this subsection shall be resold by such licensee at a price which exceeds the amount the licensee paid for such permit or game tag."; in line 32, following the period, by inserting "Nothing in this section shall be construed as changing the distribution formula for big game permits established by K.S.A. 32-179, and amendments thereto.";

HOUSE BILL No. 2729

By Committee on Energy and Natural Resources

1-29

| 0017 | AN ACT concerning fish and game; relating to licens | ses and |
|------|---|--------------------------|
| 0018 | permits; amending K.S.A. 32-179 and K.S.A. 1987 St | 100 and |
| 0019 | 164b and repealing the existing sections. | ι ρ μ. υ Δ |
| 0013 | 1040 and repeating the existing sections. | |
| 0020 | Be it enacted by the Legislature of the State of Kansa. | s: |
| 0021 | Section 1. K.S.A. 1987 Supp. 32-164b is hereby ame | nded to |
| 0022 | read as follows: 32-164b. (a) Except as otherwise provided | |
| 0023 | section, the Kansas fish and game commission secretary | |
| 0024 | department of wildlife and parks is authorized to ado | |
| 0025 | and regulations fixing the amount of fees for the following | |
| 0026 | subject to the following limitations and subject to the | - require |
| 0027 | ment that no such rules and regulations shall be ado | pted a |
| 0028 | temporary rules and regulations: | |
| 0029 | Resident hunting license — not less than \$5 nor more than | \$1 |
| 0031 | Nonresident hunting license — not less than \$25 nor more than. | 5 |
| 0033 | Resident fishing license — not less than \$5 nor more than | 1 |
| 0035 | | 3 |
| 0037 | Twenty-four-hour fishing license — not to exceed | |
| 0041 | Resident furharvester license — not less than \$10 nor more than Nonresident furharvester license — not less than \$50 nor more | i |
| 0042 | thanthan \$50 nor more | 40 |
| 0044 | Resident duplicate license or permit (hunting, fishing, furharvest- | 40 |
| 0045 | ing) — not to exceed | • |
| 0047 | Nonresident duplicate license or permit (hunting, fishing, furhar- | |
| 0048 | vesting) — not to exceed | |
| 0050 | Resident fur dealer license — not less than \$50 nor more than | 20 |
| 0052 | Combination resident hunting and fishing license — not less than | |
| 0053 | \$10 nor more than | 2 |
| 0055 | Nonresident fur dealer license — not less than \$50 nor more than | 40 |
| 0057 | Controlled shooting area hunting license — not less than \$5 nor | |
| 0058 | more than (to be same as resident hunting license) | 1 |
| 0062 | Resident mussel fishing license — not less than \$25 nor more than Nonresident mussel fishing license — not less than \$50 nor more | 20 |
| 0063 | than | 40 |
| 0065 | Game breeders permit — not less than 32 nor more than | 40 |
| 0067 | Live rabbit trapping permit — not to exceed | 1 |
| 0069 | Rabbit shipping permit — not less than \$25 nor more than | 20 |
| 0071 | Collecting for scientific and exhibition permit — not to exceed. | 1 |
| 0073 | Disabled persons vehicle permit (lifetime) — not to exceed | • |
| | | |

| 0075 0076 0078 0079 | Resident big game hunting permit — not less than \$10 nor more than | 100 |
|------------------------------|--|------|
| 0080 0081 0083 0084 | Nonresident and nonresident landowner big game hunting permit — not less than \$30 nor more than | -960 |
| 0085 | Forty-eight-hour waterfowl permit — not to exceed \$20 | 20 |
| 0087 0089 | Field trial permits (game birds) — not less than \$10 nor more than Field trial permits (fur-bearing animals) — not less than \$10 nor | 25 |
| 0090 | | 25 |
| 0092 | | 25 |
| 0094 | Hound trainer-breeder running permit — not less than \$10 nor more | • |
| 0095 | than | 25 |
| 0097 | Water event permit — not to exceed | 50 |

