

MINUTES OF THE SENATE NATURAL RESOURCES COMMITTEE.

The meeting was called to order by Chairman Robert Tyson at 8:34 a.m. on January 24, 2002 in Room 423-S of the Capitol.

All members were present except: Senator Christine Downey - excused

Committee staff present: Raney Gilliland, Legislative Research Department
Lisa Montgomery, Office of Revisor of Statutes
Deborah McIntire, Committee Secretary

Conferees appearing before the committee:
Dr. Ron Hammerschmidt, Director, Division of Environment, KDHE
Karl Mueldener, Director, Bureau of Water, KDHE
Theresa Hodges, Director, Bureau of Environmental Field Services, KDHE

Others attending: See attached list

Chairman Robert Tyson opened the meeting by welcoming the following to the committee: Mike Hayden, Secretary-elect, Kansas Department of Wildlife & Parks; Deborah McIntire, Committee Secretary; Lisa Montgomery, Office of Revisor of Statutes; and Raney Gilliland, Legislative Research Department.

The first conferee to appear before the committee was Dr. Ron Hammerschmidt (Director, Division of Environment) who started with opening remarks and provided a background for the information that would be provided by staff of the Department as to review of **SB 204**. He introduced Karl Mueldener (Director, Bureau of Water) and Theresa Hodges (Director, Bureau of Environmental Field Services).

Karl Mueldener briefed the committee on implementation of **SB 204** as it concerns the USGS contract, regulations, and threatened and endangered species (Attachment 1 and 2).

Theresa Hodges briefed the committee on implementation of **SB 204** as it concerns designated use attainability analysis and other tasks (Attachment 1 and 2). Discussion and questions followed.

Ron Hammerschmidt provided a brief wrap up on behalf of the Department. Discussion and questions followed.

Chairman Tyson thanked the Department for its presentation and indicated that it may be necessary for the Department to appear before the committee in the future for further discussion.

Two bill introductions were presented by Clint Riley, Kansas Department of Wildlife and Parks. One concerned certification of a disability for certain permits and the other was related to big game permits (Attachment 3). Senator Oleen moved to recommend the introduction of the bills, seconded by Senator Corbin. Motion passed.

The meeting adjourned at 9:04 a.m.

The next meeting is scheduled for January 25 at 8:30 a.m.

**SENATE NATURAL RESOURCES COMMITTEE
GUEST LIST**

DATE: January 24, 2002

NAME	REPRESENTING
Joe Dick	KLK BPU
Heslie Kaufman	KFB
Steve Swaffar	KFB
Karl Mueller	KDHE
Er Hammer-schwalt	KDHE
Theresa Hodges	KDHE
MIKE TATE	KDHE
John Barnes	KNRC
Paul Johnson	PACK
Judd Johnson	Kansas Livestock Assn.
Mary Fund	Ks. Rural Center
Sucha Stover	Ks water office
Eileen Hach	Johnson County
DAVE MURPHY	KANSAS RIVERKEEPER
Mary Jane Stattelman	KGFAI KARA
Keith Bradshaw	D.V. of Budget
Clint Bily	KDWP
Andy Adams	KDWP
Barbara Starost	Kansas Health Institute
Jamie Cleve Adams	KS Dept of Agriculture
Mike Hayden	DWP
Doug Smith	Pinegar, Smith & Associates

Sucha Keryer

HUS

Charles Benjamin

Sierra Club-KS



KANSAS

DEPARTMENT OF HEALTH & ENVIRONMENT

BILL GRAVES, GOVERNOR

Clyde D. Graeber, Secretary

Report to Senate Natural Resources Committee
Implementation of SB 204 from "01" Session
Presented by Karl Mueldener
KDHE, Bureau of Water
January 24, 2002

USGS Contract

- ▶ SB 204 in Section 1 defines classified streams. One definition includes streams with a 10 year median flow equal to or in excess of 1 cfs based on USGS work.
- ▶ A contract with the USGS was signed in July, 2001, and the work is underway.
- ▶ The USGS work will identify stream segments flows based on; 1) actual measured flows and; 2) where actual stream flow measurements are absent, flows will be extrapolated based on parameters such as drainage area, latitude, and topography of the basin.

Regulations

Draft regulations are now being reviewed by the Attorney General and Dept. of Administration.

- ▶ Changes are intended to be minimal to existing regulations, i.e, limited to removing conflicts with SB 204 from the existing regulations.
- ▶ Anticipate public release this month, Jan. 02, and adoption possible by July, 2002
- ▶ Triennial review is coincidentally scheduled for this year. Review of Water Quality Standards is required every 3 years by Fed law.

Items for consideration include: changes in stream classification, particularly removing some dry stream from the register, conversion to e-coli criteria from the existing fecal criteria.

T & E Species

Stream segments actually inhabited by threatened and endangered aquatic species are defined as classified stream segments under SB 204. The Kansas Department of Wildlife and Parks and the United States Fish and Wildlife Service have been requested to furnish information on streams where T&E aquatic species have been recorded. Both agencies have indicated some data will be provided in response to the request.

Senate Natural Resources Committee

Date 1-24-02

Attachment # 1

Briefing to the Senate Natural Resources Committee
Implementation of SB 204
Presented by Theresa Hodges
KDHE Bureau of Environmental Field Services
January 24, 2002

- **Designated Use Attainability Analysis**
SB 204 set two milestones for KDHE related to use attainability analyses.
 - October 15, 2001–KDHE published a list identifying the streams for which:
 - recreational UAAs had been conducted;
 - recreational use has been determined not attainable;
 - recreational UAAs have not been completed.List published October 12, 2001.
 - December 1, 2001–KDHE to publish UAA protocols as guidance document; task completed November 30, 2001. Published on KDHE web site, <http://www.kdhe.state.ks.us/befs/index.html#resources>.

- **Other Tasks**
 - The 2001 Legislature allocated \$100,000 for contracting for the development of a protocol for the cost/benefit analysis required for classifying non-flowing streams that lack T & E species, NPDES discharges, but that do have remnant pools that serve as important ecological refugia. KDHE has:
 - Solicited proposals from Kansas universities, but did not receive any proposals.
 - Expanded the solicitation to a national search, but did not receive any proposals.
 - Convened a meeting to discuss viable approaches for evaluating the net benefits of classifying streams that show pooling during periods of zero flow and serve as important ecological refugia.
 - Annual update of Kansas Surface Water Register.
 - Notice of intent to revise Register was published in *Kansas Register*, December 6, 2001.
 - Notification letters were also sent to BACs, KAC, League of Municipalities, Conservation Districts, SCC, KWO, KDA, KDWP and 58 other interested persons. We received 2 written comments and one telephone comment. We are moving forward to revise the Register and proceed with the regulatory process, which also includes a 60-day public comment period.



KANSAS

DEPARTMENT OF HEALTH & ENVIRONMENT

BILL GRAVES, GOVERNOR
Clyde D. Graeber, Secretary

2002 Annual Report Regarding Status of Substitute Senate Bill 204 Implementation

On April 13, 2001, Governor Graves signed into law Substitute Senate Bill 204. This bill outlined a very aggressive scope of work for the Kansas Department of Health and Environment (KDHE). Staff defined a timeline for accomplishing the tasks and have successfully met the statutory deadlines.

Section 6 of Substitute SB 204 requires the Secretary of Health and Environment to report annually to the Governor and Legislature the status of completing the classification of streams as required in Section 3, and designated use attainability analyses as required in Section 4. Specific tasks accomplished to date include:

1. **Classification of Stream Segments.** Evaluation of stream segments for classification is primarily dependent on the US Geological Survey (USGS) completing work on a method for extrapolating stream flow for Kansas stream segments. In order to facilitate that work, KDHE staff met with USGS staff to develop a scope of work and funding mechanism. That work has proceeded at a rapid pace. The following is a brief summary of activities to date:
 - A. April 16, 2001 - KDHE and USGS staff met in Lawrence, Kansas to discuss the scope of work for the project.
 - B. April 23, 2001 - KDHE and USGS staff met in Topeka, Kansas to further refine the scope of work for the project.
 - C. May 1, 2001 - USGS provided a first draft proposal for completing the scope of work, including an estimate for the total cost for the work - \$286,000. The KDHE share for the work was set at \$191,000 and the USGS share at \$95,000.

Senate Natural Resources Committee

Date 1-24-02

Attachment # 2

DIVISION OF ENVIRONMENT
Bureau of Environmental Field Services

1000 SW Jackson, Suite 430
Topeka, KS 66612-1367

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(785) 296-6603
FAX (785) 291-3266

- D. May 10, 2001 - KDHE provided comments on draft proposal and requested minimal changes.
- E. May 14, 2001 - USGS made requested changes to the proposal.
- F. May 18, 2001 - KDHE initiated paperwork for a contract with USGS to complete the flow data project.
- G. May 22, 2001 - KDHE wrote EPA requesting that existing federal grant funding for Kansas be reallocated toward funding the USGS work.
- H. May 29, 2001 - KDHE requested a slight change in the proposal wording to ensure the provisions of SB204 were accurately addressed in the proposal. USGS concurred.
- I. June 19, 2001 - EPA concurred that KDHE could reallocate existing federal funding to pay the State share of the USGS contract.
- J. July 16, 2001 - Contract with USGS finalized. Term of contract - July 1, 2001 to June 30, 2003.
- K. September 4, 2001 - USGS submitted the draft Quality Assurance Project Plan (QAPP) outlining the methodology and quality assurance procedures to be followed in the completion of the project.
- L. September 6, 2001 - KDHE commented on the draft QAPP and requested minor changes to which USGS agreed.
- M. September 7, 2001 - KDHE approved final QAPP.
- N. December 7, 2001 - USGS submitted first billing for the project.
- O. December 11, 2001 - KDHE and USGS staff met in Topeka, Kansas to discuss USGS progress on project to date.

2. **Designated Use Attainability Analysis.** SB 204 set two milestones for KDHE to meet during this first year. These milestones were met as follows:

- A. October 12, 2001 - KDHE published lists identifying streams for which: 1) recreational use attainability analyses have been completed; 2) recreational use has been determined not attainable; and 3) recreational use attainability analyses have not been completed. The accompanying map (Attachment A) depicts the streams

listed in the above categories.

- B. November 30, 2001 - KDHE published on the KDHE web site (<http://www.kdhe.state.ks.us/befs/index.html#resources>) a guidance document of protocols for conducting designated use attainability analyses for all uses defined in Section 1(c).

3. **Other Tasks Initiated.** Two additional tasks have been initiated to meet other requirements of Sub. SB 204:

A. Development of Cost/Benefit Analysis Procedure.

Section 1(a)(1)(D)(ii) requires KDHE to conduct a cost/benefit analysis for evaluating the net benefits of classifying non-flowing streams that lack any known threatened or endangered species, and lack any National Pollutant Discharge Elimination System discharges, but that do have remnant pools that serve as important ecological refugia. The 2001 Legislature provided \$100,000 for KDHE to contract for the development of a procedure to meet the criteria set in Sub. SB 204. The following is a brief summary of actions to date:

1. July 9, 2001 - Solicited proposal (Contract #264201) from Kansas universities for the development of a procedure to determine the cost/benefit associated with the classifications of streams in Kansas pursuant to Sub. SB 204. No proposals were received by closing date of July 20, 2001.
2. September 12, 2001 - Solicitation for cost/benefit analysis procedure expanded to national search (Request for Proposal #04033). No proposals were received by closing date of October 18, 2001.
3. January 10-11, 2002 - Convened a meeting to discuss viable approaches for evaluating the net benefits of classifying streams that show pooling of water during periods of zero flow and provide important refuges for aquatic life and permits biological recolonization of intermittently flowing segments. Meeting agenda and list of participants are attached (Attachment B). A summary of the meeting will be provided at a later date.

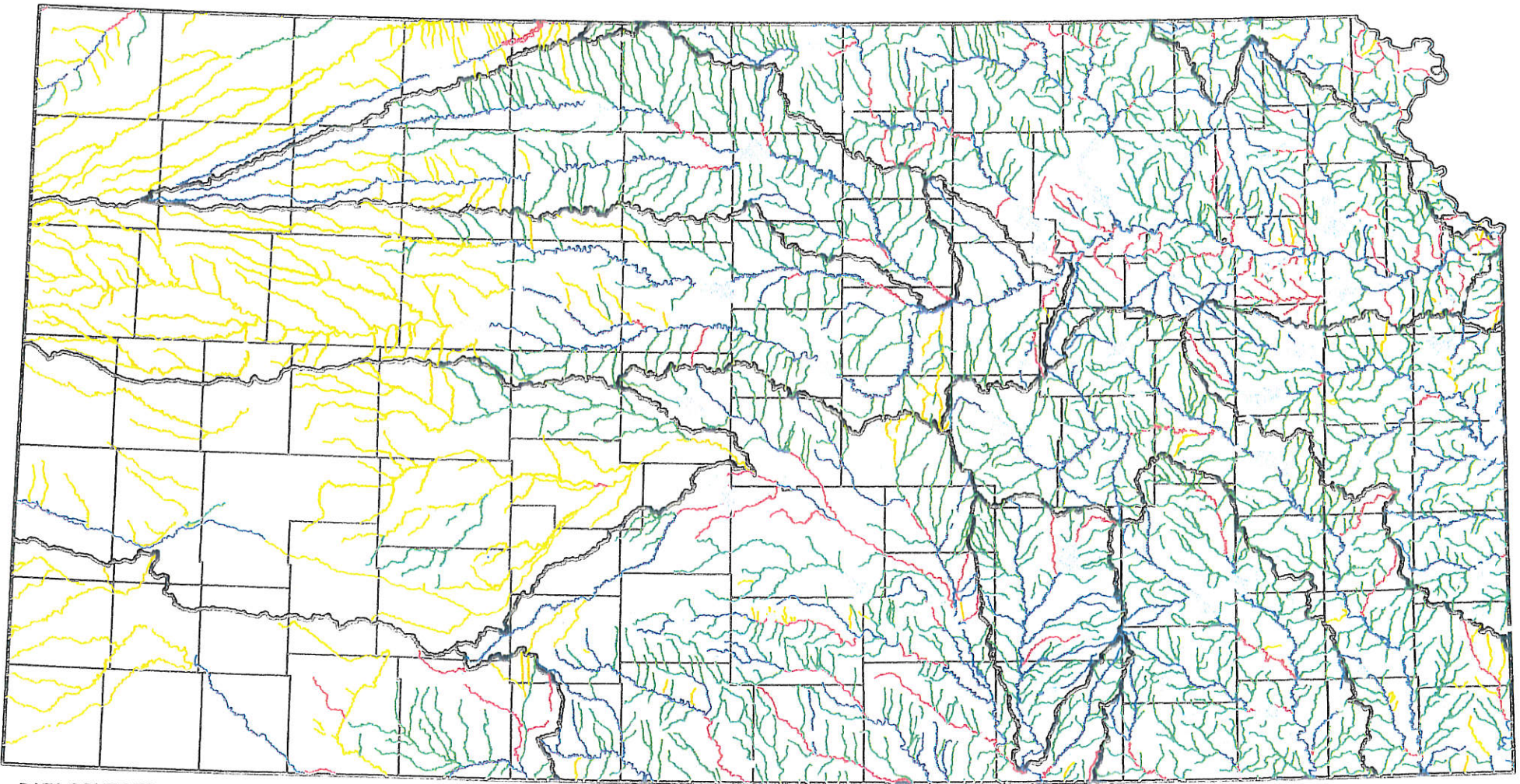
B. Annual update of Kansas Surface Water Register.

Section 5(h) requires that the Kansas Surface Water Register be updated annually. A notice of intent to revise the register was published in the *Kansas Register* on December 6, 2001. Notification letters were also sent to the Basin Advisory Committees, Kansas League of Municipalities, Kansas Association of Counties, Conservation Districts, Kansas Water Office, Department of Wildlife and Parks, Department of Agriculture, State Conservation Commission, and an additional list of 58 interested persons. This preliminary comment period ended January 4,

2002. The formal revision to the Kansas Surface Water Quality Register is currently being undertaken. This regulatory process will provide a 60 day comment period as prescribed by the Kansas Administrative Procedures.

Staff continue to work toward full implementation of Substitute Senate Bill 204 and future statutory timelines.

**CLASSIFIED STREAMS:
DESIGNATED RECREATIONAL USE STATUS
USE ATTAINABILITY ANALYSIS STATUS
(Sub. Senate Bill 204, Section 4(a))**



DATA SOURCES:

Political boundaries: KCDB/KGS
 Hydrological Unit Code (HUC8): NRCS
 Hydrology: USEPA modified by KDHE
 Designations & status: KDHE

KDHE/BEFS November 2001

- lakes
- primary contact recreation use adopted but no UAAs conducted
- primary contact recreation use not designated, UAAs not completed
- primary contact recreation use adopted, UAAs completed
- primary contact recreation use not attainable, UAAs completed
- county boundary
- stream basin boundary

Meeting Agenda / Topics

Issue

KDHE needs to develop an approach for evaluating the net benefits of classifying (i.e., designating uses and setting water quality standards for) non-flowing streams that lack any known T & E species, and lack any NPDES discharges, but that do have remnant pools that serve as important ecological refugia.

Thursday Jan 10, 2002

12:00 - 12:15

Introductions

12:15-1:00

Resource Description-----Mike Butler

1. Describe some examples of streams fitting the criteria, including their watershed/landscape setting and their hydrology.
2. Describe the potential scope of the area in Kansas where these streams are likely. Eco-regions
3. Potential impact on downstream water bodies.

1:00 -3:15

1:00-2:00

Ecological Considerations-----David Edds and Matt Heberling

1. How do these pools function ecologically?
 - a. Fish/amphibian survival
 - b. Support of associated riparian habitat
 - c. Wildlife use
 - d. Migratory waterfowl use

2:00-2:15

Break

2:15-3:15

2. What services to humans are provided by these streams and their pools?
 - a. Recreation (fishing, bird-watching, hunting, etc.)
 - b. Livestock watering
 - c. Support of downstream uses
 - d. Aesthetics/social values
 - e. Indirect use or non-use values (property value)

3:15-3:45

Regulatory Considerations-----Theresa Hodges

1. If the streams were classified, what uses would likely be designated?
2. What kinds of threats currently impair these pools/streams and their services/uses?
 - a. Nonpoint sources
 - b. Physical modification
 - c. Hydrological modification

3:45-5:00

Effects of Classification-----Facilitated Discussion

1. What regulatory processes would be used? (e.g., use designation, monitoring, listing, TMDL development)
2. What restoration alternatives are available? (e.g., agricultural BMPs, riparian zone restoration, stream channel restoration)
3. How efficacious are the restoration alternatives (what environmental benefits will be provided/restored)?
4. What other consequences will they have? (e.g., effects on agricultural production, employment effects)
5. What monies would be available (whose and how much)?

Friday Jan 11, 2002

9:00-12:00

Considerations for designing a cost/benefit analysis protocol/tool kit

Facilitated discussion to determine what categories to include when comparing the costs and benefits of "with classification" and "without classification" conditions.

1. Techniques for estimating environmental benefits of classification/restoration
 - a. Techniques for estimating ecological efficacy
 - b. Techniques for estimating economic value
2. Techniques for measuring costs of classification/restoration
3. Economic issues.

SB 204 Meeting, January 10-11, 2002

Kansas City, KS, EPA Region IV Office

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23	Bernardo, Dan	Kansas State University	785-532-6702	dbernar@agecon.ksu.edu

**GUIDANCE DOCUMENT
FOR
USE ATTAINABILITY ANALYSES (UAAs)**

December 1, 2001

Kansas Department of Health and Environment
Bureau of Environmental Field Services
1000 SW Jackson, Suite 430
Topeka, KS 66612

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USE ATTAINABILITY ANALYSIS (UAA) PROTOCOLS

I. Introduction

The Kansas surface water quality standards (K.A.R. 28-16-28b through 28-16-28f) establish water quality goals for all streams, lakes and wetlands occurring within the state or forming a portion of the border with an adjoining state. General narrative provisions in the standards extend a basic level of protection to all such waters, irrespective of size or ownership.

“Classified” waterbodies comprise an important subset of the waters of the state, in that they are assigned specific beneficial uses under the standards and are subject to numeric water quality criteria and related regulatory provisions. The level of protection afforded by the standards may vary among classified waterbodies depending on their assigned uses and associated water quality criteria.

The beneficial uses of approximately 2,500 stream segments, lakes and wetlands are delineated in the Kansas Surface Water Register. This register also assigns unique identification numbers and geographical (latitude/longitude) descriptors to individual waterbodies based on U.S. EPA river reach files.

The protocols to develop use designations for surface waters in Kansas endeavors to provide scientifically defensible information on the existing and attainable uses of classified streams, lakes and wetlands. This information is intended for use in:

- (1) complying with federal and state requirements for designating the beneficial uses of surface water (40CFR 131.10; K.A.R.28-16-28d);
- (2) responding to changes in the capacity of surface waters to support the beneficial uses recognized under the Kansas standards;
- (3) identifying and applying appropriate water quality criteria and related regulatory provisions in the development of National Pollutant Discharge Elimination System (NPDES) permit limits, and total maximum daily loads (wasteload allocations & load allocations);
- (4) responding to possible future changes in the wording of the Kansas standards with respect to the beneficial uses of surface water; and
- (5) responding to requests by permitted facilities and other interested stakeholders to review designated uses of surface waters.

Separate protocols have been developed for determining aquatic life support uses, primary/secondary contact recreation use (including food procurement), and water supply uses. These protocols have been developed for use by external clients of the Kansas Department of Health and Environment for the development and submission of UAAs to the KDHE for review.