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- (b) From and after January 1, 1987, the fee for a landownertenant resident big game hunting permit shall be the amount out equal to 1/2 of the fee prescribed by law or rule and regulation for out a general resident big game hunting permit.
- 0103 (c) The fees prescribed for firearm permits shall be the same 0104 as the fees for archery permits.
- 0105 (d) For the calendar year 1988, the fee for a forty-eight-hour 0106 waterfowl permit shall be \$20.
- 0107 (e) The fee for a furharvester license for a resident citizen 0108 under 16 years of age shall be the amount equal to 1/2 of the fee 0109 prescribed by law or rule and regulation for a resident furhar-0110 vester license.
- (f) For the calendar year 1987. The fee for a general resident of the deer hunting permit shall be \$30; the fee for a general resident antelope hunting permit shall be \$35; the fee for a general resident elk hunting permit shall be \$75; the fee for a general resident turkey hunting permit shall be \$20; the fee for a non-one resident turkey hunting permit shall be \$30; the fee for a non-one resident landowner deer hunting permit shall be \$50; the fee for a non-one annesident landowner antelope hunting permit shall be \$60; and the fee for a nonresident landowner elk hunting permit shall be \$60; one specification of the section of
- O121 Sec. 2. K.S.A. 32-179 is hereby amended to read as follows: O122 32-179. (a) When used in this act:
- 0123 (1) "Landowner" means a resident owner of farm or ranch 0124 land of 80 acres or more located in the state of Kansas;
- 0125 (2) "tenant" means a resident of this state who manages or

For the calendar year 1989, the fee for an additional resident deer hunting permit shall be \$50.

Additional resident deer hunting permit - not less than \$10 nor more

100



operates farm or ranch land of 80 acres or more for agricultural outputposes located in the state of Kansas;

- 0128 (3) "regular season" means a statewide big game hunting 0129 season authorized annually which may include one or more 0130 seasons restricted to specific types of equipment;
- 0131 (4) "special season" means a big game hunting season in 0132 addition to a regular season authorized on an irregular basis or at 0133 different times of the year other than regular season;
- 0134 (5) "general permit" means a big game hunting permit avail-0135 able to Kansas residents not applying for big game permits as a 0136 landowner or tenant;
- 0137 (6) "nonresident landowner" means a nonresident of the 0138 state of Kansas who owns farm or ranch land of 80 acres or more 0139 which is located in the state of Kansas.
- (b) The Kansas fish and game commission secretary of the department of wildlife and parks is hereby authorized to issue 0142 through the office of director of the commission at Pratt, Kansas, 0143 permits and game tags pertaining to the hunting, taking and 0144 possessing of big game. Such permits and game tags shall not be 0145 issued until the eommission secretary has established a regular 0146 or special big game hunting season and then only in such 0147 number as the eommission secretary deems advisable consider-0148 ing the number of game and the conditions affecting the same. Fifty percent of the permits authorized for a regular season o150 shall be issued to landowners or tenants and the balance shall be 0151 issued as general permits, except that, whenever the total of all 0152 applications submitted by Kansas residents for permits is less 0153 than the number of permits authorized for a regular season, the 0154 commission secretary may issue permits to nonresident land-0155 owners. If the total number of applications for deer permits 0156 submitted by Kansas residents and nonresident landowners is 0157 less than the number of permits authorized for a regular season 0158 in a deer management unit, the secretary may issue deer hunting 0159 permits to nonresidents in such deer management unit. The fish 0160 and game commission secretary may issue turkey hunting per-0161 mits to nonresidents in unlimited turkey hunting zones. Big 0162 game permit application procedures shall be established by rule

The secretary may issue more than one deer permit to any resident whenever the total number of applicants for deer permits is less than the number of permits authorized.

0163 and regulation of the commission secretary. Permits not issued 0164 to applicants within the time period prescribed by rule and 0165 regulation may be issued without regard to the 50% limitation. 0166 The commission secretary may authorize additional permits for-0167 landowners or tenants who were unsuccessful in obtaining a 0168 -regular season-permit after timely application. Such permits and-0169 applications therefor may contain additional restrictions as pre-0170 -seribed-by the commission secretary. The commission secretary may establish special seasons in addition to the regular seasons and permits may be issued without any percentage limitation. A 0173 landowner or tenant is not eligible to apply for a big game permit as a landowner or as a tenant in a management unit or zone other than that which includes such landowner's or tenant's land. 0176 Members of the immediate family who are domiciled with a 0177 landowner or tenant may apply for a big game hunting permit as a landowner or as a tenant. The total number of permits issued to a landowner or tenant and a landowner's or tenant's immediate family shall not exceed one permit for each 80 acres owned, 0181 managed or operated by such landowner or tenant.