II. Implementation Procedures*

UAAs should be submitted to the Director, Bureau of Environmental Field Services,

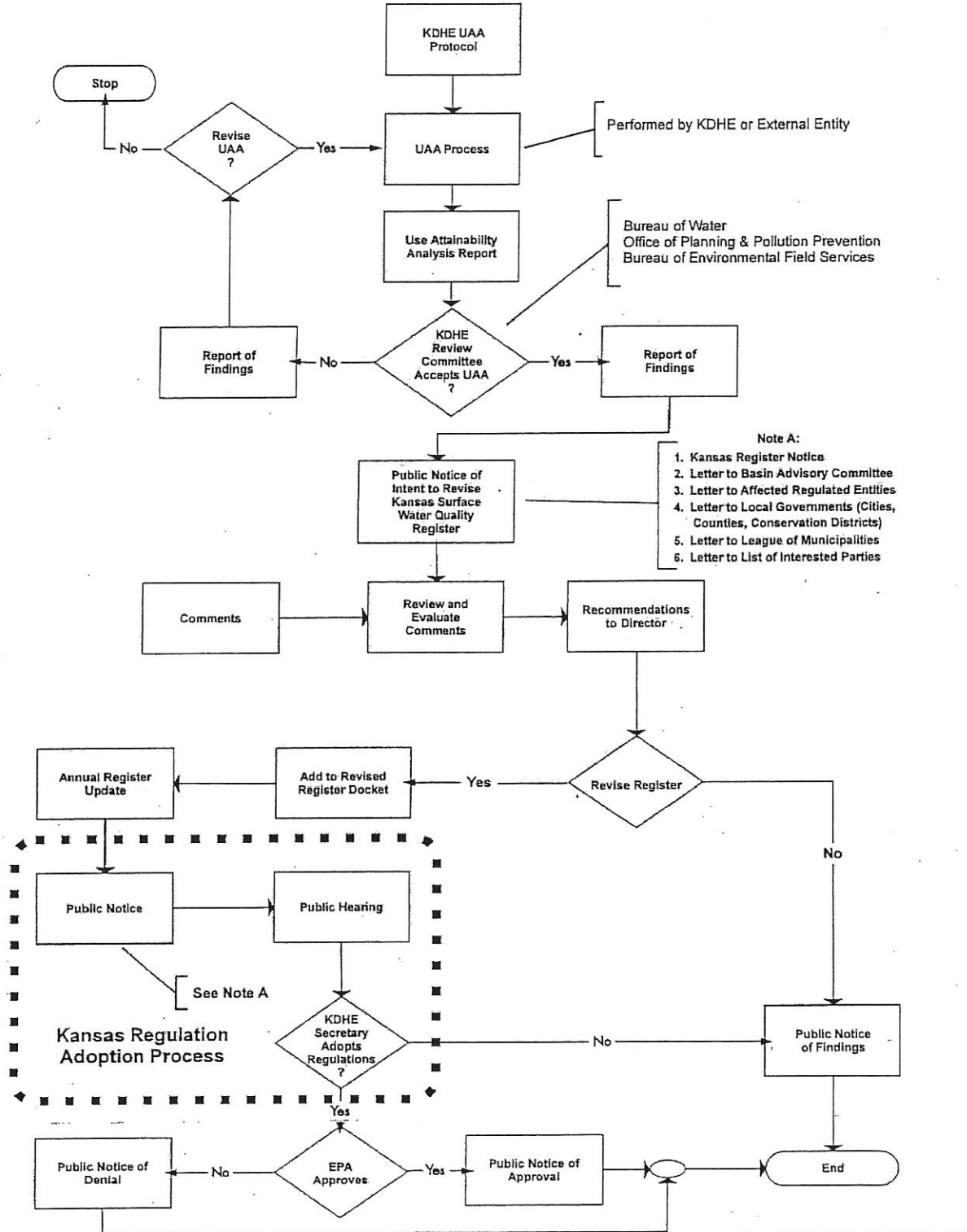
Kansas Department of Health and Environment, 1000 SW Jackson, Suite 430, Topeka, Kansas 66612 for review. An internal KDHE review committee will meet quarterly, or more frequently if needed, to review all UAAs for accuracy, completeness and adequacy of statement of findings. If the UAA meets the stated criteria, it will be forwarded to the Data Management Section as a proposed change to the Kansas Surface Water Register. A written response to the entity submitting the UAA will be prepared by the Bureau of Environmental Field Services.

The Surface Water Quality Commission recommended that the Basin Advisory Committees assist the KDHE in examining the designated uses of streams within their basins. The basin advisory committees were established in 1985 for the twelve major river basins to advise the Kansas Water Office and Kansas Water Authority on local water issues. As UAAs are completed and changes proposed, the proposed changes will be forwarded to the appropriate Basin Advisory Committee for discussion and review at their stated meetings.

The Kansas Surface Water Register is adopted by reference in K.A.R. 28-16-28d(c)(2). K.A.R. 28-16-28d will be updated annually by the Bureau of Environmental Field Services to amend the register to reflect the findings of UAAs. A flow chart depicting the internal KDHE process for development of regulations is attached. The policies and procedures for filing Kansas Administrative Regulations, as developed by the Department of Administration to implement K.S.A. 77-415 through 77-437, will be followed (flow chart attached). These procedures include public notice and a public hearing on proposed regulatory changes. All entities who have submitted a UAA will be notified directly of the public hearing related to adoption of the revised register. UAAs and subsequent revisions to the Kansas surface water quality standards are subject to approval by the Regional Administrator, U.S. EPA (40CFR131.20(c))

* Flow chart attached.

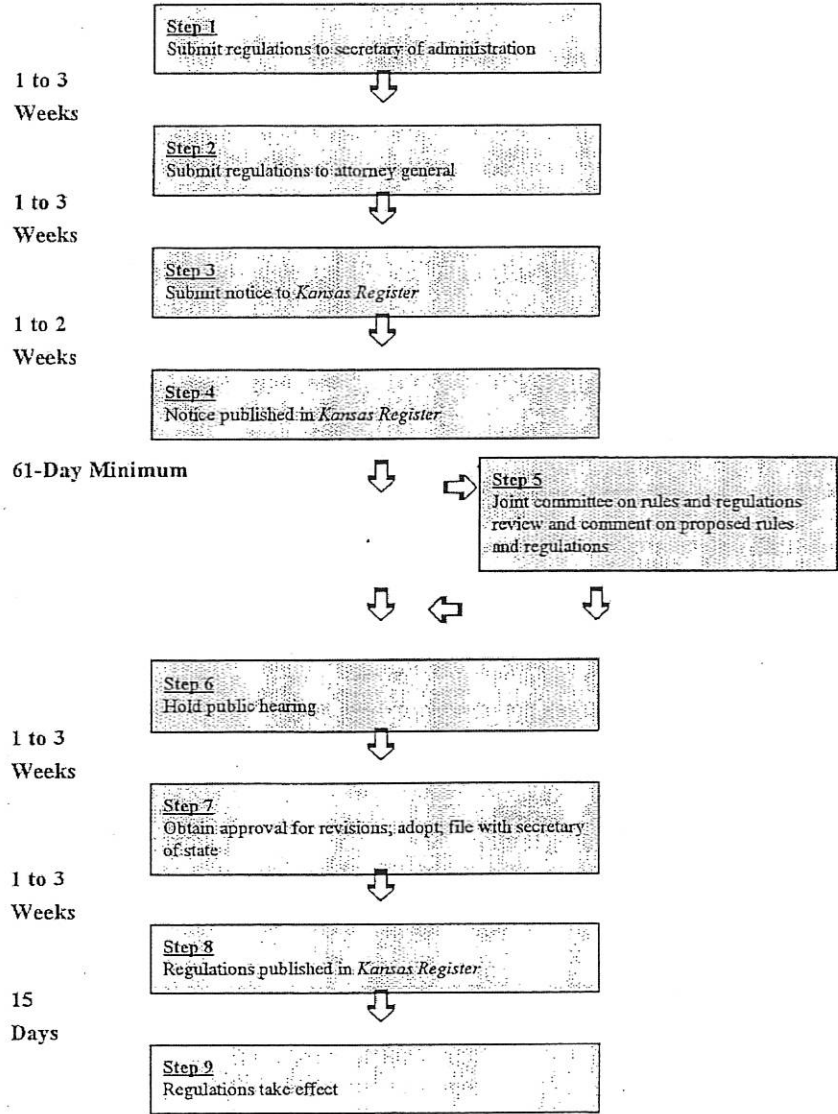
Kansas Use Attainability Analysis Process



KANSAS REGULATION ADOPTION PROCESS

PERMANENT REGULATIONS

Total Time: 111 to 174 days
16 to 25 weeks



**PROTOCOL FOR CONDUCTING
USE ATTAINABILITY ANALYSIS (UAA)
FOR
AQUATIC LIFE USE**

USE ATTAINABILITY ANALYSIS (UAA)
FOR
AQUATIC LIFE USE

Waterbody Name _____ Basin _____
Date _____ HUC _____
Segment _____
Stream Chemistry Network Station (if applicable) _____

DEFINITIONS

Aquatic life support use means the use of surface waters for the maintenance of the ecological integrity of streams, lakes and wetlands. This includes the sustained growth and propagation of native aquatic life; naturalized, important, recreational aquatic life; and indigenous or migratory semiaquatic or terrestrial wildlife directly or indirectly dependent on surface water for survival.

In Kansas, the aquatic life support use is further designated as one of three subcategories: special aquatic life use, expected aquatic life use, and restricted aquatic life use.

1. Special aquatic life use (SALU) is assigned to surface waters which have the potential to contain combinations of habitat types and indigenous aquatic life not commonly found in the state, as well as waters containing or potentially containing populations of threatened or endangered (T & E) species.
2. Expected aquatic life use (EALU) is assigned to surface waters containing habitat types and indigenous aquatic life commonly found in Kansas. Essentially, this use is the "default" designation.
3. Restricted aquatic life use (RALU) is assigned to surface waters where indigenous aquatic life is limited in abundance or diversity due to natural deficiencies in, or artificial modifications to, the physical quality of the habitat

PREPARATION FOR UAA

Review all applicable files, databases and maps in order to become thoroughly familiar with the waterbody to be inspected and to determine what sampling should be accomplished. Indicate which resources have been reviewed and/or condition satisfied.

X = resource checked or condition satisfied
O = resource not available or condition not satisfied

The following materials are available from Kansas Department of Wildlife and Parks (KDWP):
_____ fishery resource maps and designations
_____ stream survey maps and collection information
_____ critical habitat maps for T&E species

_____ fish collection records from KDWP stream surveys

Published and unpublished stream fish collection data are also available from:

- _____ Kansas Department of Health and Environment (KDHE)
- _____ Fort Hays State University
- _____ University of Kansas Museum of Natural History
- _____ Kansas Biological Survey, Natural Heritage Program

Unionid mussel collection records and other macroinvertebrate records are available from:

- _____ Kansas Biological Survey, Natural Heritage Program
- _____ KDHE (KDHE Mussel Database)
- _____ Fort Hays State University
- _____ Wichita State University

Records of collection, observation and reproduction of other aquatic and semi-aquatic wildlife, including reptiles, amphibians and birds, are available from:

- _____ Emporia State University
- _____ Kansas State University
- _____ Kansas Ornithological Society
- _____ Kansas Herpetological Society
- _____ Kansas Biological Survey, Natural Heritage Program

DOCUMENTATION OF LITERATURE SEARCH

Identify all known aquatic and semiaquatic species associated with the waterbody and cite the literature or database source.

USE ASSESSMENT PROCEDURES

Aquatic life support use shall be considered to be existing in all currently classified waterbodies in Kansas and attainable if the waterbody meets the criteria for classification set forth in L2001, ch.100, sec.1, which describes classified streams as follows:

- _____ 1. Classified streams shall include:
 - _____ A. All streams with a 10-year median flow of equal to or in excess of 1 cubic foot per second (1.0 cfs). Regardless of flow, a stream shall be classified if studies conducted or accepted by the department show that pooling of water during periods of zero flow provides important refuges for aquatic life and permits biological recolonization of intermittently flowing segments and a cost/benefit analysis indicates that the benefits of classifying the stream outweigh the costs of classifying the stream.
 - _____ B. All streams actually inhabited by threatened or endangered aquatic species listed in rules and regulations promulgated by the Kansas Department of Wildlife and Parks or the U.S. Fish and Wildlife Services.
 - _____ C. All streams which are at the point of discharge and downstream from such point where the Department has issued a National Pollutant Discharge

Elimination System Permit other than a permit for a confined feeding facility.

- _____ 2. Classified lakes shall be all lakes owned by federal, state, county or municipal authorities and all privately owned lakes that serve as public drinking water supplies or that are open to the general public for primary or secondary contact recreation. (K.A.R. 28-16-28d)
- _____ 3. Classified wetlands shall be all wetlands owned by federal, state, county, or municipal authorities, all privately owned wetlands open to the general public for hunting, trapping or other forms of secondary contact recreation, and all wetlands classified as outstanding national resource waters, exceptional state waters, or designated as special aquatic life use waters....". (K.A.R. 28-16-28d)

Special aquatic life use (SALU) - This use shall be considered existing if the waterbody segment is:

- _____ designated as critical habitat for T&E species, or
 _____ is found to contain T&E species or species in need of conservation (SINC) during field collection activities.

The special aquatic life use shall be considered attainable if:

- _____ the waterbody falls within the geographic range of T&E or SINC species, and
 _____ possesses hydrologic and habitat components consistent with the known requirements of these species.

Restricted aquatic life use (RALU) - This use shall be assigned to surface waters if:

- _____ indigenous aquatic life is limited in abundance or diversity by the physical quality of the habitat due to natural deficiencies or artificial modifications.

Examples of such natural deficiencies or modifications are:

- _____ concrete lined diversion canals,
 _____ subterranean aqueducts, and
 _____ channels so extensively modified that no natural or artificially provided habitat is present.

Expected aquatic life use (EALU) - This is the default designation for aquatic life support. It is assigned when

- _____ the waterbody is classified, and
 _____ not designated as SALU or RALU.

The Expected aquatic life use shall be considered attainable when:

- _____ the waterbody meets the State's criteria for classification,

The Expected aquatic life use shall be considered existing when:

- _____ the waterbody is classified and aquatic life is known to be present.

Cost effective best management practices for non-point sources are found in Appendix A.

FIELD ASSESSMENT PROCEDURES FOR AQUATIC LIFE USE DESIGNATIONS

If there is insufficient information concerning resident aquatic communities, it will be necessary to document the aquatic life community through field assessments. Field assessments must be conducted by a qualified aquatic biologist. A qualified aquatic biologist includes any person with appropriate post-secondary coursework in aquatic biology, aquatic ecology, aquatic invertebrate zoology, ichthyology, and/or limnology combined with field experience in the identification of aquatic and semiaquatic species native to Kansas.

1. Field activities begin with a visual inspection of the targeted waterbody at several randomly selected locations. Those locations deemed most representative of the waterbody are selected for further study. If a site is believed to afford unusual or outstanding biological habitat, it is included as an additional study location even if it is unrepresentative of the waterbody as a whole. This increases the likelihood that rare or unusual biological assemblages will be identified and assigned an appropriate level of protection under the water quality standards. For a lake or wetland, one site may be adequate to characterize existing or potential uses. Stream or river UAAs will generally have more sites (a minimum of three) due to the possibility of anomalous habitat conditions at any given access point. Stream sites (reaches) selected for study should extend in length at least ten times the width of the stream as measured from the high water mark, i.e., top of the stream banks.
2. Assessment sites shall be designated for each UAA and clearly marked on 1:24,000 scale (7.5 minute series) United States Geological Survey (USGS) topographic maps (available at: www.topozone.com). If possible, global positioning system (GPS) coordinates should be taken on-site and recorded on field forms.
3. If access to the waterbody is to be made on private property, landowner or resident permission should be secured prior to access (K.S.A. 21-3721).
4. Narrative UAA site assessments are to be clearly recorded, either by electronic or written means, at each assessment site. To eliminate risk of mistakes or confusion regarding uses among multiple sites, record observations before moving to the next assessment site.

The written assessment must specify the targeted waterbody, its legal location, GPS coordinates (if available), field physical and chemical data, photographic exposure information, stream width, depth and flow estimations, habitat types present, existing uses actually observed, observations of unusual conditions such as algal blooms, dead fish or unusual odors, streambank water diversions or alluvial wells (located within 50 feet of the waterbody), observations of aquatic life such as fish or mussels, and observations of semiaquatic life such as amphibians, waterfowl, or furbearers. Complete forms APP. D-1 through D-5, as appropriate to the type of waterbody.

5. At a minimum, dissolved oxygen, pH, specific conductance, and temperature must be measured at each assessment site and documented on the appropriate stream, lake or wetland physical characterization data sheet. Sample collection and analysis

must follow the standard methods described in *Standard Methods for the Examination of Water and Wastewater, 17th Ed.*, 1989 (or later edition), Washington DC: American Public Health Association.

6. A photographic record must be made of sites assessed for the UAA. Photographs must include an upstream view, downstream view, and any photographs required to document observed or potential uses. Photographs must be marked or catalogued in a manner which indicates the site location and sampling date and what is being shown by each photograph.
7. If possible, streamside or other local landowners or residents should be interviewed regarding present or past uses of the waterbody and any social benefits of the waterbody. Persons interviewed should be identified by name and legal address in the written assessment.
8. Biological community sampling will normally focus on two groups of organisms, fish and molluscs. Numerous fish and mollusc species are listed as T&E or SINC species and often form the basis for designating a waterbody segment either SALU or EALU. Juvenile forms of aquatic insects may also be collected to assist in designation of the waterbody segment. Forms APP D-6 and C-3 relate to the collection, preservation and identification of aquatic and semiaquatic species. Complete as appropriate.
9. Prior to any fish or mollusc collection activities, a scientific collector's permit **must** be obtained from Kansas Department of Wildlife & Parks (phone 316-672-5911) and, if federally protected species are likely to be encountered, United States Fish & Wildlife Service (USFWS) (phone 303-236-7920).
10. Fish collection procedures must focus on a multi-habitat approach, allowing the sampling of habitats in relative proportion to their local availability. Each sample reach should contain riffle, run and pool habitats, if present. If possible, the sample reach should be located away from the influences of point and localized nonpoint sources of pollution and channelized bridge or road crossings. Ability to access and wade the waterbody may ultimately govern the exact placement of the sample reach.

Each type of available habitat (riffle, run, pool, undercut banks, aquatic vegetation, etc.) must be sampled extensively until no new species are found in repeated seine hauls. This means at least three consecutive seine hauls with no new species, even under optimal seining conditions. Sub-optimal seining conditions may require more extensive sampling activities, guided by the professional judgement of the aquatic biologist conducting the sampling. The use of electrofishing equipment is an alternate method for sampling and enumerating fish communities. Habitat assessment worksheets, appropriate for the type of waterbody, (Forms APP. D-1 through D-5) must be completed to document habitats present and sampled.
11. Fish (except young-of-the-year) collected within the sample reach must be identified

to species (or subspecies) and enumerated. Field identifications are acceptable; however voucher specimens should be retained for laboratory verification, particularly if there is any doubt about the correct identity of the specimen. Specimens that cannot be identified with certainty in the field must be preserved in a 10 percent formalin solution and stored in labeled containers for subsequent laboratory identification. A representative voucher collection must be retained for unidentified specimens, very small specimens, and new locality records.

In addition to the unidentified specimen jar, a voucher collection of a sub-sample of each species identified in the field must be preserved and labeled for subsequent laboratory verification (with the exception of large, readily identifiable species - i.e., carp, flathead catfish, etc., for which photographic documentation may suffice).

At a minimum labels must display location data (verbal description and legal coordinates), collection date, collectors' names, and sample identification code or station number for the particular sampling site.

Voucher specimens and collections must be made available to KDHE for verification and/or cataloguing in the collection of the University of Kansas Museum of Natural History, Division of Fishes.

Immediately following the data recording phase of the procedure, specimens that have been identified and enumerated in the field should be released on-site to minimize mortality.

12. Identification of fish must be conducted by a qualified aquatic biologist familiar with taxonomy of local and regional ichthyofauna. The accurate identification of each fish collected is essential and species-level identification is required. Questionable records are prevented by: a) requiring the presence of at least one qualified aquatic biologist with experience in fish taxonomy on every sampling effort, and b) preserving selected specimens which cannot be readily identified in the field for laboratory verification. It is recommended that a maximum sub-sample size of 25 specimens of each species be collected. Only one or two specimens need to be collected of T&E and SINC species. Taxonomic nomenclature must be kept consistent and current. Common and scientific names of fishes are listed in *Common and Scientific Names of Fishes from the United States and Canada, 5th edition*, American Fisheries Society, Special Publication 20. Bethesda, Maryland, 1991.
13. Unionid mussels present at the sample points must be identified and recorded. Live unionid mussels should be recorded, photographed, and immediately released on-site (with the possible exception of voucher specimens). Photographic documentation is especially important for T&E and SINC species, which should generally be released on-site. Remnant valves (recent, weathered and semi-fossil) must be collected in numbers proportional to their presence and made available to KDHE for identification, cataloguing and archiving.

14. Unionid mussels encountered within the sample reach must be identified to species (or subspecies) and enumerated. Voucher specimens must be retained for laboratory verification if there is any doubt about the correct identity of the specimen. Live specimens that cannot be identified with certainty in the field should be preserved individually in a 10 percent formalin solution and stored in labeled containers for subsequent laboratory identification. A representative voucher collection must be retained for unidentified and very small live specimens in the absence of recently deceased specimens or unweathered shell materials. Voucher specimens must be clearly labeled for subsequent laboratory verification. At a minimum labels must display location data (verbal description and legal coordinates), collection date, collectors' names, and sample identification code or station number for the particular sampling site.

Preserved voucher specimens and collected shell materials must be made available to KDHE for verification and/or cataloguing in the KDHE mussel collection or other appropriate repository (e.g., University of Kansas Museum of Natural History).

Immediately following the data recording phase of the procedure, any live specimens that have been identified and enumerated in the field should be carefully released on-site to minimize mortality.

15. Identification of unionid mussels must be conducted by a qualified aquatic biologist familiar with the taxonomy of local and regional unionid mussel fauna. The accurate identification of each unionid mussel collected is essential and species-level identification is required. Questionable records are prevented by: a) requiring the presence of at least one qualified aquatic biologist familiar with taxonomy of unionid mussels on every field effort, and b) preserving selected specimens (live individuals or unweathered valves) of each species and those which cannot be readily identified in the field for laboratory verification. Taxonomic nomenclature must be kept consistent and current. Common and scientific names of unionid mussels are listed in *Common and Scientific Names of Aquatic Invertebrates from the United States and Canada: Mollusks, 2nd edition*, American Fisheries Society, Special Publication 26, Bethesda, Maryland, 1998.

FINDINGS OF AQUATIC LIFE USE UAA

A written statement of finding and all supporting documentation must be presented to KDHE for review. The statement must include pertinent findings that support the designation being proposed for adoption in the Kansas Surface Water Quality Standards, K.A.R. 28-16-28d. If field and taxonomic assessments have been conducted a statement of the qualifications of the participating biologists must be included.

Form E-1

FIELD ASSESSMENT WORKSHEET

USE ATTAINABILITY ANALYSIS (UAA)
FOR
AQUATIC LIFE USE

Waterbody Name: _____ HUC: _____
Basin: _____ Segment: _____

Location (Legal): _____ 1/4 _____ 1/4 Sec. _____ Township. _____ Range _____ Quadrangle _____

Evaluators: _____ Date: _____

Site Location Map or attach photographs:

Economic Considerations:

What activities are apparent along the stream that might impact the water quality of the stream segment, i.e. discharges, crop land, grazing activities, etc.?

**FORMS
APP. C-3 and
APP. D-1 through D-6**

Form App. C-3

KDHE/BEFS
IDENTIFICATION BENCH SHEET

STATION _____ STREAM/LOCATION _____
 DATE COLLECTED _____ DATE EXAMINED _____ DETERMINED BY _____
 COLLECTOR(S) _____ TYPE OF SAMPLE (EFFORT) _____

	KBS CODE #	A #	N #	L #	P #	TOTAL #		KBS CODE #	A #	N #	L #	P #	TOTAL #
COLEOPTERA							MEGALOPTERA						
							ODONATA						
							PLECOPTERA						
DIPTERA													
							TRICHOPTERA						
							CRUSTACEA						
EPHEMEROPTERA													
							GASTROPODA						
							HIRUDINEA						
							OLIGOCHAETA						
							PELECEPODA						
							TURBELLARIA						
HEMIPTERA							OTHER						

KBS CODE#-KDHE KANSAS BIOSYSTEM TAXON UNIQUE CODE A#-NUMBER OF ADULTS IN SAMPLE
 N#-NUMBER OF NYMPHS IN SAMPLE L#-NUMBER OF LARVAE IN SAMPLE
 P#-NUMBER OF PUPAE IN SAMPLE

TOTAL ORGANISMS _____ TOTAL TAXA _____ EPT INDEX _____ MBI _____ MBI(N) _____ HDI _____ D.O. _____

SHEET _____ OF _____

Form App. D-1

Stream Physical Characterization/Water Quality Field Data Sheet
(Front)

Stream Name:		Location:
Station #:	Rivermile:	Legal Descr:
Lat:	Long:	River Basin:
Storet #:	Agency:	
Investigators:		
Form Completed By:	Date:	Reason For Survey:
	Time: <small>AM PM</small>	

Weather Conditions	Now	Past 24 hours	Has there been a heavy rain in the last 7 days?
	<input type="radio"/>	<input type="radio"/> storm (heavy rain)	<input type="radio"/> Yes <input type="radio"/> No
	<input type="radio"/>	<input type="radio"/> rain (steady rain)	
	<input type="radio"/>	<input type="radio"/> showers (intermittent)	Air Temperature: _____ C
	<input type="radio"/> _____%	<input type="radio"/> _____% cloud cover	Other: _____
	<input type="radio"/>	<input type="radio"/> clear/sunny	

Site Location/Map	Draw a map of the site and indicate the area sampled (or attach a photograph)

Stream Characterization	Stream Subsystem
	<input type="radio"/> Perennial <input type="radio"/> Intermittent <input type="radio"/> Ephemeral
	Stream Origin
	<input type="radio"/> Spring-fed <input type="radio"/> Mixture of origins <input type="radio"/> Other
	Catchment Area _____ km ²
	Ecoregion: _____
	Stream Order: _____

Stream Physical Characterization/Water Quality Field Data Sheet
(Back)

Watershed Features	Predominant Surrounding Landuse <input type="checkbox"/> Forest <input type="checkbox"/> Commercial <input type="checkbox"/> Field/Pasture <input type="checkbox"/> Industrial <input type="checkbox"/> Agricultural <input type="checkbox"/> Other _____ <input type="checkbox"/> Residential	Local Watershed NPS Pollution <input type="checkbox"/> No evidence <input type="checkbox"/> Some potential sources <input type="checkbox"/> Obvious sources Local Watershed Erosion <input type="checkbox"/> None <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy
Riparian Vegetation (18 meter buffer)	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Trees <input type="checkbox"/> Shrubs <input type="checkbox"/> Grasses <input type="checkbox"/> Herbaceous <input type="checkbox"/> None dominant species present: _____	
Instream Features	Estimated Stream Width: _____ m Proportion of Reach Represented by Stream Estimated Stream Depth: _____ m Morphology Types Surface Velocity (at thalweg): _____ m/sec <input type="checkbox"/> Riffle: _____% <input type="checkbox"/> Run: _____% Estimated Reach Length: _____ m <input type="checkbox"/> Pool: _____% High Water Mark: _____ m Channelized <input type="checkbox"/> Yes <input type="checkbox"/> No Canopy Cover Dam Present <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partly open <input type="checkbox"/> Partly Shaded <input type="checkbox"/> Shaded	
Aquatic Vegetation	Indicate the dominant type and record the dominant species present <input type="checkbox"/> Rooted emergent <input type="checkbox"/> Rooted submergent <input type="checkbox"/> Rooted floating <input type="checkbox"/> Free floating <input type="checkbox"/> Floating Algae <input type="checkbox"/> Attached Algae dominant species present: _____ Portion of the reach with aquatic vegetation: _____ %	
Water Quality	Temperature: _____ C Water Odors <input type="checkbox"/> Normal/None <input type="checkbox"/> Sewage Specific Conductance: _____ <input type="checkbox"/> Petroleum <input type="checkbox"/> Chemical <input type="checkbox"/> Fishy <input type="checkbox"/> Other _____ Dissolved Oxygen: _____ Water Surface Oils <input type="checkbox"/> Slick <input type="checkbox"/> Sheen <input type="checkbox"/> Globs <input type="checkbox"/> Flecks pH: _____ Turbidity: _____ <input type="checkbox"/> None <input type="checkbox"/> Other _____ Turbidity (if not measured <input type="checkbox"/> Color _____ WQ Instrument Used: _____ <input type="checkbox"/> Clear <input type="checkbox"/> Slightly turbid <input type="checkbox"/> Turbid Other WQ Samples Collected: Y N <input type="checkbox"/> Opaque <input type="checkbox"/> Stained <input type="checkbox"/> Other	
Sediment/ Substrate	Odors Deposits <input type="checkbox"/> Normal <input type="checkbox"/> Sewage <input type="checkbox"/> Petroleum <input type="checkbox"/> Sludge <input type="checkbox"/> Sawdust <input type="checkbox"/> Paper fiber <input type="checkbox"/> Chemical <input type="checkbox"/> Anaerobic <input type="checkbox"/> None <input type="checkbox"/> Sand <input type="checkbox"/> Relic shells <input type="checkbox"/> Other _____ <input type="checkbox"/> Other: _____ Looking at stones which are not deeply embedded, are the undersides black in color? Oils <input type="checkbox"/> Absent <input type="checkbox"/> Slight <input type="checkbox"/> Moderate <input type="checkbox"/> Profuse <input type="checkbox"/> Yes <input type="checkbox"/> No	

Inorganic Substrate Components/Embeddedness (should add up to 100%)			Organic Substrate Components (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	
Boulder	> 256 mm (10")				
Cobble	64-256 mm (2.5-10")				
Gravel	2-64 mm (0.1-2.5")		Muck-Mud	black, very fine organic (FPOM)	
Sand	0.06-2 mm (gritty)		Marl	grey, shell fragments	
Silt	0.004-0.06 mm				
Clay	< 0.004 mm (slick)				

Form App. D-2

Stream Habitat Assessment Field Data Sheet
(Front)

Stream Name:		Location:	
Station #:	Rivermile:	Legal Descr:	
Lat:	Long:	River Basin:	
Storet #:	Agency:		
Investigators:			
Form Completed By:		Date:	Reason For Survey:
		Time: <small>AM PM</small>	

Habitat Parameter	Conditions Category			
	Optimal	Suboptimal	Marginal	Poor
1. Epifaunal Substrate/ Available Cover	Greater than 50% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	30-50% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of new fall, but not yet prepared for colonization (may rate at high end of scale).	10-30% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 10% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
2. Substrate Characterization	Mixture of substrate materials, with gravel and firm sand prevalent; root mats and submerged vegetation common.	Mixture of soft sand, mud, or clay; mud may be dominant; some root mats and submerged vegetation present.	All mud or clay or sand bottom; little or no root mat; no submerged vegetation.	Hard-pan clay or bedrock; no root mat or vegetation.
3. Pool Variability	Even mix of large-shallow, large-deep, small-shallow, small-deep pools present.	Majority of pools large-deep; very few shallow.	Shallow pools much more prevalent than deep pools.	Majority of pools small-shallow or pools absent.
4. Sediment Deposition/ Embeddedness	Little or no enlargement of islands or point bars and less than 5% (20% for low-gradient streams) of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 5-30% (20-50% for low-gradient) of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% (50-80% for low gradient) of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 50% (80% for low-gradient) of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.

Stream Habitat Assessment Field Data Sheet
(Back)

Habitat Parameter	Conditions Category			
	Optimal	Suboptimal	Marginal	Poor
6. Channel Alteration Channelization or dredging absent or minimal; stream with normal pattern.	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr) may be present, but recent channelization is not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.
7. Channel Sinuosity The bends in the stream increase the stream length 3 to 4 times longer than if it was in a straight line. (Note - channel braiding is considered normal in sandy bottomed streams, esp. in W. Kansas). This parameter is not easily rated in these areas.	The bends in the stream increase the stream length 3 to 4 times longer than if it was in a straight line. (Note - channel braiding is considered normal in sandy bottomed streams, esp. in W. Kansas). This parameter is not easily rated in these areas.	The bends in the stream increase the stream length 2 to 3 times longer than if it was in a straight line.	The bends in the stream increase the stream length 2 to 1 time longer than if it was in a straight line.	Channel straight; waterway has been channelized for a long distance.
8. Bank Stability (score each bank) Note: determine left or right side by facing downstream. <i>left bank</i> <i>right bank</i>	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. < 3% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.
9. Vegetative Protection (score each bank) Note: determine left or right side by facing downstream. <i>left bank</i> <i>right bank</i>	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or native grasses; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
10. Riparian Vegetative Zone (score each bank) Note: determine left or right side by facing downstream. <i>left bank</i> <i>right bank</i>	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters; little or no riparian vegetation due to human activities.

Form App. D-3

Lake Physical Characterization/Water Quality Field Data Sheet
(Front)

Lake Name:		Location:
Station #:		Legal Descr:
Lat:	Long:	River Basin:
Storet #:		Agency:
Investigators:		
Form Completed By:	Date:	Reason For Survey:
	Time: <small>AM PM</small>	

Weather Conditions	Now	Past 24 hours	Has there been a heavy rain in the last 7 days
	<input type="radio"/>	<input type="radio"/> storm (heavy rain)	<input type="radio"/> Yes <input type="radio"/> No
	<input type="radio"/>	<input type="radio"/> rain (steady rain)	
	<input type="radio"/>	<input type="radio"/> showers (intermittent)	Air Temperature: _____ C
	<input type="radio"/> _____ %	<input type="radio"/> _____ % cloud cover	Other: _____
	<input type="radio"/>	<input type="radio"/> clear/sunny	

Site Location/Map	Draw a map of the site and indicate the area sampled (or attach a photograph)
-------------------	---

Lake Physical Characteristics	Lake Acreage: _____	Watershed Acreage: _____
	Zmax: _____	Watershed/Lake ratio: _____
	Zmean: _____	

Lake Characterization	Stream Subsystem (if applicable)	Catchment Area _____ km ²
	<input type="radio"/> Perennial <input type="radio"/> Intermittent <input type="radio"/> Ephemeral	
	Lake Origin	
<input type="radio"/> Spring-fed <input type="radio"/> Stream or River-fed		
<input type="radio"/> Overland runoff		
<input type="radio"/> Other	Elevation: _____	

Lake Physical Characterization/Water Quality Field Data Sheet
(Back)

Watershed Features	Predominant Surrounding Landuse (%) Forest _____ Commercial _____ Field/Pasture _____ Industrial _____ Agricultural _____ Other _____ Residential _____	Local Watershed NPS Pollution <input type="radio"/> No evidence <input type="radio"/> Some potential sources <input type="radio"/> Obvious sources Local Watershed Erosion <input type="radio"/> None <input type="radio"/> Moderate <input type="radio"/> Heavy
Riparian Vegetation (18 meter buffer)?	Indicate the dominant type and record the dominant species present <input type="radio"/> Trees <input type="radio"/> Shrubs <input type="radio"/> Grasses <input type="radio"/> Herbaceous <input type="radio"/> None dominant species present: _____	
Aquatic Vegetation	Indicate the dominant type and record the dominant species present <input type="radio"/> Rooted emergent <input type="radio"/> Rooted submergent <input type="radio"/> Rooted floating <input type="radio"/> Free floating <input type="radio"/> Floating Algae <input type="radio"/> Attached Algae dominant species present: _____ Portion of the reach with aquatic vegetation: % cover % volume infested	
Water Quality	Temperature: _____ C Dissolved Oxygen: _____ Specific Conductance: _____ Secchi Depth: _____ Nutrients: Total N: _____ pH: _____ Total P: _____ Turbidity: _____ Chlorophyll: _____ WQ Instrument Used: _____ Other WQ Samples Collected? Y N	Water Odors <input type="radio"/> Normal/None <input type="radio"/> Sewage <input type="radio"/> Petroleum <input type="radio"/> Chemical <input type="radio"/> Fishy <input type="radio"/> Other _____ Water Surface Oils <input type="radio"/> Slick <input type="radio"/> Sheen <input type="radio"/> Globbs <input type="radio"/> Flecks <input type="radio"/> None <input type="radio"/> Other _____ Turbidity (if not measured) <input type="radio"/> Color _____ <input type="radio"/> Clear <input type="radio"/> Slightly turbid <input type="radio"/> Turbid <input type="radio"/> Opaque <input type="radio"/> Stained <input type="radio"/> Other _____
Sediment/Substrate	Odors <input type="radio"/> Normal <input type="radio"/> Sewage <input type="radio"/> Petroleum <input type="radio"/> Sludge <input type="radio"/> Sawdust <input type="radio"/> Paper fiber <input type="radio"/> Chemical <input type="radio"/> Anaerobic <input type="radio"/> None <input type="radio"/> Sand <input type="radio"/> Relic shells <input type="radio"/> Other _____ <input type="radio"/> Other: _____ Oils <input type="radio"/> Absent <input type="radio"/> Slight <input type="radio"/> Moderate <input type="radio"/> Profuse <input type="radio"/> Yes <input type="radio"/> No Looking at stones which are not deeply embedded, are the undersides black in color?	

Inorganic Substrate Components/Embeddedness (should add up to 100%)			Organic Substrate Components (does not necessarily add up to 100%)		
Substrate Type	Diameter	% Composition in Sampling Reach	Substrate Type	Characteristic	% Composition in Sampling Area
Bedrock			Detritus	sticks, wood, coarse plant materials (CPOM)	
Boulder	> 256 mm (10")				
Cobble	64-256 mm (2.5-10")				
Gravel	2-64 mm (0.1-2.5")		Muck-Mud	black, very fine organic (FPOM)	
Sand	0.06-2 mm (gritty)				
Silt	0.004-0.06 mm		Marl	grey, shell fragments	
Clay	< 0.004 mm (slick)				

Form App. D-4

Lake Habitat Assessment Field Data Sheet

Lake Name:		Location:	
Station #:		Legal Descr:	
Lat:	Long:	River Basin:	
Storet #:		Agency:	
Investigators:			
Form Completed By:		Date:	Reason For Survey:
		Time: AM PM	

Habitat Parameter	Conditions Category			
	Optimal	Suboptimal	Marginal	Poor
1. Available Cover and habitat	hypolimnion volume < 15 %, areal macrophyte cover 30 - 60 %, maximum depth > 5 m, mean depth > 3 m.	hypolimnion volume < 25 %, areal macrophyte cover 20 - 30 % or 70 - 90 %, maximum depth < 5 m, mean depth < 3 m.	hypolimnion volume < 35 %, areal macrophyte cover < 20 % or > 90 %, maximum depth < 4 m, mean depth < 2 m.	hypolimnion volume > 35 %, macrophytes absent or infesting almost whole lake volume maximum depth < 2 m, mean depth < 1 m.
2. Pool Variability	stable pool all year			large annual level changes
3. Sediment Deposition	areal sediment deposition < 1 cm / year, mostly in old channels	areal sediment deposition 1 - 2 cm / year, mostly in old channels and upstream zones	areal sediment deposition 1 - 2 cm / year, significant amount across entire lake surface, upper zones and old channels filled in	areal sediment deposition > 2 cm / year, excessive deposition across entire lake, old channels gone, upstream areas are mud flats
4. Shoreline Stability	good natural shore cover, little evidence of shore erosion	natural cover patchy or poor, some evidence of leeward shore erosion	poor natural shore protection, presence of stabilization structures, rip-rap, soil concrete, etc.	extensive shore erosion or extensive presence of artificial stabilization
5. Shoreline Vegetation	extensive areas of emergent / woody / macrophytic shore vegetation	some areas of emergent / woody / macrophytic shore vegetation	few areas of emergent / woody / macrophytic shore vegetation	no areas of emergent / woody / macrophytic shore vegetation
6. Vegetation above High Water Line	primarily natural vegetation, or re-creation of natural cover of > 18 m width	primarily natural vegetation, or re-creation of natural cover of 12 - 18 m width, minimal human activities replacing natural cover	primarily natural vegetation, or re-creation of natural cover of 6 - 12 m width, mostly human land uses (park, camping, roads, etc.)	primarily natural vegetation, or re-creation of natural cover of < 6 m width, very little good vegetation cover

Form App. D-5

Wetland: _____

Date: _____

Location (legal description, etc.): _____

Wetland Surface Area: _____ acres

Watershed Area: _____ acres

Maximum Depth of Primary Pool: _____ meters

Mean Depth of Primary Pool: _____ meters

Fetch Length (longest expanse of open water): _____ meters

Water Level fluctuations are: (Check One)

1 - Mostly Natural	_____
2 - In Between 1 and 3	_____
3 - Even Mixture	_____
4 - In Between 3 and 5	_____
5 - Mostly Artificial	_____

Exposure to Prevailing Winds: (Check One)

1 - Fully Protected	_____
2 - In Between 1 and 3	_____
3 - Even Mixture	_____
4 - In Between 3 and 5	_____
5 - Fully Open to Winds	_____

Ditches and Channels Present? _____

Inlets and Outlets Present? _____

Underlying Depth to Groundwater: _____ meters

Sheet Versus Channel Inflow: (Check One)

1 - 100% Overland Flow	_____
2 - In Between 1 and 3	_____
3 - Even Mixture	_____
4 - In Between 3 and 5	_____
5 - Near 100% Channel Inflow	_____

Potential for Scour and/or Shore Erosion: (Check One)

1 - Low Potential	_____
2 - In Between 1 and 3	_____
3 - Even Mixture	_____
4 - In Between 3 and 5	_____
5 - High Potential	_____

Evidence of Human Activity/Impact:

Evidence of Direct Alteration: _____
(List Items and Evidence) _____

Disturbance Sources (things that would disturb bird nesting, etc.): _____
(List Items and Evidence) _____

Population Within Watershed: _____

NPDES Dischargers in Watershed: _____

List Dischargers: _____

Watershed Land Use Composition:

Cropland	_____	acres
Pasture/Grasland	_____	acres
Urban	_____	acres
Animal Confinement	_____	acres
Wooded/Natural/Water	_____	acres
Other	_____	acres
Total	_____	acres

Riparian/Shoreline Vegetation: Percent Cover Along Shoreline _____ percent shoreline

Composition of Riparian Vegetation:

Percent Trees/Shrubs	_____	%
Percent Grasses/Forbs	_____	%
Percent Other	_____	%

Predominant Substrate Type:
(Check One)

Sand	_____
Silt/Mud	_____
Clay	_____
Cobble	_____

Emergent Plant Zone:

Percent Cover Over Entire Wetland	_____	%
Percent Cover In Primary Pool	_____	%
Dominant Genera	_____	

Submersed/Floating Leaved Zone:

Percent Cover Over Entire Wetland	_____	%
Percent Cover In Primary Pool	_____	%
Dominant Genera	_____	

Vegetation/Water Interspersion:
(Check One)
(Interspersion of Plant
Stands and Open Water)

1- Low	_____
2 - In Between 1 and 3	_____
3 - Even Mixture	_____
4- In Between 3 and 5	_____
5 - High	_____

Vegetation Form Richness:
(Check One)
(Richness of Growth Forms
Such As Woody, Broad Leaved,
Reed-Like, Etc.)