The eommission secretary may require proof of ownership or tenancy from persons applying for a big game permit as a landowner or tenant. The eommission secretary may adopt rules and regulations for each management unit or zone regarding the procedures for issuance of big game permits. The eommission secretary shall not issue any big game archery permit to any person who has not attained the age of 14 years on or before the opening day of such season. The eommission secretary shall not issue a big game firearm permit to any person who has not attained the age of 16 years on or before the opening day of such season, except that a wild turkey firearm permit may be issued to one any person who attains the age of 14 years on or before the opening day of such season.

0195 (c) The fee for each big game permit shall be as prescribed by 0196 rule and regulation adopted under K.S.A. 32-164b, and amend-0197 ments thereto. The eommission secretary may charge a fee as 0198 prescribed by rule and regulation adopted under K.S.A. 32-164b, 0199 and amendments thereto, for issuance of duplicate permits, tags

Any resident landowner who was unsuccessful in obtaining a regular season deer permit may apply for and shall be issued a deer permit upon submission of proof of denial of a regular season deer permit. Such permits shall be valid only for hunting on the landowner's land and such permits and applications therefor may contain any other restrictions as prescribed by the secretary. Applications for such permits may be made to the secretary or any person authorized to sell hunting licenses.



0200 or informational cards upon substantiated proof of loss.

- (d) The permit shall state the species, number and sex of the 0202 big game which may be killed by the permittee. The permit must 0203 be in possession of the permittee while hunting and the same 0204 must be shown to any officer authorized to enforce fish and game 0206 mational card with any big game permit, and at the conclusion of
- 0212 carcass of any big game immediately after killing and thereafter, 0213 if required by rules and regulations adopted by the Kansas fish 0214 and game commission secretary, the permittee shall immedi-0215 ately take such killed game to a check station as may be required 0216 in the regulation where a check station tag shall be affixed to the



laws upon demand. The director secretary may furnish an inforthe open season each permittee receiving such card shall return the card to the office of the director of the Kansas fish and game commission, Pratt, Kansas, secretary giving such information as is called for on the card. (e) The permittee shall permanently affix the game tag to the game carcass if the kill is legal. The tags shall remain affixed until the carcass is consumed or processed for storage. It shall be unlawful for any person to possess a carcass of big game, taken in Kansas, without a tag issued by the commission secretary attached to the same and without a check station tag attached to the same if required by the commission secretary. The permittee shall make the big game carcass available for inspection by any officer authorized to enforce fish and game laws upon demand. (f) The form and contents of the permits and tags shall be determined by the director secretary. The permits and tags issued shall expire on December 31 following date of issuance and all moneys received by the office of director from the same shall be forwarded quarterly to the state treasurer at Topeka, 0230 Kansas, for deposit in the forestry, fish and game commission fee 0231 fund. (g) It shall be unlawful for any person to hunt deer or elk in 0233 Kansas during any firearms season for the taking of such game, 0234 without and unless such person is wearing a hat of orange color 0235 and on the upper half of such person's body a minimum of 200 0236 square inches of orange color, at least 100 square inches of which

shall be visible from the front and at least 100 square inches of which shall be visible from the back. Notwithstanding the pro-0239 visions of K.S.A. 32-110b, and amendments thereto, any person 0240 violating any provision of this paragraph shall be deemed guilty 0241 of a misdemeanor and, upon conviction thereof, shall be fined in 0242 an amount not less than \$25 nor more than \$100.

- 0243 Sec. 3. K.S.A. 32-179 and K.S.A. 1987 Supp. 32-164b are 0244 hereby repealed.
- O245 Sec. 4. This act shall take effect and be in force from and O246 after its publication in the statute book.