1- Low	_____
2 - In Between 1 and 3	_____
3 - Even Mixture	_____
4- In Between 3 and 5	_____
5 - High	_____

Physical Habitat Interspersion: (Check One) (Variety of Flow, Depth, and Substrate Interspersion)	1- Low _____ 2 - In Between 1 and 3 _____ 3 - Even Mixture _____ 4- In Between 3 and 5 _____ 5 - High _____
Vegetation Class Interspersion: (Check One) (Interspersion of Various Vegetation Growth Forms)	1- Low _____ 2 - In Between 1 and 3 _____ 3 - Even Mixture _____ 4- In Between 3 and 5 _____ 5 - High _____

Wetland Class (Based on National Wetland Inventory, Cowardin, et al., 1979)

System Classification (Check One):

Riverine Lower Perennial (within a channel, low gradient, low velocity)	_____
Riverine Upper Perennial (within a channel, higher gradient, higher velocity)	_____
Riverine Intermittent (within a channel, flow is not year-round but may be pooled during low flow)	_____
Lacustrine Limnetic (depressional, <30% plant cover, >20 acres, and >2 meters maximum depth)	_____
Lacustrine Littoral (as above, but maximum depth <2 meters)	_____
Palustrine (as above, but <20 acres, <2 meters maximum depth, typically vegetation rich but not required)	_____

Class: (Check One Under The Appropriate System Type)	Riverine Systems:	Rock Bottom	_____
		Unconsolidated Bottom	_____
		Aquatic Bed	_____
		Rocky Shore	_____
		Unconsolidated Shore	_____
		Emergent Wetland (lower perennial only)	_____
		Streambed (intermittent systems only)	_____
		Lacustrine Systems:	
		Rock Bottom	_____
		Unconsolidated Bottom	_____
		Aquatic Bed	_____
		Rocky Shore (littoral only)	_____
		Unconsolidated Shore (littoral only)	_____
		Emergent Wetland (littoral only)	_____
		Palustrine Systems:	
	Rock Bottom	_____	
	Unconsolidated Bottom	_____	
	Aquatic Bed	_____	
	Unconsolidated Shore	_____	
	Emergent Wetland	_____	
	Scrub/Shrub Wetland	_____	
	Forested Wetland	_____	

Water Regime Modifiers: (Check One)	Permanently Flooded	_____
	Semipermanently Flooded (all year most years)	_____
	Seasonally Flooded (water for extended period, dry by end of year)	_____
	Saturated (saturated year-round, but open water rare)	_____
	Temporarily Flooded (open water for brief periods in growing season)	_____
	Intermittently Flooded (substrate usually exposed)	_____
	Artificially Flooded (controlled by structures)	_____

Average Specific Conductance: _____ umho/cm

Average pH: _____ S.U.

**PROTOCOL FOR CONDUCTING
USE ATTAINABILITY ANALYSIS (UAA)
FOR
PRIMARY AND SECONDARY CONTACT RECREATION**

USE ATTAINABILITY ANALYSIS (UAA)
FOR
PRIMARY AND SECONDARY CONTACT RECREATION

PREPARATION FOR UAA

Review all applicable files, databases and maps in order to become thoroughly familiar with the waterbody to be inspected and to determine what assessment should be accomplished.

The following materials are available from the Kansas Department of Wildlife and Parks (KDWP) and may obviate the need for onsite survey:

- _____ fishery resource maps and designations
- _____ stream survey maps and collection information
- _____ fish collection records from KDWP stream surveys

USE ASSESSMENT PROCEDURES

Classified waters shall be evaluated for recreational uses using the procedures set forth in this section and the criteria for classification set forth in L2001, ch. 100, sec. 1, which describes classified streams as follows:

- _____ 1. Classified streams shall include:
 - _____ A. All streams with a 10-year median flow of equal to or in excess of 1 cubic foot per second (1.0 cfs). Regardless of flow, a stream shall be classified if studies conducted or accepted by the department show that pooling of water during periods of zero flow provides important refuges for aquatic life and permits biological recolonization of intermittently flowing segments and a cost/benefit analysis indicates that the benefits of classifying the stream outweigh the costs of classifying the stream..
 - _____ B. All streams actually inhabited by threatened or endangered aquatic species listed in rules and regulations promulgated by the Kansas Department of Wildlife and Parks or the U.S. Fish and Wildlife Services.
 - _____ C. All streams which are at the point of discharge and downstream from such point where the Department has issued a National Pollutant Discharge Elimination System Permit other than a permit for a confined feeding facility.
- _____ 2. Classified lakes shall be all lakes owned by federal, state, county or municipal authorities and all privately owned lakes that serve as public drinking water supplies or that are open to the general public for primary or secondary contact recreation. (K.A.R. 28-16-28d)
- _____ 3. Classified wetlands shall be all wetlands owned by federal, state, county, or municipal authorities, all privately owned wetlands open to the general public for hunting, trapping or other forms of secondary contact recreation, and all **wetlands** classified as outstanding national resource waters, exceptional state waters, or designated as special aquatic life

waters....”(K.A.R. 28-16-28d)

Primary contact recreation shall be considered an existing use in all classified waterbodies known to host one or more of the following activities:

<input type="checkbox"/> swimming	<input type="checkbox"/> skin diving
<input type="checkbox"/> boating	<input type="checkbox"/> waterskiing
<input type="checkbox"/> mussel harvesting	<input type="checkbox"/> windsurfing

or which hosted one or more of these activities on or after November 28, 1975 (based on interviews with streamside landowners or other knowledgeable individuals or other dated documentation).

In order to protect public health, the primary contact recreation use shall be assigned as an attainable use to all waters along: (check applicable conditions)

public parks
 public parkways
 urban streams

and other waters with a high probability of public access: (check applicable conditions)

boat ramps nature trails
 camping areas playgrounds

Secondary contact recreation - At a minimum, all classified surface waters shall be designated for this use. It shall be considered an existing use in those waterbodies exhibiting indications of one or more of the following activities:

<input type="checkbox"/> wading	<input type="checkbox"/> trapping
<input type="checkbox"/> fishing	<input type="checkbox"/> hunting

or which exhibited one or more of these activities on or after November 28, 1975 (based on interviews with streamside landowners or other knowledgeable individuals or other dated documentation).

The secondary contact recreation use shall be considered attainable if:

the waterbody meets the criteria for classification set forth in K.A.R. 28-16-28d(b).

Cost effective best management practices for non-point sources are found in Appendix A.

FIELD ASSESSMENT FOR PRIMARY & SECONDARY CONTACT RECREATION AND FOOD PROCUREMENT

1. Field activities should begin with a visual inspection of the targeted waterbody at several locations. Those stream sites deemed most likely to support primary contact recreation and/or food procurement should be selected for further study. For a lake or wetland, one site may be adequate to characterize existing or potential uses. The number of sites to be assessed on a given waterbody should be determined prior to commencement of field activities. Form E-1 should be used to record findings.

2. Assessment sites should be designated for each UAA and clearly marked on 1:24,000 scale (7.5 minute series) USGS topographic maps (available at: www.topozone.com). If possible, global positioning system (GPS) coordinates should be taken on-site and recorded on field forms.
3. If access to the waterbody is to be made through private property, landowner or resident permission should be secured prior to access (K.S.A. 21-3721).
4. Narrative UAA site assessments must be clearly recorded, either by electronic or written means, at each assessment site. To reduce the risk of mistakes or confusion regarding existing or attainable uses among multiple sites, it is necessary to record observations before moving to the next assessment site.

The recorded field assessment must specify the waterbody assessed, legal location, GPS coordinates (if available), field physical data, photographic exposure information, stream width, depth and flow estimations, existing uses actually observed, and any other observations of unusual conditions.

5. A photographic record must be made of sites assessed for the UAA. Photographs should include an upstream view, downstream view, and any photographs required to document observed or potential uses. Photographs must be marked or catalogued in a manner that indicates what is being shown by each photograph.
6. Whenever possible, streamside or other local landowners or residents should be interviewed regarding present or past uses of the waterbody and any social benefits of the waterbody. Persons interviewed should be identified by name and legal address in the recorded field assessment.

FINDINGS OF PRIMARY & SECONDARY CONTACT RECREATION UAA

A written statement of finding and all supporting documentation must be presented to KDHE for review. This statement shall include pertinent findings that support the designation being proposed for adoption in the Kansas Surface Water Quality Standards, K.A.R. 28-16-28d.

Form E-1

FIELD ASSESSMENT WORKSHEET

USE ATTAINABILITY ANALYSIS (UAA)
FOR
PRIMARY & SECONDARY CONTACT RECREATION

Waterbody Name: _____ HUC: _____
Basin: _____ Segment: _____

Location (Legal): _____ 1/4 _____ 1/4 Sec. _____ Township. _____ Range _____ Quadrangle _____

Evaluators: _____ Date: _____

Site Location Map or attach photographs:

The evaluator is encouraged to add comments and observations which will aid in making decisions about the site.

1. Direct evidence of:

Primary contact recreation activities? Yes No
Secondary contact recreation activities? Yes No

If people are observed recreating in the water, or if direct evidence exists of primary and/or secondary contact recreation, then primary and/or secondary contact recreation are considered existing uses. Types of direct evidence might include rope swings, campfire rings, boat ramps or other constructed or evident points of access.

COMMENTS: _____

2. Sufficient water to support primary contact recreation? Yes No

An average depth of at least 0.5 meter or a maximum depth of at least 1.0 meter at base flow conditions is considered minimal for primary contact recreation. Base flow, as defined in K.A.R. 28-16-28b(f), means that portion of a stream's flow contributed by sources of water other than precipitation runoff. This refers to a fair weather flow sustained primarily by springs or groundwater seepage, wastewater discharges, irrigation return flows, releases from reservoirs, or some combination of these factors.

COMMENTS: _____

3. Economic Considerations:

What activities are apparent along the stream that might impact the water quality of the stream segment, i.e. discharges, crop land, grazing activities, etc.?

STREAM FIELD OBSERVATIONS

Station Description: _____ HUC _____ Seg _____

County: _____ 1/4 _____ 1/4 Sec _____ T _____ S R _____ E/W

GPS data: (lat) N _____ (long) W _____

Date: _____ Time: _____

Camera Exposure #: Upstream _____ Downstream _____ Other _____

Stream Description:

Upstream View:

Physical Dimensions:

- | | | | | |
|---------------------------------|-------------|--------------|-------------------|------------|
| <input type="checkbox"/> riffle | width _____ | length _____ | depth: avg. _____ | max. _____ |
| <input type="checkbox"/> run | width _____ | length _____ | depth: avg. _____ | max. _____ |
| <input type="checkbox"/> pool | width _____ | length _____ | depth: avg. _____ | max. _____ |

Downstream View:

Physical Dimensions:

- | | | | | |
|---------------------------------|-------------|--------------|-------------------|------------|
| <input type="checkbox"/> riffle | width _____ | length _____ | depth: avg. _____ | max. _____ |
| <input type="checkbox"/> run | width _____ | length _____ | depth: avg. _____ | max. _____ |
| <input type="checkbox"/> pool | width _____ | length _____ | depth: avg. _____ | max. _____ |

Flow Present? (describe) _____

Predominant Substrate Type: _____

Aquatic Life Observed:

- Plants Frogs Insects Fish Crawfish Snails

Describe: _____

- Stream type: Perennial (permanent flow) Intermittent (permanent water)
- Ephemeral (seasonal water)

Observations: _____

PROTOCOL FOR CONDUCTING
EXPEDITED
STREAM USE ATTAINABILITY ANALYSIS (UAA)
FOR
PRIMARY AND SECONDARY CONTACT RECREATION

EXPEDITED STREAM
USE ATTAINABILITY ANALYSIS (UAA)
FOR
PRIMARY AND SECONDARY CONTACT RECREATION

PREPARATION FOR UAA

Review all applicable files, databases and maps in order to become thoroughly familiar with the stream to be inspected and to determine what assessment should be accomplished.

Optional Activities:

The following materials are available from Kansas Department of Wildlife and Parks (KDWP) and may obviate the need for onsite survey:

- _____ fishery resource maps and designations
- _____ stream survey maps and collection information
- _____ fish collection records from KDWP stream surveys

CLASSIFICATION ASSESSMENT PROCEDURES:

For all classified streams, recreational uses shall be designated as existing if indications of such uses are evident. These uses shall be designated as attainable if the stream meets the criteria for classification set forth in L2001, ch. 100, sec. 1, which describes classified streams as follows:

_____ A. All streams with a 10-year median flow of equal to or in excess of 1 cubic foot per second (1.0 cfs). Regardless of flow, a stream shall be classified if studies conducted or accepted by the department show that pooling of water during periods of zero flow provides important refuges for aquatic life and permits biological recolonization of intermittently flowing segments and a cost/benefit analysis indicates that the benefits of classifying the stream outweigh the costs of classifying the stream..

_____ B. All streams actually inhabited by threatened or endangered aquatic species listed in rules and regulations promulgated by the Kansas Department of Wildlife and Parks or the U.S. Fish and Wildlife Services.

_____ C. All streams which are at the point of discharge and downstream from such point where the Department has issued a National Pollutant Discharge Elimination System Permit other than a permit for a confined feeding facility.

Period of zero flow: From _____ to _____

Pooling with presence of aquatic life*: _____ Yes _____ No

* In addition to fish, aquatic life includes, but is not limited to, frogs, crayfish, insects, plants and snails.

- Stream "NOT Classified", proceed to page 4 to document location of stream assessed (include photographs—be sure the photos are identified with location and an indication of what is being shown by each photograph).

A written statement of finding and all supporting documentation must be presented to KDHE for review. This statement should include pertinent findings that support the designation being proposed for adoption in the Kansas Surface Water Quality Standard, K.A.R. 28-16-28d.

- Stream Classified, proceed to pages 2 - 5.

EXPEDITED RECREATIONAL USE ATTAINABILITY ANALYSIS

CLASSIFIED STREAMS

If stream is considered classified on page 1, proceed as outlined below. Check applicable boxes. Primary contact recreation use shall be considered existing in streams in which indications of the following uses are evident:

- swimming
- skin diving
- boating
- waterskiing
- mussel harvesting
- windsurfing
- none of the above

- or which were used for this purpose on or after November 28, 1975 (based on interviews with streamside landowners or other knowledgeable individuals or other dated documentation).

In order to protect public health, the primary contact recreation use shall be considered attainable if the stream otherwise meets the criteria for designation set forth in this document. The use will also be assigned to all waters along: (check applicable conditions)

- public parks
- public parkways
- urban streams
- none of the above

and other waters with a high probability of public access: (check applicable conditions)

boat ramps

- nature trails
- camping areas
- playgrounds
- none of the above

Secondary contact recreation - At a minimum, all classified streams shall be designated for this use. It shall be considered existing in streams in which indications of the following uses are evident:

- wading
- trapping
- fishing
- hunting
- none of the above
- or which were used for this purpose on or after November 28, 1975 (based on interviews with streamside landowners or other knowledgeable individuals or other dated documentation).

The secondary contact recreation use shall be considered attainable if:

- the stream meets the criteria for classification set forth in K.A.R. 28-16-28d(b), (See page 23).

Cost effective best management practices for non-point sources are found in Appendix A.

FIELD ASSESSMENT FOR PRIMARY CONTACT RECREATION

- A. Field activities should begin with a visual inspection of the targeted stream at several locations. For most stream segments, a minimum of three (3) stream sites deemed most likely to support primary contact recreation should be selected for further study. Form E-1 should be used to record findings.
- B. Assessment sites should be designated for each UAA and clearly marked on 1:24,000 (7.5 minute series) USGS topographic maps or topographic maps available at: www.topozone.com with a 1:25,000 resolution. When possible, GPS (global positioning system) coordinates should be taken on-site and recorded on field forms.
- C. If access to the stream is to be made on private property, landowner or resident permission should be secured prior to access (K.S.A. 21-3721).
- D. Clearly record findings at each assessment site. The written findings must include the stream assessed, legal location, GPS coordinates if available, stream width and depth, flow estimations, existing uses actually observed, and any other observations of unusual conditions.
- E. A photographic record must be made of sites assessed for the UAA. Photographs should include an upstream view, downstream view, and any photographs required to document observed or potential uses. Photographs should be documented to indicate what is being shown by the photograph.
- F. Whenever possible, streamside or other local landowners or residents should be interviewed regarding present or past uses of the stream and any social benefits of the waterbody. Persons interviewed should be identified by name and legal address in the written assessment.

FINDINGS OF PRIMARY CONTACT RECREATION UAA:

A written statement of finding and all supporting documentation must be presented to KDHE for review. This statement should include pertinent findings that support the designation being proposed for adoption in the Kansas Surface Water Quality Standard, K.A.R. 28-16-28d.

Form E-1

USE ATTAINABILITY ANALYSIS (UAA)
FOR
PRIMARY AND SECONDARY CONTACT RECREATION

Stream or Lake Name: _____ HUC: _____
Basin: _____ Segment: _____

Location (Legal): _____ 1/4 _____ 1/4 Sec. _____ Township _____ Range _____ Quadrangle _____

Evaluators: _____ Date: _____

Site Location Map or attach photographs:

The evaluator is encouraged to add comments and observations which will aid in making decisions about the site.

1. Direct evidence of:

- Primary contact recreation activities? Yes No
- Secondary contact recreation activities? Yes No

If people are observed recreating in the water, or if direct evidence exists of primary and/or secondary contact recreation, then primary and/or secondary contact recreation are considered existing uses. Types of direct evidence might include rope swings, campfire rings, boat ramps or other constructed or evident points of access.

COMMENTS: _____

2. Sufficient water to support primary contact recreation? Yes No

An average depth of at least 0.5 meter or a maximum depth of at least 1.0 meter at base flow conditions is considered minimal for primary contact recreation. Base flow, as defined in K.A.R. 28-16-28b(f), means that portion of a stream's flow contributed by sources of water other than precipitation runoff. This refers to a fair weather flow sustained primarily by springs or groundwater seepage, wastewater discharges, irrigation return flows, releases from reservoirs, or some combination of these factors.

COMMENTS: _____

3. Economic Considerations:

What activities are apparent along the stream that might impact the water quality of the stream segment, i.e. discharges, cropland, grazing activities, etc.?

**PROTOCOL FOR CONDUCTING
USE ATTAINABILITY ANALYSIS (UAA)
FOR
FOOD PROCUREMENT**

**USE ATTAINABILITY ANALYSIS (UAA)
FOR
FOOD PROCUREMENT**

PREPARATION FOR UAA

Review all applicable files, databases and maps in order to become thoroughly familiar with the waterbody to be inspected and to determine what assessment should be accomplished.

The following materials are available from the Kansas Department of Wildlife and Parks (KDWP) and may obviate the need for onsite survey:

- _____ fishery resource maps and designations
- _____ stream survey maps and collection information
- _____ fish collection records from KDWP stream surveys

USE ASSESSMENT PROCEDURES

Classified waters shall be evaluated for recreational uses using the procedures set forth in this section and the criteria for classification set forth in L2001, ch. 100, sec. 1, which describes classified streams as follows:

- _____ 1. Classified streams shall include:
 - _____ A. All streams with a 10-year median flow of equal to or in excess of 1 cubic foot per second (1.0 cfs). Regardless of flow, a stream shall be classified if studies conducted or accepted by the department show that pooling of water during periods of zero flow provides important refuges for aquatic life and permits biological recolonization of intermittently flowing segments and a cost/benefit analysis indicates that the benefits of classifying the stream outweigh the costs of classifying the stream..
 - _____ B. All streams actually inhabited by threatened or endangered aquatic species listed in rules and regulations promulgated by the Kansas Department of Wildlife and Parks or the U.S. Fish and Wildlife Services.
 - _____ C. All streams which are at the point of discharge and downstream from such point where the Department has issued a National Pollutant Discharge Elimination System Permit other than a permit for a confined feeding facility.
- _____ 2. Classified lakes shall be all lakes owned by federal, state, county or municipal authorities and all privately owned lakes that serve as public drinking water supplies or that are open to the general public for primary or secondary contact recreation. (K.A.R. 28-16-28d)
- _____ 3. Classified wetlands shall be all wetlands owned by federal, state, county, or municipal authorities, all privately owned wetlands open to the general public for hunting, trapping or other forms of secondary contact recreation, and all wetlands classified as outstanding national resource waters, exceptional state waters, or designated as special aquatic life waters....". (K.A.R. 28-16-28d)

use shall be considered existing in waterbodies in which there is visual or recorded (e.g., KDWP creel census or fishery survey) evidence of the following activities:

_____ fishing

_____ consumption of turtles, bullfrogs, crayfish, mussels or aquatic macrophytes

_____ waterfowl hunting activities

or which hosted these activities on or after November 28, 1975 (based on interviews with streamside landowners or other knowledgeable individuals or other dated documentation).

Food procurement use shall be considered attainable if:

_____ the waterbody is found to support waterfowl, gamefish or other large fish, panfish, or other edible and legally harvestable aquatic or semiaquatic species.

Cost effective best management practices for non-point sources are found in Appendix A.

FINDINGS OF FOOD PROCUREMENT UAA

A written statement of finding and all supporting documentation must be presented to KDHE for review. This statement shall include pertinent findings that support the designation being proposed for adoption in the Kansas Surface Water Quality Standards, K.A.R. 28-16-28d.

Form E-1

FIELD ASSESSMENT WORKSHEET

USE ATTAINABILITY ANALYSIS (UAA)
FOR
FOOD PROCUREMENT

Waterbody Name: _____ HUC: _____
Basin: _____ Segment: _____

Location (Legal): ____ 1/4 ____ 1/4 Sec. ____ Township. ____ Range ____ Quadrangle ____

Evaluators: _____ Date: _____
Site Location Map or attach photographs:

The evaluator is encouraged to add comments and observations which will aid in making decisions about the site.

1. Direct evidence of:

Food procurement activities? _____ Yes _____ No

For food procurement designation, note any evidence of fishing activities such as fishing lines, bait cans, etc. Indicate findings regarding food procurement in comment section.

COMMENTS: _____

2. Economic Considerations:

What activities are apparent along the stream that might impact the water quality of the stream segment, i.e. discharges, crop land, grazing activities, etc.?

**PROTOCOL FOR CONDUCTING
USE ATTAINABILITY ANALYSIS (UAA)
FOR
WATER SUPPLY USES**

**USE ATTAINABILITY ANALYSIS (UAA)
FOR
WATER SUPPLY USES**

DEFINITIONS

Agricultural water supply is the provision of water for **irrigation or livestock watering**. Irrigation is the withdrawal of surface water for application onto land. Livestock watering is the provision of water to livestock for consumption. Waterbodies in direct contact with alluvial aquifers may be assigned the agricultural water supply use if the alluvial aquifer is utilized for livestock watering or irrigation.

Domestic water supply is the use of surface water, after appropriate treatment, for the production of potable water. Waterbodies in direct contact with alluvial aquifers may be assigned the domestic water supply use if the alluvial aquifer is utilized for potable water.

Industrial water supply uses include cooling water, hydroelectric power generation, or nonfood processing water for commercial or industrial activities. Waterbodies in direct contact with alluvial aquifers may be assigned the industrial water supply use if the aquifer is utilized for the purpose.

Groundwater recharge use is assigned to surface waters that replenish fresh or usable groundwater aquifers. The use involves infiltration, percolation or direct injection of surface waters into underground aquifers.

PREPARATION FOR UAA

Review all applicable files, databases and maps in order to become thoroughly familiar with the waterbody to be inspected and to determine what sampling will be accomplished. Indicate which resources have been reviewed and/or condition satisfied.

- X = resource checked or condition satisfied
O = resource not available or condition not satisfied

The WIMAS (Water Information Management and Analysis System) GIS (Geographic Information System) database shall be consulted to determine the existence of surface or alluvial aquifer groundwater appropriations for the purpose of:

- _____ irrigation use (agricultural water supply)
_____ livestock watering use (agricultural water supply)
_____ production of potable water (domestic water supply use)
_____ industrial water supply
_____ aquifer replenishment (groundwater recharge)

Kansas Department of Health and Environment (KDHE), Bureau of Water (BOW) feedlot records shall be consulted to determine the existence of:

- _____ concentrated animal facilities which might have access to the waterbody for obtaining

drinking water (agricultural water supply)

Public Water Supply Section (KDHE, BOW) records shall be reviewed to determine the existence of surface or alluvial aquifer groundwater appropriations for the purpose of:

- _____ production of potable water (domestic water supply use)
- _____ aquifer replenishment (groundwater recharge)

United States Geological Survey (USGS) topographic maps and aerial photographs (if available) shall be reviewed for the presence of:

- _____ likely areas of small feedlots not required to hold permits (agricultural water supply)
- _____ winter feeding operations (agricultural water supply)
- _____ other likely points of livestock access to the waterbody (agricultural water supply)

For the groundwater recharge use, available geological (USGS, Kansas Geological Survey) information shall also be reviewed to determine:

- _____ presence or absence of alluvial aquifers, seeps or springs in or near the waterbody, and
- _____ whether the waterbody is characterized as a “gaining” or “losing” stream

DOCUMENTATION OF LITERATURE/DATABASE SEARCH

A written summary must identify pertinent findings and source of information.

USE ASSESSMENT PROCEDURES

Assessment sites shall be designated for each UAA and clearly marked on 1:24,000 scale (7.5 minute series) USGS topographic maps (available at: www.topozone.com).

Irrigation - Waterbodies:

_____ currently used for the withdrawal of surface water for application onto land, or
 _____ which were used for this purpose on or after November 28, 1975,
 shall be considered to have irrigation as an existing use. This information is obtained from water rights appropriations filed with the Kansas Division of Water Resources (DWR), onsite visual observation, or interviews with stream side landowners or other knowledgeable individuals.

1. The “domestic use” provision of the Kansas Water Appropriation Act (K.S.A. 82a-701(c), K.S.A. 82a-705, K.S.A. 82a-705a) effectively makes all waters of the state available for household purposes, livestock and domestic animal watering, and irrigation of up to two acres without the need for a formal appropriation right. This provision applies to both surface and groundwater statewide (there are no “closed” waters) subject only to the provisions that the use does not conflict with senior water rights or result in complete cessation of flow in surface streams. Consequently, all classified waterbodies for which available chemical water quality data indicate naturally occurring levels of fluoride averaging less than two times the irrigation criterion, shall be considered to have irrigation as an attainable use.

Surface Water Quality Data (mean)Irrigation Criterion (x2)

Fluoride _____ mg/L

Fluoride 2 mg/L

Note: These data may be available from KDHE's Bureau of Environmental Field Services or may be obtained independently by the evaluator. If the latter alternative is chosen, all water samples must be analyzed by a laboratory certified by KDHE to conduct fluoride analyses (K.S.A.65-171I). Sample collection and analysis shall be accomplished following standard methods described in *Standard Methods for the Examination of Water and Wastewater, 17th Ed.*, 1989 (or later edition), Washington DC: American Public Health Association.

2. Waterbodies in direct contact with alluvial aquifers shall be assigned irrigation as an existing use if:
 - _____ the aquifer is used as an irrigation source, or was used for this purpose on or after November 28, 1975 (based on information obtained from water rights appropriations filed with DWR, onsite visual observation, or interviews with stream side landowners or other knowledgeable individuals).
3. Because of the "domestic use" provision of the Kansas Water Appropriation Act (as explained above), waterbodies in direct contact with alluvial aquifers for which available chemical water quality data indicate naturally occurring levels of fluoride averaging less than two times the irrigation criterion, shall be considered to have irrigation as an attainable use.

Aquifer Water Quality Data (mean)Irrigation Criterion (x2)

Fluoride _____ mg/L

Fluoride 2 mg/L

Note: These data may be available from KDHE's Bureau of Environmental Field Services or may be obtained independently by the evaluator. If the latter alternative is chosen, all water samples must be analyzed by a laboratory certified by KDHE to conduct fluoride analyses (K.S.A 65-171I). Sample collection and analysis shall be accomplished following standard methods described in *Standard Methods for the Examination of Water and Wastewater, 17th Ed.*, 1989 (or later edition), Washington DC: American Public Health Association.

Livestock Watering - The livestock watering use shall be considered existing when:

- _____ indications of such use are evident, or
- _____ the waterbody was used for this purpose on or after November 28, 1975 (based on information obtained from water rights appropriations filed with DWR, onsite visual observation, or interviews with streamside landowners or other knowledgeable individuals).

1. Because of the "domestic use" provision of the Kansas Water Appropriation Act (as explained above), livestock watering shall be considered an attainable use if available chemical water quality data indicate naturally occurring levels of sulfate and fluoride averaging less than two times the livestock watering criteria and the waterbody meets the criteria for classification set forth in L2001, ch. 100, sec. 1, which describes classified streams as follows:

- _____ 1. Classified streams shall include:
- _____ A. All streams with a 10-year median flow of equal to or in excess of 1 cubic foot per second (1.0 cfs). Regardless of flow, a stream shall be classified if studies conducted or accepted by the department show that pooling of water during periods of zero flow provides important refuges for aquatic life and permits biological recolonization of intermittently flowing segments and a cost/benefit analysis indicates that the benefits of classifying the stream outweigh the costs of classifying the stream..
- _____ B. All streams actually inhabited by threatened or endangered aquatic species listed in rules and regulations promulgated by the Kansas Department of Wildlife and Parks or the U.S. Fish and Wildlife Services.
- _____ C. All streams which are at the point of discharge and downstream from such point where the Department has issued a National Pollutant Discharge Elimination System Permit other than a permit for a confined feeding facility.
- _____ 2. Classified lakes shall be all lakes owned by federal, state, county or municipal authorities and all privately owned lakes that serve as public drinking water supplies or that are open to the general public for primary or secondary contact recreation. (K.A.R. 28-16-28d)
- _____ 3. Classified wetlands shall be all wetlands owned by federal, state, county, or municipal authorities, all privately owned wetlands open to the general public for hunting, trapping or other forms of secondary contact recreation, and all wetlands classified as outstanding national resource waters, exceptional state waters, or designated as special aquatic life use waters....". (K.A.R. 28-16-28d)

Surface Water Quality Data (mean)

Sulfate _____ mg/L
 Fluoride _____ mg/L

Livestock Watering Criterion (x2)

Sulfate 2,000 mg/L
 Fluoride 4 mg/L

Note: These data may be available from KDHE's Bureau of Environmental Field Services or may be obtained independently by the evaluator. If the latter alternative is chosen, all water samples must be analyzed by a laboratory certified by KDHE to conduct sulfate and fluoride analyses (K.S.A. 65-171). Sample collection and analysis shall be accomplished following standard methods described in *Standard Methods for the Examination of Water and Wastewater, 17th Ed.*, 1989 (or later edition), Washington DC: American Public Health Association.

2. Classified waterbodies in direct contact with alluvial aquifers shall be assigned livestock watering as an existing use if the aquifer is:
- _____ used as a livestock watering source, or
- _____ was used for this purpose on or after November 28, 1975 (based on information obtained from water rights appropriations filed with DWR, onsite visual observation, or interviews with streamside landowners or other knowledgeable individuals).

3. Because of the “domestic use” provision of the Kansas Water Appropriation Act (as explained above), classified waterbodies in direct contact with alluvial aquifers for which available chemical water quality data indicate naturally occurring levels of sulfate and fluoride averaging less than two times the livestock watering criteria, shall be considered to have livestock watering as an attainable use.

<u>Aquifer Water Quality Data (mean)</u>		<u>Livestock Watering Criterion (x2)</u>	
Sulfate	_____ mg/L	Sulfate	<u>2,000</u> mg/L
Fluoride	_____ mg/L	Fluoride	<u>4</u> mg/L

Note: These data may be available from KDHE’s Bureau of Environmental Field Services or may be obtained independently by the evaluator. If the latter alternative is chosen, all water samples must be analyzed by a laboratory certified by KDHE to conduct sulfate and fluoride analyses (K.S.A.65-171I). Sample collection and analysis shall be accomplished following standard methods described in *Standard Methods for the Examination of Water and Wastewater, 17th Ed.*, 1989 (or later edition), Washington DC: American Public Health Association.

Domestic Water Supply - Waterbodies:

_____ currently used as a direct source of domestic water supply, or
 _____ which were used for this purpose on or after November 28, 1975 (based on information obtained from KDHE’s Public Water Supply Section, water rights appropriations filed with DWR, onsite visual confirmation, or interviews with streamside landowners or other knowledgeable individuals) shall be designated as having an existing domestic water supply use.

1. Because of the “domestic use” provision of the Kansas Water Appropriation Act (as explained above), waterbodies for which available chemical water quality data indicate naturally occurring levels of sulfate, chloride and fluoride averaging less than two times the domestic water supply criteria, shall be considered to have domestic water supply as an attainable use.

<u>Surface Water Quality Data (mean)</u>		<u>Domestic Water Supply Criterion (x2)</u>	
Sulfate	_____ mg/L	Sulfate	<u>500</u> mg/L
Chloride	_____ mg/L	Chloride	<u>500</u> mg/L
Fluoride	_____ mg/L	Fluoride	<u>4</u> mg/L

Note: These data may be available from KDHE’s, Bureau of Environmental Field Services, or may be obtained independently by the evaluator. If the latter alternative is chosen, all water samples must be analyzed by a laboratory certified by KDHE to conduct sulfate, chloride and fluoride analyses (K.S.A.65-171I). Sample collection and analysis shall be accomplished following standard methods described in *Standard Methods for the Examination of Water and Wastewater, 17th Ed.*, 1989 (or later edition), Washington DC: American Public Health Association

2. Waterbodies in direct contact with alluvial aquifers shall be assigned domestic water supply as an existing use if the aquifer:
 - _____ is used as a domestic water supply source, or
 - _____ was used for this purpose on or after November 28, 1975, (based on information obtained from KDHE Bureau of Water, Public Water Supply Section, water rights appropriations filed with DWR, onsite visual observation, or interviews with streamside landowners or other knowledgeable individuals).

3. Because of the “domestic use” provision of the Kansas Water Appropriation Act (as explained above), waterbodies in direct contact with alluvial aquifers for which available chemical water quality data indicate naturally occurring levels of sulfate, chloride and fluoride averaging less than two times the domestic water supply criteria, shall be considered to have domestic water supply as an attainable use.

<u>Aquifer Water Quality Data (mean)</u>			<u>Domestic Water Supply Criterion (x2)</u>		
Sulfate	_____	mg/L	Sulfate	<u>500</u>	mg/L
Chloride	_____	mg/L	Chloride	<u>500</u>	mg/L
Fluoride	_____	mg/L	Fluoride	<u>4</u>	mg/L

Note: These data may be available from KDHE’s Bureau of Environmental Field Services or may be obtained independently by the evaluator. If the latter alternative is chosen, all water samples must be analyzed by a laboratory certified by KDHE to conduct sulfate, chloride and fluoride analyses (K.S.A.65-1711). Sample collection and analysis shall be accomplished following standard methods described in *Standard Methods for the Examination of Water and Wastewater, 17th Ed.*, 1989 (or later edition), Washington DC: American Public Health Association.

Industrial Water Supply - Waterbodies where existing uses include:

_____ cooling water,
 _____ hydroelectric power generation, or
 _____ non-food processing water for commercial or industrial activities,
 or which were used for this purpose on or after November 28, 1975 shall be assigned industrial water supply as an existing use. This information is obtained from water rights appropriations filed with DWR or from onsite visual confirmation.

1. Classified waterbodies not currently used for the purpose of industrial water supply, but which:
 - _____ would be considered for appropriation for this purpose by DWR,
 - _____ shall be considered to have industrial water supply as an attainable use.

2. Waterbodies in direct contact with alluvial aquifers shall be assigned industrial water supply as an existing use if the aquifer:
 - _____ is used as an industrial water supply source, or
 - _____ was used for this purpose on or after November 28, 1975 (based on information obtained from water rights appropriations filed with DWR or onsite visual observation).

3. Classified surface waters in contact with alluvial aquifers not currently used for this purpose, but which:
 _____ would be considered for appropriation for this purpose by DWR,
 shall be considered to have industrial water supply as an attainable use.

Groundwater Recharge - The groundwater recharge use shall be considered existing when:
 _____ sand,
 _____ gravel,
 _____ fractured bedrock, or
 _____ other unconsolidated substrates are present, or
 _____ when springs or seeps occur in or near the streambed, or
 _____ if the waterbody is characterized a "losing" stream based on information obtained from
 _____ KGS, USGS, or onsite visual observation, or
 _____ the waterbody is utilized for injection for aquifer replenishment.

FIELD ASSESSMENT FOR WATER SUPPLY USES

Because of water appropriation and other available information, field assessments are usually not needed to determine the water supply use designation. However, in the event a field assessment for water supply uses is needed, the length of the stream segment should be observed for the presence of livestock access, surface diversions, or wells constructed within the alluvial aquifer zone. It may be necessary to interview landowners or tenants along the stream segment to determine any water supply uses made of the surface water or alluvial aquifer.

FINDINGS OF WATER SUPPLY USE

A written statement of finding and all supporting documentation must be presented to KDHE for review

This statement should include all pertinent findings that support the designation being proposed for adoption in the Kansas Surface Water Quality Standards, (K.A.R. 28-16-28d).

APPENDIX A

COST-EFFECTIVE BEST MANAGEMENT PRACTICES
FOR
NON-POINT SOURCES

Extracted from Appendix I
Kansas Non-point Source Management Plan
2000 Update

2-66

Table I - 2 Kansas Water Quality Protection Measures for Nonpoint Pollutant Sources

ID	Source & Pollutant	Water Quality Protection Expectation	Authority and/or Guidance
ID: See Table I-1		<p>R:Recommended water quality protection measure M:Mandatory water quality protection measure, based on federal, state, or local rule or regulation</p>	
	Nonpoint Pollutant Sources	<p>Definition: Any pollutant sources not required to have a National Pollutant Discharge Elimination System (NPDES) permit.</p>	K.A.R. 28-16-28b(kk)
		<p>Discharges from nonpoint pollutant sources shall not cause a violation of Kansas Water Quality Standards</p>	K.A.R 28-16-28b-f
		<p>All Kansas water resources are assumed to be threatened by nonpoint pollutant sources unless all nonpoint pollutant sources are using the minimum recommended water quality protection - water pollution control measures described herein. On a voluntary basis, landowners should utilize applicable best management practices (BMPs) to minimize storm water runoff from various land use activities including: domestic lawn care, agriculture, industrial use, and construction.</p>	
		<p>Take advantage of, and maintain, all existing and naturally occurring features of the watershed including permanently vegetated riparian areas, wetlands and ponds which contribute to the protection of water quality. Maintain and restore existing hydrology and streambed geomorphology.</p>	<p><i>Local Planning Guide for Wetland and Riparian Areas in Kansas</i>, Kansas Water Office, 1993</p> <p><i>Kansas Forest Stewardship Plan 2000-2005</i>, Kansas Forest Service, February 14, 2001.</p>
40,	Business,	<p>R: Develop and implement water quality protection plan pursuant to</p>	<p><i>Kansas Local Government Water -</i></p>

Table I - 2 Kansas Water Quality Protection Measures for Nonpoint Pollutant Sources

ID	Source & Pollutant	Water Quality Protection Expectation	Authority and/or Guidance
ID: See Table I-1		R: Recommended water quality protection measure M: Mandatory water quality protection measure, based on federal, state, or local rule or regulation	
45, 47	Commercial, Industrial and Institutional Sites	guidelines set out by Kansas Nonpoint Source Pollution Control Principles and Practices M: 11 industrial categories subject to NPDES permit requirements	<i>Quality Planning Guide</i> , K-State Research and Extension, November, 1999. <i>Storm Waer Managment for Industrial Activities</i> EPA 832-R-92-006, September, 1992
10	Agricultural Land in General	R: Apply resource management systems which provide for sustainable use and sound management of soil, air, plant and animal resources.	<i>NRCS Field Office Technical Guide</i> , Natural Resources Conservation Service
11, 12,	Cropland	R: Use residue preserving tillage, practice crop rotation, use contour tillage and terraces, maintain buffers along field edges and streams, use nutrient management plans to limit nutrient runoff and leaching.	<i>Kansas Catalog of Nonpoint Source Pollution Control Practices: Agricultural Land</i> K-State Research and Extension, MS-8-95, August, 1995
14, 15	Range/Pasture Land	R: Develop and follow a grazing management plan designed to provide sustained forage production, avoid overgrazing, practice management intensive grazing, manage livestock watering points to minimize water quality impacts.	<i>Managing Kansas Grazinglands for Water Quality</i> , K-State Research and Extension, MF-2086, March, 1995

Table I - 2 Kansas Water Quality Protection Measures for Nonpoint Pollutant Sources

ID	Source & Pollutant	Water Quality Protection Expectation	Authority and/or Guidance
ID: See Table I-1		<p>R:Recommended water quality protection measure M:Mandatory water quality protection measure, based on federal, state, or local rule or regulation</p>	
70	Riparian	<p>R: Riparian areas should have a permanently vegetated buffer of grass or trees at least 66 feet wide.</p>	<p><i>Wetland and Riparian Areas Program Best Management Practices for Kansas</i>, KSU Extension Forestry, KDWP, 1995</p> <p><i>Kansas River and Stream Corridor Management Guide</i> Kansas State Conservation Commission</p>
	Wheat	<p>R: Crop Rotation, Match Inputs to Growth Stage & Yield Goal, Promote Root Health, Break the Green Bridge, Use Certified Seed</p>	<p><i>Best Management Practices for Wheat</i>, National Association of Wheat Growers Foundation, 1995</p>
	Total Suspended Solids	<p>R: Apply measures to reduce soil erosion losses from the field. Uplands - annual erosion rate does not exceed tolerable soil erosion rate. Bottom land - annual erosion does not exceed tolerable erosion rate and runoff is discharged through edge of field buffer strip or filter, healthy riparian area, detention basin or wetland.</p>	<p><i>Kansas No-till Handbook</i>, K-State Research & Extension, S-126, November, 1999</p>
	Nitrogen	<p>See <i>Nutrient Application</i></p>	
	Pesticides	<p>M: Apply pesticides according to directions on the product label. R: Where feasible avoid or reduce use, band herbicides at planting or cultivation, use integrated pest management strategies, incorporate</p>	<p>K.S.A 2-2438 and 2-2472, <i>Managing to Minimize Atrazine Runoff</i> - K-State Research & Extension, MF 2208,</p>

Table I - 2 Kansas Water Quality Protection Measures for Nonpoint Pollutant Sources

ID	Source & Pollutant	Water Quality Protection Expectation	Authority and/or Guidance
ID: See Table I-1		<p>R:Recommended water quality protection measure M:Mandatory water quality protection measure, based on federal, state, or local rule or regulation</p>	
		<p>when feasible, maintain or establish vegetative edge of field buffer areas and practice soil conservation. For transportation and storage recommendations, See <i>Nutrient Application, Transportation, & Storage</i>.</p>	<p>February, 2000. <i>Kansas Grower's Guide to Best Management Practices</i>, Kansas Corn Growers Association, January, 2000</p>
	Phosphorous	See <i>Cropland Total Suspended Solids and Nutrient Application</i>	
19.1	Farmsteads	<p>R: All farmsteads should develop and implement a water quality protection plan using the principles set out by Kansas Farm*A*Syst. M: House hold wastewater , see On-site Wastewater</p>	<p><i>Kansas Farm*A*Syst</i> KSU Cooperative Extension, 2000</p>
	Homesites, rural non-farm	<p>R: All homesites (rural and urban) develop and implement a water quality protection plan based on the principles set out by Kansas Home*A*Syst. M: Household wastewater , see On-site Wastewater</p>	<p><i>Kansas Home*A*Syst</i> KSU Cooperative Extension, 1999</p>
Hydrologic Modification			
71, 72, 73	Channel modification & filling	<p>M: Comply with terms and conditions of permits issued by US Army Corps of Engineers and KS Dept of Agriculture- Division of Water Resources and water quality certification issued by KS Dept of Health and Environment. R: Maintain or restore stream hydrology in land use planning.</p>	<p>US Army Corps of Engineers, CWA Section 401, CWA Section 404 KS Dept of Ag - DWR; KSA 82a 301-305a KDHE; KAR 28-16-28f(c)(1) <i>Kansas Water Quality Practices: Guidelines for Preparing a Project Water Quality Protection Plan</i> KDHE,</p>

Table I - 2 Kansas Water Quality Protection Measures for Nonpoint Pollutant Sources

ID	Source & Pollutant	Water Quality Protection Expectation	Authority and/or Guidance
ID: See Table I-1		<p>R:Recommended water quality protection measure M:Mandatory water quality protection measure, based on federal, state, or local rule or regulation</p>	
June, 2000			
Construction Sites			
30, 31, 32	Construction Activities greater than 5 acres	M: Have NPDES permit and storm water pollution prevention plan approved by KDHE. Install soil erosion and sediment control measures prior to construction and maintain through the life of the project.	KDHE Bureau of Water, Industrial Programs, KAR 28-16 <i>Storm Water Managment for Construction Activites</i> , EPA 832-R-92-005, September 1992
30, 31, 32	Construction activities less than 5 acres	R: Develop and implement a nonpoint source construction site water quality protection plan developed pursuant to Kansas Nonpoint Source Pollution Control Principles and Practices. KDHE is currently accepting Notices of Intent (NOI) for construction activities on sites greater than 1 acre.	Until EPA phase II stormwater rules are promulgated after which construction sites one acre and greater must have NDPEs permit.
Livestock Production and Animal Keeping			

Table I - 2 Kansas Water Quality Protection Measures for Nonpoint Pollutant Sources

ID	Source & Pollutant	Water Quality Protection Expectation	Authority and/or Guidance
ID: See Table I-1		R:Recommended water quality protection measure M:Mandatory water quality protection measure, based on federal, state, or local rule or regulation	KSA 65-171d KAR 28-18-1
Dog Farms	<p>M/R: If determined to have significant pollution potential, comply with provisions of KDHE rules and regulations. Otherwise develop and follow a water quality protection plan designed to minimize discharge of pollutants to waters of the state.</p>	<p>Sand Springs Aquifer Protection Project, Dickinson County is working with National Grey Hound Association to develop water quality protection guidelines.</p>	

Table I - 2 Kansas Water Quality Protection Measures for Nonpoint Pollutant Sources

ID	Source & Pollutant	Water Quality Protection Expectation	Authority and/or Guidance
ID: See Table I-1		<p>R:Recommended water quality protection measure M:Mandatory water quality protection measure, based on federal, state, or local rule or regulation</p>	
Nutrient Application, Transport & Storage			
	Application	<p>R: Apply nutrients, including animal manures and wastewater treatment biosolids at rates designed to meet actual crop needs necessary to achieve yield goals based on 10 percent more than the 5 year average yield.</p> <ol style="list-style-type: none"> 2. Calibrate application equipment at least annually 3. Practice annual soil testing, determine yield variations with individual fields and apply nutrients accordingly. 4. Minimize use of broadcast application. 5. Determine and maintain nutrient budgets. 	KSU Cooperative Extension
	Transport	<p>M: Immediately report all spills to the KDHE Spills Hotline at (785) 296-1679.</p>	<p>KSA 65-171d KAR 28-16-27</p>

Table I - 2 Kansas Water Quality Protection Measures for Nonpoint Pollutant Sources

ID	Source & Pollutant	Water Quality Protection Expectation	Authority and/or Guidance
ID: See Table I-1		<p>R:Recommended water quality protection measure M:Mandatory water quality protection measure, based on federal, state, or local rule or regulation</p>	
		<p>R: Minimize chances of spills occurring during transportation.</p> <ol style="list-style-type: none"> 6. Maintain transportation equipment (especially tires) to minimize equipment failure. 7. Store equipment in secure location to avoid vandalism. 8. Drive defensively 9. Avoid water supply protection areas wherever possible 10. Know the location of water supply diversion points and phone number of contacts. 	
	Storage, noncommercial	<p>R: Follow Kansas Department of Agriculture rules and regulations for commercial sites.</p> <ol style="list-style-type: none"> 18. Store chemicals in a secure location, at least 100 feet from a well or flood plain. 19. Develop and maintain a spill containment and recovery plan. 20. Keep accurate records of chemical and quantities stored. 	
47.01	Commercial Storage, Mixing - Blending and Distribution Sites	<p>M: Comply with rules and regulations of the Kansas Department of Agriculture (KDA) adopted pursuant to KSA 2-1227. KDA is authorized to adopt rules and regulations for the safe handling and storage of commercial fertilizers; establishment of minimum standards covering design, construction, location, installation and operation and prevention of discharge of fertilizer materials in to</p>	<p>KSA 2-1226 KAR 4-4-900 to 984</p>

Table I - 2 Kansas Water Quality Protection Measures for Nonpoint Pollutant Sources

ID	Source & Pollutant	Water Quality Protection Expectation	Authority and/or Guidance
ID: See Table I-1		<p>R:Recommended water quality protection measure M:Mandatory water quality protection measure, based on federal, state, or local rule or regulation</p>	
		ground or surface waters of the state, containment of spills and prompt recovery of spilled materials.	
	On-site Wastewater	M: All on-site wastewater treatment systems (septic tank/lateral fields, lagoons) shall be designed and operated to assure no-discharge to the surface and groundwater quality is maintained.	KAR 28-5-6; KDHE Bulletin 4-2; March 1997 - <i>Minimum Standards of Design and Construction of On-site Wastewater Systems</i> and applicable local codes in 100 counties.
	Domestic Pet Waste	R: Collect and dispose of pet waste to prevent contamination of storm water runoff.	
40	Urban Land	<p>M: Apply pesticides to lawns, gardens, ornamental plants and buildings according to directions on product labels.</p> <p>R: Conduct soil tests to determine amount of lawn fertilizers to be applied. Limit impervious areas in new and existing developments. Utilize storm water pollution control structures in new and existing development.</p>	<p><i>Stormwater Strategies - Community Responses to Runoff Pollution</i>, Natural Resources Defense Council, May, 1999.</p> <p><i>Building Clean Water Communities</i>, KDHE, March 25, 1998.</p>
Recreation Areas			
46	Golf Courses	R: Develop and implement a written water quality protection plan for the golf course property and activities practiced on the golf course.	<p><i>An Environmental Approach to Golf Course Development</i> - American Society of Golf Course Architects, 1999</p>

Table I - 2 Kansas Water Quality Protection Measures for Nonpoint Pollutant Sources

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ID: See Table I-1		R:Recommended water quality protection measure M:Mandatory water quality protection measure, based on federal, state, or local rule or regulation	
Transportation Systems and Facilities			
83	Roads & Highways	R: Maintain vegetation along roadsides to filter runoff and slow erosion. Minimize road width (impervious areas) in new development.	
	Construction	See <i>Construction Sites</i>	
	Runoff	R: Utilize storm water pollution control measures where applicable.	
	Maintenance	R: Conduct vehicle maintenance over impervious surfaces with appropriate collection structures.	
83.12	Deicing	R: Store deicing materials in a covered location to avoid contact with storm water.	
84	Spills	M: Immediately report all spills to the KDHE Spills Hotline at (785) 296-1679.	KSA 65-171d KAR 28-16-27
83.2	Rail Roads	R: Develop water pollution prevention plans to protect adjacent water resources.	
Utility Corridor			
87	Pipelines	M: Provide for monitoring/leak detection for pipelines.	Kansas Corporation Commission

Table I - 2 Kansas Water Quality Protection Measures for Nonpoint Pollutant Sources

ID	Source & Pollutant	Water Quality Protection Expectation	Authority and/or Guidance
ID: See Table I-1		R:Recommended water quality protection measure M:Mandatory water quality protection measure, based on federal, state, or local rule or regulation	
			KSA 55-501
87	Utility Lines	M: Immediately report all spills to the KDHE Spills Hotline at (785) 296-1679.	KSA 65-171d KAR 28-16-27
Water Supply Source Water Areas			
			<i>Kansas Local Government Water - Quality Planning Guide</i> , K-State Research and Extension, November, 1999.
			<i>Kansas Source Water Assessment Program Plan</i> , KDHE, February, 2001
	Groundwater	R: Develop and implement a wellhead protection plan in accordance with the principles and practices set out by the Kansas Wellhead Protection pan and the Kansas Source Water Assessment Program Plan	Safe Drinking Water Act, Section 1428 <i>Kansas Wellhead Protection Program</i> KDHE June 28, 1996
	Surface Water	R: Develop and implement a watershed management plan in accordance with principles and practices set out by Kansas Source Water Assessment Program Plan and Kansas Watershed Protection Planning Principles and Practices.	Safe Drinking Water Act, Section 1453

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ID: See Table I-1		R:Recommended water quality protection measure M:Mandatory water quality protection measure, based on federal, state, or local rule or regulation	
Brownfields & Abandoned Sites			
88.1	Abandoned Water Wells	M: Plug in accordance with specifications set out by Kansas rules and regulations.	KSA 82a 1201 KAR 28-30-1

Listing of Classified Streams:
Designated Recreational Use Status
Use Attainability Analysis Status

This listing developed in compliance with Sub. Senate Bill 204, Section 4(a).

October 12, 2001

prepared by

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Preface

The Kansas Department of Health and Environment is responsible for designating uses of surface waters as a part of establishing surface water quality standards. Designated uses are listed in the *Kansas Surface Water Register* and adopted by reference in regulation (K.A.R. 28-16-28d). A use attainability analysis (UAA) is a procedure to evaluate water bodies and assign designated uses. The federal regulations (40 CFR 131.10) allow a State to designate a use without conducting a UAA, but a UAA must be conducted to remove a designated use. The 1999 *Kansas Surface Water Register* listed 1,292 stream segments for which the Department had not conducted a UAA and had not assigned a recreational use. Some recreational uses defined in prior surface water quality standards (dating to the 1970's) were included in the 1999 *Register* without a UAA.

In compliance with Substitute Senate Bill 204 enacted by the 2001 Legislature, the Department is to make public a listing of currently classified stream segments for which:

- designated use attainability analyses for recreational use has been completed;
- recreational use has been determined not attainable;
- designated use attainability analyses for recreational use has not been completed.

No UAAs have been completed for secondary contact recreation as defined in Substitute Senate Bill 204. For the purposes of this listing, the term "been completed" means that the use has been adopted in state regulation and approved by U.S. EPA.

Explanation of notations used in the listing:

- Primary Contact Recreation (PCR)—X indicates the primary contact recreation use has been adopted in state regulation and approved by U.S. EPA;
- PCR Not Attainable—0 indicates the primary contact recreation use is not attainable and that status has been adopted in state regulation and approved by U.S. EPA;
- UAA Completed—X indicates a review of the segment is documented which supports the recreational use status indicated;
- UAA Not Completed—X indicates no documented review of the segment,
—2001 indicates the field work was completed in 2001, but findings have not been adopted in regulation.

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

CIMARRON RIVER BASIN		Segment	Primary Contact	Primary Contact not attainable	UAAs completed	UAAs not completed
STREAM SEGMENT NAME	HUC8					
SUBBASIN: UPPER CIMARRON (HUC 11040002)						
Cimarron R	11040002	1		0	X	
SUBBASIN: NORTH FORK CIMARRON (HUC 11040003)						
Cimarron R, N Fk	11040003	1		0	X	
Cimarron R, N Fk	11040003	2		0	X	
Cimarron R, N Fk	11040003	4		0	X	
Unnamed Stream	11040003	3		0	X	
SUBBASIN: SAND ARROYO (HUC 11040004)						
Sand Arroyo Cr	11040004	1		0	X	
SUBBASIN: BEAR (HUC 11040005)						
Bear Cr	11040005	1		0	X	
Bear Cr	11040005	11		0	X	
Bear Cr	11040005	9		0	X	
Bear Cr	11040005	6		0	X	
Bear Cr, North	11040005	8		0	X	
Beaty Cr	11040005	10		0	X	
Buffalo Cr	11040005	5		0	X	
Dry Cr	11040005	7		0	X	
Little Bear Cr	11040005	2		0	X	
Wolf Cr	11040005					
SUBBASIN: UPPER CIMARRON-LIBERAL (11040006)						
Cimarron R	11040006	1	X		X	
Cimarron R	11040006	2	X			X
SUBBASIN: CROOKED CREEK (HUC 11040007)						
Crooked Cr	11040007	1		0	X	
Crooked Cr	11040007	2		0	X	
Remuda Cr	11040007	4			X	2001
Spring Cr	11040007	3	X		X	
Stumpie Arroyo	11040007	1247		0	X	
Unnamed Stream	11040007	1180		0	X	

HUC=Hydrological Unit Code
 -- Useability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

CIMARRON RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: CROOKED CREEK (HUC 11040007)						
Unnamed Stream	11040007	1253		O		X
Unnamed Stream	11040007	1259		O		X
SUBBASIN: UPPER CIMARRON-BLUFF (HUC 11040008)						
Antelope Cr	11040008	16				2001
Bear Cr	11040008	18				2001
Big Sandy Cr	11040008	6				X
Big Sandy Cr	11040008	7				2001
Big Sandy Cr	11040008	9			X	
Bluff Cr	11040008	13	X			X
Bluff Cr	11040008	2	X			2001
Bullard Cr	11040008	10			X	
Cavalry Cr	11040008	3	X			X
Cimarron R	11040008	1	X			X
Cimarron R	11040008	11	X			X
Cimarron R	11040008	5	X			2001
Cimarron R	11040008	20				2001
Day Cr	11040008	25				2001
Gyp Cr	11040008	14				2001
Indian Cr	11040008	8				2001
Kiger Cr	11040008	12				
Kiowa Cr	11040008	1182		O		X
Kiowa Cr, Middle	11040008	1180		O		X
Kiowa Cr, West	11040008	652				2001
Little Sandy Cr	11040008	21				2001
Snake Cr	11040008	17				X
Stink Cr	11040008	19				X
Trout Cr	11040008	15				2001
Twomile Cr	11040008	1173		O		X
Wiggins Cr	11040008					

HUC=Hydrological Unit Code

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

CIMARRON RIVER BASIN					
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u> <u>UAAs not completed</u>

SUBBASIN: LOWER CIMARRON-EAGLE CHIEF (HUC 11050001)					X
Anderson Cr	11050001	39			X
Keno Cr	11050001	22			2001
West Cr	11050001	24			

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

KANSAS/LOWER REPUBLICAN RIVER BASIN

<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: MIDDLE REPUBLICAN (HUC 10250016)						2001
Advent Cr	10250016	64				2001
Antelope Cr	10250016	66				2001
Ash Cr	10250016	65				2001
Ayres Cr	10250016	70				2001
Bean Cr	10250016	76				2001
Big Timber Cr	10250016	1301				X
Buffalo Cr	10250016	59	X			2001
Burr Oak Cr	10250016	48				2001
Calumet Cr	10250016	54				X
Cedar Cr	10250016	63				2001
Cora Cr	10250016	51				2001
Crosby Cr	10250016	77				2001
Crow Cr	10250016	52				2001
Dry Cr	10250016	80				2001
Forsha Cr	10250016	86				2001
Korb Cr	10250016	72				2001
Lohff Cr	10250016	56				2001
Long Branch	10250016	68				2001
Lost Cr	10250016	53				2001
Louisa Cr	10250016	61				2001
Norway Cr	10250016	73				2001
Oak Cr	10250016	75				2001
Otter Cr	10250016	79				2001
Rankin Cr	10250016	69				2001
Rebecca Cr	10250016	39				X
Republican R	10250016	1	X			X
Republican R	10250016	2	X			2001
Rock Cr	10250016	57				

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

KANSAS/LOWER REPUBLICAN RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: MIDDLE REPUBLICAN (HUC 10250016)

Spring Cr	10250016	71				2001
Spring Cr	10250016	78				2001
State Cr	10250016	62				X
Taylor Cr	10250016	74				2001
Walnut Cr	10250016	40				2001
Walnut Cr	10250016	46			X	
White Rock Cr	10250016	41	X			X
White Rock Cr	10250016	45	X			X
White Rock Cr	10250016	47	X			X
White Rock Cr	10250016	49	X			X
White Rock Cr	10250016	50	X			2001
White Rock Cr, N Br	10250016	60				2001
Wolf Cr	10250016	67				

SUBBASIN: LOWER REPUBLICAN (HUC 10250017)

Beaver Cr	10250017	45				2001
Beaver Cr	10250017	61				2001
Buffalo Cr	10250017	29				2001
Buffalo Cr	10250017	37	X			2001
Buffalo Cr, East	10250017	68				2001
Cheyenne Cr	10250017	55				2001
Coal Cr	10250017	47				2001
Cool Cr	10250017	50				2001
Dry Cr	10250017	1369				2001
Dry Cr	10250017	43				2001
East Cr	10250017	21			X	
Elk Cr	10250017	14	X			X
Elk Cr	10250017	15	X			2001
Elk Cr, W Fk	10250017	16				

HUC=Hydrological Unit Code
 ... Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

KANSAS/LOWER REPUBLICAN RIVER BASIN					
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u> / <u>UAAs not completed</u>

SUBBASIN: LOWER REPUBLICAN (HUC 10250017)					
Elm Cr	10250017	39	X		X / 2001
Elm Cr, E Br	10250017	62			2001
Elm Cr, W Br	10250017	59			2001
Finney Cr	10250017	64			2001
Five Cr	10250017	413			X / 2001
Fourmile Cr	10250017	67	X		2001
Hay Cr	10250017	49			2001
Huntress Cr	10250017	9354			2001
Lincoln Cr	10250017	65			2001
Lost Cr	10250017	57			2001
Marsh Cr	10250017	35			2001
Marsh Cr, West	10250017	36			2001
Marsh Cr, East	10250017	42			2001
Millers Cr	10250017	40			2001
Mud Cr	10250017	63			2001
Oak Cr	10250017	48			2001
Oak Cr	10250017	58			X / 2001
Otter Cr	10250017	66	X		2001
Parsons Cr	10250017	12			2001
Peats Cr	10250017	10			2001
Plum Cr	10250017	60			X / 2001
Republican R	10250017	1	X		X
Republican R	10250017	11	X		X
Republican R	10250017	13	X		X
Republican R	10250017	17	X		X
Republican R	10250017	18	X		X
Republican R	10250017	26	X		X
Republican R	10250017	27	X		X

HUC=Hydrological Unit Code
 ... The Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
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SUBBASIN: LOWER REPUBLICAN (HUC 10250017)

Republican R	10250017	28	X		X	X
Republican R	10250017	8	X			X
Republican R	10250017	9	X			2001
Riley Cr	10250017	24				X
Rush Cr	10250017	1477				X
Salt Cr	10250017	19	X			X
Salt Cr	10250017	20	X		X	
Salt Cr	10250017	22	X			X
Salt Cr	10250017	23	X			X
Salt Cr	10250017	30	X			X
Salt Cr	10250017	34	X			2001
Salt Cr, West	10250017	25				2001
Spring Cr	10250017	1354				2001
Spring Cr	10250017	44				2001
Spring Cr	10250017	53			X	
Timber Cr	10250017	6	X			2001
Turkey Cr	10250017	51				2001
Upton Cr	10250017	52				2001
Whites Cr	10250017	54			X	
Wolf Cr	10250017	38	X			2001
Wolf Cr, W Br	10250017	56				

SUBBASIN: UPPER KANSAS (HUC 10270101)

Clarks Cr	10270101	8	X		X	X
Clarks Cr	10270101	9	X			2001
Davis Cr	10270101	18				2001
Dry Cr	10270101	19				2001
Humbolt Cr	10270101	10			X	
Kansas R	10270101	1	X			

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

KANSAS/LOWER REPUBLICAN RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: UPPER KANSAS (HUC 10270101)						
Kansas R	10270101	3	X			X
Kansas R	10270101	4	X			X
Kansas R	10270101	6	X			X
Kansas R	10270101	7	X			2001
Kitten Cr	10270101	14				X
Little Arkansas Cr	10270101	13				2001
Little Kitten Cr	10270101	16			X	
McDowell Cr	10270101	11	X			2001
Mulberry Cr	10270101	20				2001
Ralls Cr	10270101	21				2001
Sevenmile Cr	10270101	5				X
Silver Cr	10270101	12	X			2001
Swede Cr	10270101	17			X	
Threemile Cr	10270101	15	X		X	
Wildcat Cr	10270101	2	X			
SUBBASIN: MIDDLE KANSAS (HUC 10270102)						
Adams Cr	10270102	53			X	X
Antelope Cr	10270102	67	X			X
Bartlett Cr	10270102	55				X
Big Elm Cr	10270102	90				X
Blackjack Cr	10270102	64				X
Blacksmith Cr	10270102	102				X
Bourbonais Cr	10270102	63				X
Brush Cr	10270102	57				X
Coal Cr	10270102	46				X
Coryell Cr	10270102	94				X
Cow Cr	10270102	45			X	
Cross Cr	10270102	12	X			

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

KANSAS/LOWER REPUBLICAN RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: MIDDLE KANSAS (HUC 10270102)						
Crow Cr	10270102	86				X
Darnells Cr	10270102	51				X
Deep Cr	10270102	1229			X	
Deep Cr	10270102	26	X			X
Deep Cr, E Br	10270102	72	X		X	
Deer Cr	10270102	41	X			X
Dog Cr	10270102	78				X
Doyle Cr	10270102	69				X
Dry Cr	10270102	79				X
Dutch Cr	10270102	92				X
Elm Cr	10270102	103				X
Elm Cr	10270102	98				X
Elm Slough	10270102	58				X
Emmons Cr	10270102	66				X
French Cr	10270102	19				X
Gilson Cr	10270102	47				X
Halfday Cr	10270102	97	X			X
Hendricks Cr	10270102	73				X
Hise Cr	10270102	43				X
Illinois Cr	10270102	30	X			X
Illinois Cr	10270102	62	X		X	
Indian Cr	10270102	1365		O		X
Indian Cr	10270102	20				X
James Cr	10270102	87				X
Jim Cr	10270102	52				X
Johnson Cr	10270102	84				X
Kansas R	10270102	1	X			X
Kansas R	10270102	10	X			X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

KANSAS/LOWER REPUBLICAN RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: MIDDLE KANSAS (HUC 10270102)						
Kansas R	10270102	11	X			X
Kansas R	10270102	13	X			X
Kansas R	10270102	14	X			X
Kansas R	10270102	24	X			X
Kansas R	10270102	25	X			X
Kansas R	10270102	3	X			X
Kansas R	10270102	4	X			X
Kuenzli Cr	10270102	82				X
Little Cross Cr	10270102	61				X
Little Muddy Cr	10270102	99				X
Little Soldier Cr	10270102	6	X			X
Little Soldier Cr	10270102	7	X			X
Loire Cr	10270102	80				X
Lost Cr	10270102	60				X
Messhoss Cr	10270102	96			X	
Mill Cr	10270102	27	X			X
Mill Cr, E Br	10270102	31	X			X
Mill Cr, E Br	10270102	33	X			X
Mill Cr, S Br	10270102	32	X			X
Mill Cr, W Br	10270102	28	X			X
Mill Cr, W Br	10270102	29	X			X
Mission Cr	10270102	34	X		X	
Mission Cr	10270102	36	X			X
Mission Cr	10270102	37	X			X
Mission Cr, N Br	10270102	83	X			X
Mission Cr, S Br	10270102	38	X			X
Mud Cr	10270102	44				X
Mud Cr	10270102	56				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

KANSAS/LOWER REPUBLICAN RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: MIDDLE KANSAS (HUC 10270102)						
Muddy Cr	10270102	2	X		X	X
Muddy Cr, W Fk	10270102	93				X
Mulberry Cr	10270102	42				X
Mulberry Cr	10270102	77				X
Nehring Cr	10270102	81				X
Paw Paw Cr	10270102	75				X
Pleasant Hill Run	10270102	23				X
Pomeroy Cr	10270102	59				X
Post Cr	10270102	101				X
Pretty Cr	10270102	74				X
Riley Cr	10270102	1223				X
Rock Cr	10270102	21				X
Rock Cr, E Fk	10270102	22				X
Ross Cr	10270102	35				X
Salt Cr	10270102	88				X
Sand Cr	10270102	65				X
Shunganunga Cr	10270102	39	X			
Shunganunga Cr	10270102	40	X		X	
Shunganunga Cr, S Br	10270102	106				X
Snake Cr	10270102	95				X
Snokomo Cr	10270102	85			X	
Soldier Cr	10270102	5	X			X
Soldier Cr	10270102	9	X			X
Spring Cr	10270102	105				X
Spring Cr	10270102	48				X
Spring Cr	10270102	54				X
Spring Cr	10270102	76				X
Stinson Cr	10270102	394		0	X	

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

KANSAS/LOWER REPUBLICAN RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: MIDDLE KANSAS (HUC 10270102)						X
Sullivan Cr	10270102	89				X
Tecumseh Cr	10270102	107				X
Turkey Cr	10270102	71			X	
Unnamed Stream	10270102	1367		O	X	
Unnamed Stream	10270102	1389		O	X	
Unnamed Stream	10270102	693	X			X
Unnamed Stream	10270102	8				X
Vassar Cr	10270102	100				X
Vermillion Cr	10270102	15				X
Vermillion Cr	10270102	16	X			X
Vermillion Cr	10270102	17	X			X
Vermillion Cr	10270102	18	X			X
Walnut Cr	10270102	91				X
Wells Cr	10270102	68				X
Whetstone Cr	10270102	104				X
Wilson Cr	10270102	50				X
Wolf Cr	10270102	49				X
SUBBASIN: DELAWARE (HUC 10270103)						X
Banner Cr	10270103	45				X
Barnes Cr	10270103	39				X
Bills Cr	10270103	47				X
Brush Cr	10270103	44				X
Brush Cr	10270103	54				X
Burr Oak Cr	10270103	8				X
Catamount Cr	10270103	49				X
Cedar Cr	10270103	32	X			X
Cedar Cr	10270103	37	X			X
Cedar Cr, North	10270103	46				X

HUC=Hydrological Unit Code
 TTA Δ=Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

KANSAS/LOWER REPUBLICAN RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: DELAWARE (HUC 10270103)						X
Cedar Cr, South	10270103	9032	X			X
Claywell Cr	10270103	56				X
Clear Cr	10270103	19				X
Coal Cr	10270103	50			X	
Delaware R	10270103	1	X			X
Delaware R	10270103	12	X			X
Delaware R	10270103	13	X		X	
Delaware R	10270103	14	X			X
Delaware R	10270103	15	X			X
Delaware R	10270103	17	X			X
Delaware R	10270103	21	X			X
Delaware R	10270103	22	X			X
Delaware R	10270103	23	X		X	
Delaware R	10270103	29	X			X
Elk Cr	10270103	30	X			X
Elk Cr	10270103	24				X
Gregg Cr	10270103	55				X
Honey Cr	10270103	18				X
Little Delaware R	10270103	20				X
Little Delaware R	10270103	16				X
Little Grasshopper Cr	10270103	805				X
Little Slough Cr	10270103	57				X
Little Wild Horse Cr	10270103	40				X
Mission Cr	10270103	602			X	
Mosquito Cr	10270103	25	X			X
Muddy Cr	10270103	26	X			X
Muddy Cr	10270103	48				X
Nebo Cr	10270103	43				X
Negro Cr	10270103					

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

KANSAS/LOWER REPUBLICAN RIVER BASIN

<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: DELAWARE (HUC 10270103)						
Otter Cr	10270103	41				X
Plum Cr	10270103	36				X
Rock Cr	10270103	34				X
Rock Cr	10270103	53				X
Slough Cr	10270103	7	X		X	
Slough Cr	10270103	9	X			X
Spring Cr	10270103	42				X
Squaw Cr	10270103	38				X
Straight Cr	10270103	28				X
Tick Cr	10270103	52				X
Unnamed Stream	10270103	31				X
Walnut Cr	10270103	51				X
Wolfley Cr	10270103	27				X
SUBBASIN: LOWER KANSAS (HUC 10270104)						
Baldwin Cr	10270104	69			X	
Barber Cr	10270104	373		O	X	
Brenner Heights Cr	10270104	1175		O		X
Brush Cr	10270104	49				X
Brush Cr, West	10270104	46				X
Buck Cr	10270104	22	X		X	
Burys Cr	10270104	32	X			X
Buttermilk Cr	10270104	44				X
Camp Cr	10270104	41			X	
Camp Cr	10270104	66	X			X
Camp Cr	10270104	74				X
Captain Cr	10270104	72			X	
Cedar Cr	10270104	38	X			X
Chicken Cr	10270104	79				

HUC=Hydrological Unit Code

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

KANSAS/LOWER REPUBLICAN RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: LOWER KANSAS (HUC 10270104)

						X
Clear Cr	10270104	383			X	
Coal Cr	10270104	80	X			X
Cow Cr	10270104	58				X
Crooked Cr	10270104	10				X
Crooked Cr	10270104	12				X
Dawson Cr	10270104	45				X
Deer Cr	10270104	701				X
Elk Cr	10270104	68				X
Fall Cr	10270104	52				X
Hanson Cr	10270104	437				X
Hays Cr	10270104	406				X
Hog Cr	10270104	54				X
Howard Cr	10270104	43				X
Hulls Branch	10270104	42				X
Indian Cr	10270104	48				X
Jarbalo Cr	10270104	51			X	
Kansas R	10270104	1	X			X
Kansas R	10270104	18	X			X
Kansas R	10270104	19	X			X
Kansas R	10270104	2	X			X
Kansas R	10270104	21	X			X
Kansas R	10270104	23	X			X
Kansas R	10270104	3	X			X
Kansas R	10270104	4	X			X
Kent Cr	10270104	73				X
Kill Cr	10270104	37				X
Little Cedar Cr	10270104	76				X
Little Kaw Cr	10270104	59	X		X	

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

KANSAS/LOWER REPUBLICAN RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: LOWER KANSAS (HUC 10270104)						X
Little Mill Cr	10270104	78				X
Little Sandy Cr	10270104	883				X
Little Stranger Cr	10270104	881				X
Little Stranger Cr	10270104	959				X
Little Turkey Cr	10270104	62				X
Little Wakarusa Cr	10270104	71			X	
Lynn Cr	10270104	67	X		X	
Mattoon Cr	10270104	1178		O	X	
Mill Cr	10270104	39	X			X
Mission Cr, East	10270104	61				X
Mission Cr, West	10270104	1164				X
Mooney Cr	10270104	1011			X	
Mud Cr	10270104	20	X		X	
Muncie Cr	10270104	55		O		X
Ninemile Cr	10270104	15				X
Ninemile Cr	10270104	17				X
Oakley Cr	10270104	56				X
Piper Cr	10270104	1154				X
Plum Cr	10270104	50				X
Prairie Cr	10270104	47				X
Rock Cr	10270104	35				X
Rock Cr	10270104	902				X
Scatter Cr	10270104	13			X	
Sixmile Cr	10270104	65	X			X
Spoon Cr	10270104	75				X
Stone House Cr	10270104	57				X
Stone House Cr, East	10270104	9057				X
Stone House Cr, West	10270104	830				

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

KANSAS/LOWER REPUBLICAN RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: LOWER KANSAS (HUC 10270104)						X
Stranger Cr	10270104	5	X			
Stranger Cr	10270104	6	X		X	
Stranger Cr	10270104	7				X
Stranger Cr	10270104	8				X
Stranger Cr	10270104	9				X
Tonganoxie Cr	10270104	14				X
Tooley Cr	10270104	379				X
Turkey Cr	10270104	77				X
Unnamed Stream	10270104	11				X
Unnamed Stream	10270104	16			X	
Unnamed Stream	10270104	452		O		X
Unnamed Stream	10270104	583				X
Unnamed Stream	10270104	584				X
Wakarusa R	10270104	24	X			X
Wakarusa R	10270104	25	X			
Wakarusa R	10270104	30	X		X	
Wakarusa R	10270104	31	X		X	
Wakarusa R	10270104	64				X
Wakarusa R, Middle Br	10270104	63				X
Wakarusa R, S Br	10270104	36				X
Washington Cr	10270104	53			X	
Wolf Cr	10270104	70	X			X
Yankee Tank Cr	10270104					
SUBBASIN: LOWER BIG BLUE (HUC 10270205)						X
Ackerman Cr	10270205	49				X
Big Blue R	10270205	1	X			X
Big Blue R	10270205	17	X			X
Big Blue R	10270205	18	X			X
Big Blue R	10270205	2				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

KANSAS/LOWER REPUBLICAN RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: LOWER BIG BLUE (HUC 10270205)

Big Blue R	10270205	20	X			X
Big Blue R	10270205	21	X		X	
Big Blue R	10270205	7	X			X
Black Vermillion R	10270205	10	X		X	
Black Vermillion R	10270205	11	X			X
Black Vermillion R	10270205	13	X			X
Black Vermillion R	10270205	14	X			X
Black Vermillion R	10270205	8	X			X
Black Vermillion R, Clear Fk	10270205	9				X
Black Vermillion R, N Fk	10270205	15				X
Black Vermillion R, S Fk	10270205	12				X
Bluff Cr	10270205	573				X
Bommer Cr	10270205	40				X
Bucksnot Cr	10270205	566				X
Carter Cr	10270205	59				X
Cedar Cr	10270205	56				X
Corndodger Cr	10270205	52				X
De Shazer Cr	10270205	55				X
Deadman Cr	10270205	60				X
Deer Cr	10270205	36				X
Dog Walk Cr	10270205	53				X
Dutch Cr	10270205	44				X
Elm Cr	10270205	46				X
Elm Cr, North	10270205	41				X
Fancy Cr, N Fk	10270205	61				X
Fancy Cr, West	10270205	29				X
Game Fork	10270205	54				X
Hop Cr	10270205	43				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

KANSAS/LOWER REPUBLICAN RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: LOWER BIG BLUE (HUC 10270205)

Horseshoe Cr	10270205	26	X		X	
Indian Cr	10270205	37				X
Jim Cr	10270205	57				X
Johnson Fork	10270205	51				X
Kearney Branch	10270205	58				X
Lily Cr	10270205	39				X
Little Indian Cr	10270205	35				X
Little Timber Cr	10270205	48				X
Meadow Cr	10270205	34				X
Mill Cr	10270205	31	X		X	
Mission Cr	10270205	22				X
Murdock Cr	10270205	42				X
Otter Cr	10270205	67				X
Otter Cr, North	10270205	62				X
Perkins Cr	10270205	47				X
Phiel Cr	10270205	68				X
Raemer Cr	10270205	33				X
Robidoux Cr	10270205	16				X
Schell Cr	10270205	45				X
School Branch	10270205	63				X
Scotch Cr	10270205	38				X
Spring Cr	10270205	19				X
Spring Cr	10270205	65				X
Timber Cr	10270205	64				X
Weyer Cr	10270205	50				X

SUBBASIN: UPPER LITTLE BLUE (HUC 10270206)

Dry Cr	10270206	41				X
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SUBBASIN: LOWER LITTLE BLUE (HUC 10270207)

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

KANSAS/LOWER REPUBLICAN RIVER BASIN					
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>

SUBBASIN: LOWER LITTLE BLUE (HUC 10270207)					
					X
Ash Cr	10270207	36			X
Beaver Cr	10270207	38			X
Bolling Cr	10270207	42			X
Bowman Cr	10270207	21			X
Buffalo Cr	10270207	32			X
Camp Cr	10270207	35			X
Camp Cr	10270207	44			X
Cedar Cr	10270207	40			X
Cherry Cr	10270207	25			X
Coon Cr	10270207	23			X
Fawn Cr	10270207	45			X
Gray Branch	10270207	27			X
Humphrey Branch	10270207	24			X
Iowa Cr	10270207	34			X
Jones Cr	10270207	29			X
Joy Cr	10270207	13			X
Lane Branch	10270207	39			X
Little Blue R	10270207	1	X		X
Little Blue R	10270207	2	X		X
Little Blue R	10270207	3	X		X
Little Blue R	10270207	4	X		X
Malone Cr	10270207	37			X
Melvin Cr	10270207	33			X
Mercer Cr	10270207	43			X
Mill Cr	10270207	14	X		X
Mill Cr	10270207	16	X		X
Mill Cr	10270207	18	X		X
Mill Cr	10270207	20	X		X

HUC=Hydrological Unit Code
TIAA= Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

KANSAS/LOWER REPUBLICAN RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: LOWER LITTLE BLUE (HUC 10270207)

Mill Cr	10270207	22	X			X
Mill Cr, S Fk	10270207	31				X
Myer Cr	10270207	26				X
Riddle Cr	10270207	17				X
Rose Cr	10270207	12				X
Salt Cr	10270207	19				X
School Cr	10270207	49				X
Silver Cr	10270207	28				X
Spring Cr	10270207	15				X
Spring Cr	10270207	30				X
Walnut Cr	10270207	41				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

LOWER ARKANSAS RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: RATTLESNAKE (HUC 11030009)						X
Bear Cr	11030009	8				X
Little Wild Horse Cr	11030009	6			X	
Rattlesnake Cr	11030009	1	X			
Rattlesnake Cr	11030009	3	X			X
Rattlesnake Cr	11030009	4	X			X
Rattlesnake Cr, E Flk	11030009	5		O	X	
Rattlesnake Cr, S Br	11030009	9		O	X	
Spring Cr	11030009	7				X
Wildhorse Cr	11030009	2				X
SUBBASIN: GAR-PEACE (HUC11030010)					X	
Arkansas R	11030010	1	X			X
Arkansas R	11030010	3	X			X
Arkansas R	11030010	4	X			
Arkansas R	11030010	5	X		X	
Gar Cr	11030010	8			X	
Peace Cr	11030010	6	X		X	
Salt Cr	11030010	7	X			
SUBBASIN: COW (HUC 11030011)						X
Blood Cr	11030011	15				X
Calf Cr	11030011	16			X	
Cow Cr	11030011	1	X			X
Cow Cr	11030011	3	X			X
Cow Cr	11030011	5	X			X
Cow Cr	11030011	6	X			X
Deception Cr	11030011	13				X
Dry Cr	11030011	22				X
Jarvis Cr	11030011	19				X
Little Cheyenne Cr	11030011	7				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

LOWER ARKANSAS RIVER BASIN		Segment	Primary Contact	Primary Contact not attainable	UAAs completed	UAAs not completed
STREAM SEGMENT NAME	HUC8					
SUBBASIN: COW (HUC 11030011)						
Little Cow Cr	11030011	2				X
Lost Cr	11030011	17				X
Owl Cr	11030011	18				X
Plum Cr	11030011	4				X
Salt Cr	11030011	21				X
Spring Cr	11030011	20				
SUBBASIN: LITTLE ARKANSAS (HUC 11030012)						
Beaver Cr	11030012	26				X
Black Kettle Cr	11030012	368				X
Bull Cr	11030012	24		O	X	
Dry Cr	11030012	22				X
Emma Cr	11030012	6				X
Emma Cr	11030012	7				X
Emma Cr, West	11030012	8				X
Gooseberry Cr	11030012	17				X
Horse Cr	11030012	19				X
Jester Cr	11030012	2				X
Jester Cr, W Fk	11030012	18				X
Kisiwa Cr	11030012	15				X
Little Arkansas R	11030012	1	X			
Little Arkansas R	11030012	10	X		X	
Little Arkansas R	11030012	14	X			X
Little Arkansas R	11030012	3	X			X
Little Arkansas R	11030012	5	X			X
Little Arkansas R	11030012	9	X			X
Lone Tree Cr	11030012	20				X
Mud Cr	11030012	16				X
Running Turkey Cr	11030012	25				X

HUC=Hydrological Unit Code
 --- = Time Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

LOWER ARKANSAS RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: LITTLE ARKANSAS (HUC 11030012)

Salt Cr	11030012	21				X
Sand Cr	11030012	23	X			X
Sand Cr	11030012	4	X			X
Sun Cr	11030012	11				X
Sun Cr	11030012	13		O	X	
Turkey Cr	11030012	12				X

SUBBASIN: MIDDLE ARKANSAS-SLATE (HUC 11030013)

Antelope Cr	11030013	25				X
Arkansas R	11030013	1	X		X	
Arkansas R	11030013	18	X			X
Arkansas R	11030013	2	X			X
Arkansas R	11030013	3	X			X
Arkansas R	11030013	9	X			X
Badger Cr	11030013	31				X
Beaver Cr	11030013	29				X
Beaver Cr	11030013	33				X
Big Slough	11030013	11				X
Big Slough, S Fk	11030013	35				X
Bitter Cr	11030013	28				X
Chisholm Cr, East	11030013	7	X			X
Chisholm Cr, Middle Fork	11030013	36	X			X
Chisolm Cr	11030013	4		O	X	
Chisolm Cr	11030013	6		O	X	
Chisolm Cr	11030013	8	X		X	
Cowskin Cr	11030013	10	X			X
Cowskin Cr	11030013	12	X			X
Cowskin Cr	11030013	13	X		X	
Cowskin Cr	11030013	14	X			X

HUC=Hydrological Unit Code
 UAA= Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

LOWER ARKANSAS RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: MIDDLE ARKANSAS-SLATE (HUC 11030013)

Dog Cr	11030013	531				X
Dry Cr	11030013	15				X
Dry Cr	11030013	16				X
Gypsum Cr	11030013	5	X		X	
Hargis Cr	11030013	24				X
Lost Cr	11030013	23				X
Negro Cr	11030013	20				X
Oak Cr	11030013	26				X
Salt Cr	11030013	22				X
Slate Cr	11030013	17	X			X
Spring Cr	11030013	19				X
Spring Cr	11030013	21				X
Spring Cr	11030013	27				X
Spring Cr	11030013	34				X
Spring Cr	11030013	37				X
W V C Floodway	11030013	456				X
Winser Cr	11030013	32				X

SUBBASIN: NORTH FORK NINNESCAH (HUC 11030014)

Crow Cr	11030014	11				X
Dooleyville Cr	11030014	8				X
Goose Cr	11030014	10				X
Ninnescah R, N Fk	11030014	1				X
Ninnescah R, N Fk	11030014	5				X
Ninnescah R, N Fk	11030014	6				X
Red Rock Cr	11030014	12				X
Rock Cr	11030014	13				X
Silver Cr	11030014	7				X
Spring Cr	11030014	14				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

LOWER ARKANSAS RIVER BASIN

<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
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SUBBASIN: NORTH FORK NINNESCAH (HUC 11030014)

Unnamed Stream	11030014	289		O	X	
Unnamed Stream	11030014	411		O	X	
Unnamed Stream	11030014	999		O	X	
Wolf Cr	11030014	9				X

SUBBASIN: SOUTH FORK NINNESCAH (HUC 11030015)

Coon Cr	11030015	17				X
Coon Cr	11030015	9				X
Hunter Cr	11030015	14				X
Mead Cr	11030015	10				X
Mod Cr	11030015	19				X
Natrona Cr	11030015	307				X
Negro Cr	11030015	13				X
Nester Cr	11030015	15				X
Ninnescah R, S Fk	11030015	1	X			
Ninnescah R, S Fk	11030015	3	X		X	
Ninnescah R, S Fk	11030015	4	X			X
Ninnescah R, S Fk	11030015	6	X			X
Ninnescah R, W Br of S Fk	11030015	5				X
Painter Cr	11030015	7				X
Pat Cr	11030015	11				X
Petyt Cr	11030015	12				X
Sand Cr	11030015	18				X
Smoots Cr	11030015	2	X			X
Spring Cr	11030015	8				X
Unnamed Stream	11030015	249		O		X
Unnamed Stream	11030015	253		O		X
Unnamed Stream	11030015	259		O		X
Unnamed Stream	11030015	261		O		X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

LOWER ARKANSAS RIVER BASIN

<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
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SUBBASIN: SOUTH FORK NINNESCAH (HUC 11030015)

Unnamed Stream	11030015	270		O	X	
Unnamed Stream	11030015	271		O	X	
Unnamed Stream	11030015	417		O	X	
Unnamed Stream	11030015	514		O	X	
Unnamed Stream	11030015	518		O	X	
Unnamed Stream	11030015	520		O	X	
Unnamed Stream	11030015	579		O	X	
Wild Run Cr	11030015	16				X

SUBBASIN: NINNESCAH (HUC 11030016)

Afton Cr	11030016	148				X
Clear Cr	11030016	161				X
Clearwater Cr	11030016	4				X
Clearwater Cr	11030016	7				X
Dry Cr	11030016	16				X
Elm Cr	11030016	10				X
Garvey Cr	11030016	11				X
Ninnescah R	11030016	1	X		X	
Ninnescah R	11030016	3	X			
Ninnescah R	11030016	8	X			X
Polecat Cr	11030016	59				X
Sand Cr	11030016	14				X
Silver Cr	11030016	12				X
Spring Cr	11030016	15				X
Spring Cr	11030016	2				X
Turtle Cr	11030016	13				

SUBBASIN: KAW LAKE (HUC 11060001)

Arkansas R	11060001	14		X		X
Arkansas R	11060001	18		X		

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

LOWER ARKANSAS RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: KAWLAKE (HUC 11060001)						
Beaver Cr	11060001	9	X		X	
Blue Branch	11060001	30				X
Bullington Cr	11060001	28				X
Cedar Cr	11060001	32				X
Chilocco Cr	11060001	19				X
Crabb Cr	11060001	29				X
Ferguson Cr	11060001	38				X
Franklin Cr	11060001	35				X
Gardners Branch	11060001	39				X
Goose Cr	11060001	34				X
Grouse Cr	11060001	15	X		X	
Grouse Cr	11060001	16	X			X
Little Beaver Cr	11060001	11		O	X	
Myers Cr	11060001	24				X
Otter Cr	11060001	20				X
Pebble Cr	11060001	26				X
Plum Cr	11060001	33				X
Riley Cr	11060001	37				X
School Cr	11060001	31				X
Shellrock Cr	11060001	22				X
Silver Cr	11060001	17				X
Snake Cr	11060001	25				X
Spring Cr	11060001	21				X
Turkey Cr	11060001	27				X
Wagoner Cr	11060001	36				X
SUBBASIN: UPPER SALT FORK (HUC 11060002)						
Arkansas R, Salt Fk	11060002	10	X			X
Arkansas R, Salt Fk	11060002	11	X			X

HUC=Hydrological Unit Code
 UAA= Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

LOWER ARKANSAS RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: UPPER SALT FORK (HUC 11060002)						
Arkansas R, Salt Fk	11060002	13	X			X
Arkansas R, Salt Fk	11060002	15	X			X
Arkansas R, Salt Fk	11060002	4	X			X
Arkansas R, Salt Fk	11060002	6	X			X
Arkansas R, Salt Fk	11060002	8	X			X
Ash Cr	11060002	20				X
Big Sandy Cr	11060002	5				X
Cave Cr	11060002	28			X	
Cottonwood Cr	11060002	30		O		X
Deadman Cr	11060002	22				X
Dog Cr	11060002	29				X
Hackberry Cr	11060002	23				X
Indian Cr	11060002	9				X
Inman Cr	11060002	21				X
Mule Cr	11060002	7	X			X
Mustang Cr	11060002	31				X
Nescatunga Cr	11060002	14	X			X
Nescatunga Cr, E Br	11060002	27				X
Red Cr	11060002	16				X
Spring Cr	11060002	24				X
Unnamed Stream	11060002	503	X			X
Wildcat Cr	11060002	12				X
Yellowstone Cr	11060002	17				X
SUBBASIN: MEDICINE LODGE (HUC 11060003)						
Amber Cr	11060003	12				X
Antelope Cr	11060003	22				X
Bear Cr	11060003	13				X
Bitter Cr	11060003	18				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

LOWER ARKANSAS RIVER BASIN

<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: MEDICINE LODGE (HUC 11060003)						
Cedar Cr	11060003	20				X
Cottonwood Cr	11060003	16				X
Crooked Cr	11060003	11				X
Driftwood Cr	11060003	905				X
Dry Cr	11060003	21				X
Elm Cr	11060003	3	X			X
Elm Cr, N Br	11060003	4				X
Elm Cr, S Br	11060003	5				X
Elm Cr, South E Br	11060003	10				X
Little Bear Cr	11060003	19				X
Little Mule Cr	11060003	9			X	
Medicine Lodge R	11060003	2	X			X
Medicine Lodge R	11060003	6	X			X
Medicine Lodge R	11060003	8	X			X
Medicine Lodge R, N Br	11060003	24				X
Mulberry Cr	11060003	14				X
Otter Cr	11060003	25				X
Puckett Cr	11060003	15				X
Sand Cr	11060003	17				X
Soldier Cr	11060003	27				X
Stink Cr	11060003	28				X
Thompson Cr	11060003	26	X			X
Turkey Cr	11060003	7				
Unnamed Stream	11060003	370		O	X	
Unnamed Stream	11060003	415		O	X	
Unnamed Stream	11060003	452		O	X	
Unnamed Stream	11060003	559		O	X	
Wilson Slough	11060003	23				X

HUC=Hydrological Unit Code
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Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

LOWER ARKANSAS RIVER BASIN			<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>				

SUBBASIN: LOWER SALT FORK (HUC 11060004)

Camp Cr	11060004	68				X
Cooper Cr	11060004	71				X
Crooked Cr	11060004	24				X
Little Sandy Cr	11060004	39				X
Little Sandy Cr, E Br	11060004	65				X
Osage Cr	11060004	17				X
Plum Cr	11060004	70				X
Pond Cr	11060004	18				X
Rush Cr	11060004	69				X
Salty Cr	11060004	40				X
Sandy Cr	11060004	37				X
Sandy Cr, West	11060004	67				X
Spring Cr	11060004	66				X
Unnamed Stream	11060004	25				

SUBBASIN: CHIKASKIA (HUC 11060005)

Allen Cr	11060005	40				X
Baehr Cr	11060005	22				X
Beaver Cr	11060005	28				X
Beaver Cr	11060005	46				X
Big Spring Cr	11060005	34				X
Bitter Cr	11060005	4				X
Bitter Cr, East	11060005	16				X
Blue Stem Cr	11060005	48				X
Bluff Cr	11060005	13	X			
Bluff Cr	11060005	15	X		X	
Chicken Cr	11060005	36				X
Chikaskia R	11060005	10	X			X
Chikaskia R	11060005	8	X			

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

LOWER ARKANSAS RIVER BASIN		Segment	Primary Contact	Primary Contact not attainable	UAAs completed	UAAs not completed
STREAM SEGMENT NAME	HUC8					
SUBBASIN: CHIKASKIA (HUC 11060005)					X	
Chikaskia R	11060005	9	X			X
Chikaskia R, N Fk	11060005	37	X			X
Copper Cr	11060005	42				X
Dry Cr	11060005	17				X
Duck Cr	11060005	32				X
Fall Cr	11060005	14				X
Fall Cr, E Br	11060005	27				X
Goose Cr	11060005	38				X
Kemp Cr	11060005	49				X
Long Cr	11060005	529				X
Meridian Cr	11060005	20				X
Prairie Cr	11060005	512				X
Prairie Cr, East	11060005	516				X
Prairie Cr, West	11060005	527				X
Red Cr	11060005	43				X
Rock Cr	11060005	23				X
Rodgers Branch	11060005	26				X
Rose Bud Cr	11060005	44				X
Rush Cr	11060005	45				X
Sand Cr	11060005	11				X
Sand Cr, East	11060005	12				X
Sandy Cr	11060005	30				X
Shoo Fly Cr, East	11060005	19				X
Shore Cr	11060005	35				X
Silver Cr	11060005	29				X
Skunk Cr	11060005	39				X
Spring Branch	11060005	21				X
Spring Cr	11060005	18	X			

HUC=Hydrological Unit Code
 ... Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

LOWER ARKANSAS RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: CHIKASKIA (HUC 11060005)

Spring Cr	11060005	25	X			X
Spring Cr	11060005	31	X			X
Spring Cr	11060005	47	X			X
Spring Cr	11060005	6	X			X
Wild Horse Cr	11060005	41				X
Wildcat Cr	11060005	24				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

MARAIS DES CYGNES RIVER BASIN		Segment	Primary Contact	Primary Contact not attainable	UAAs completed	UAAs not completed
STREAM SEGMENT NAME	HUC8					

SUBBASIN: UPPER MARAIS DES CYGNES (HUC 10290101)

						X
Appanoose Cr	10290101	16				X
Appanoose Cr, East	10290101	89				X
Batch Cr	10290101	86				X
Blue Cr	10290101	81				X
Bradshaw Cr	10290101	75				X
Cedar Cr	10290101	66				X
Cherry Cr	10290101	74				X
Chicken Cr	10290101	70				X
Chicken Cr	10290101	93				X
Coal Cr	10290101	48				X
Dragoon Cr	10290101	27	X			X
Dry Cr	10290101	57				X
Dry Cr	10290101	95				X
Duck Cr	10290101	41				X
Eightmile Cr	10290101	13				X
Eightmile Cr, W Fk	10290101	88				X
Elm Cr	10290101	39	X			X
Frog Cr	10290101	42				X
Hard Fish Cr	10290101	47				X
Hickory Cr	10290101	8				X
Hill Cr	10290101	71				X
Hundred & Ten Mile Cr	10290101	20	X		X	
Hundred And Forty Two Mile Cr	10290101	40	X			X
Hundred And Ten Mile Cr	10290101	25	X			X
Iantha Cr	10290101	62				X
Jersey Cr	10290101	76				X
Kenoma Cr	10290101	64				X
Little Rock Cr	10290101	73				

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

MARAIS DES CYGNES RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: UPPER MARAIS DES CYGNES (HUC 10290101)						X
Locust Cr	10290101	69				X
Long Cr	10290101	1531				X
Marais Des Cygnes R	10290101	1	X			X
Marais Des Cygnes R	10290101	10	X			X
Marais Des Cygnes R	10290101	12	X			X
Marais Des Cygnes R	10290101	14	X			X
Marais Des Cygnes R	10290101	15	X			X
Marais Des Cygnes R	10290101	17	X			X
Marais Des Cygnes R	10290101	18	X			X
Marais Des Cygnes R	10290101	19	X			X
Marais Des Cygnes R	10290101	28	X			X
Marais Des Cygnes R	10290101	3	X			X
Marais Des Cygnes R	10290101	30	X		X	
Marais Des Cygnes R	10290101	31	X			X
Marais Des Cygnes R	10290101	32	X			X
Marais Des Cygnes R	10290101	33	X			X
Marais Des Cygnes R	10290101	37	X			X
Marais Des Cygnes R	10290101	38	X			X
Marais Des Cygnes R	10290101	7	X			X
Marais Des Cygnes R	10290101	9	X			X
Middle Cr	10290101	50				X
Mill Cr	10290101	1589		O	X	
Mosquito Cr	10290101	52				X
Mud Cr	10290101	49				X
Mud Cr	10290101	78				X
Mud Cr	10290101	91				X
Mute Cr	10290101	92				X
Plum Cr	10290101	2				X

HUC= Hydrological Unit Code
 UAA= Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

MARAIS DES CYGNES RIVER BASIN

<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: UPPER MARAIS DES CYGNES (HUC 10290101)						
Plum Cr	10290101	79				X
Popcorn Cr	10290101	87				X
Pottawatomie Cr	10290101	51	X		X	
Pottawatomie Cr	10290101	53	X			X
Pottawatomie Cr	10290101	55	X			X
Pottawatomie Cr	10290101	56	X			X
Pottawatomie Cr	10290101	58	X			X
Pottawatomie Cr	10290101	59	X			X
Pottawatomie Cr	10290101	61	X			X
Pottawatomie Cr	10290101	63	X			X
Pottawatomie Cr, N Fk	10290101	65				X
Pottawatomie Cr, S Fk	10290101	67				X
Rock Cr	10290101	43				X
Rock Cr	10290101	97				X
Sac Branch, S Fk	10290101	54				X
Sac Cr	10290101	60				X
Salt Cr	10290101	29				X
Sand Cr	10290101	82				X
Smith Cr	10290101	77				X
Soldier Cr	10290101	1083				X
Spring Cr	10290101	84				X
Switzler Cr	10290101	80				X
Tauy Cr	10290101	11				X
Tauy Cr, E Fk	10290101	85		O	X	
Tequa Cr	10290101	44				X
Tequa Cr, E Br	10290101	46		O	X	
Tequa Cr, S Br	10290101	45				X
Thomas Cr	10290101	72				X

HUC=Hydrological Unit Code
 UAA= Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

MARAIS DES CYGNES RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: UPPER MARAIS DES CYGNES (HUC 10290101)						
Turkey Cr	10290101	4				X
Turkey Cr:	10290101	6				X
Unnamed Stream	10290101	1072	X			X
Unnamed Stream	10290101	5				X
Walnut Cr	10290101	90				X
Willow Cr	10290101	94				X
Wilson Cr	10290101	83				X
Wolf Cr	10290101	96				X
SUBBASIN: LOWER MARAIS DES CYGNES (HUC 10290102)						
Big Sugar Cr	10290102	31	X			X
Big Sugar Cr	10290102	32	X			X
Buck Cr	10290102	44				X
Bull Cr	10290102	24		O	X	
Bull Cr	10290102	26				X
Davis Cr	10290102	38				X
Dorsey Cr	10290102	22				X
Elm Branch	10290102	48				X
Elm Branch	10290102	53				X
Elm Cr	10290102	40				X
Hushpuckney Cr	10290102	37				X
Jake Branch	10290102	54				X
Jordan Branch	10290102	36				X
Little Bull Cr	10290102	51				X
Little Sugar Cr	10290102	33				X
Little Sugar Cr, N Fk	10290102	43				X
Marais Des Cygnes R	10290102	11	X			X
Marais Des Cygnes R	10290102	15	X			X
Marais Des Cygnes R	10290102	16	X			X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

MARAIS DES CYGNES RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: LOWER MARAIS DES CYGNES (HUC 10290102)

						X
Marais Des Cygnes R	10290102	29	X			X
Marais Des Cygnes R	10290102	4	X			X
Marais Des Cygnes R	10290102	5	X			X
Martin Cr	10290102	99				X
Middle Cr	10290102	12	X			X
Middle Cr	10290102	13				X
Middle Cr	10290102	30				X
Mine Cr	10290102	1244				X
Mound Cr	10290102	35				X
Muddy Cr	10290102	46	X			X
Richland Cr	10290102	41				X
Rock Cr	10290102	27				X
Smith Branch	10290102	47				X
Spring Cr	10290102	50				X
Sugar Cr	10290102	42				X
Sugar Cr, North	10290102	10	X			X
Sugar Cr, North	10290102	39	X			X
Sugar Cr, North	10290102	6	X			X
Sweetwater Cr	10290102	49	X			X
Tenmile Cr	10290102	25	X			X
Turkey Cr	10290102	1029				X
Turkey Cr	10290102	45				X
Unnamed Stream	10290102	754	X			X
Walnut Cr	10290102	14				X
Walnut Cr	10290102	34				X
Walnut Cr	10290102	52				X
Wea Cr, North	10290102	21				X
Wea Cr, South	10290102	18				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

MARAIS DES CYGNES RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: LOWER MARAIS DES CYGNES (HUC 10290102)

Wea Cr, South	10290102	19				X
Wea Cr, South	10290102	20				X

SUBBASIN: LITTLE OSAGE (HUC 10290103)

Clever Cr	10290103	7				X
Elk Cr	10290103	11				X
Fish Cr	10290103	8				X
Indian Cr	10290103	12				X
Irish Cr	10290103	202				X
Laberdie Cr, East	10290103	13				X
Limestone Cr	10290103	5				X
Little Osage R	10290103	3	X			X
Little Osage R, Middle Fk	10290103	36	X			X
Little Osage R, N Fk	10290103	220				X
Little Osage R, S Fk	10290103	249				X
Lost Cr	10290103	10				X
Owl Cr	10290103	9				X
Reagan Branch	10290103	6				X

SUBBASIN: MARMATON (HUC 10290104)

Bone Cr	10290104	9019				X
Buck Run	10290104	46				X
Bunion Cr	10290104	39				X
Cedar Cr	10290104	41				X
Cox Cr	10290104	324				X
Drywood Cr, Moores Branch	10290104	17				X
Drywood Cr, W Fk	10290104	19				X
Drywood Cr, W Fk	10290104	323				X
Elm Cr	10290104	15				X
Hinton Cr	10290104	38				X

HUC=Hydrological Unit Code
 UAA=Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

MARAIS DES CYGNES RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: MARMATON (HUC 10290104)						X
Lath Branch	10290104	42				X
Little Mill Cr	10290104	34				X
Marmaton R.	10290104	11	X			X
Marmaton R.	10290104	12	X			X
Marmaton R.	10290104	5	X		X	
Marmaton R.	10290104	7	X			X
Marmaton R.	10290104	8	X			X
Mill Cr	10290104	6				X
Owl Cr	10290104	45				X
Paint Cr	10290104	13				X
Paint Cr	10290104	14				X
Pawnee Cr	10290104	313				X
Prong Cr	10290104	44				X
Robinson Branch	10290104	40				X
Shiloh Cr	10290104	36				X
Sweet Branch	10290104	30				X
Tennyson Cr	10290104	31				X
Turkey Cr	10290104	33				X
Walnut Cr	10290104	32				X
Walnut Cr	10290104	47				X
Wolfpen Cr	10290104	37				X
Wolverine Cr	10290104	35				X
SUBBASIN: SOUTH GRAND (HUC 10290108)						X
Harless Cr	10290108	67				X
Pony Cr	10290108	48				X

HUC=Hydrological Unit Code
TAA= Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

MISSOURI RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: TARKIO-WOLF (HUC 10240005)

Cedar Cr	10240005	51	X		X	
Cold Ryan Branch	10240005	70				X
Coon Cr	10240005	71				X
Halling Cr	10240005	68				X
Mill Cr	10240005	52				
Mission Cr	10240005	339		O	X	
Missouri R	10240005	1	X			X
Missouri R	10240005	19	X			X
Missouri R	10240005	2	X			X
Missouri R	10240005	20	X			X
Missouri R	10240005	21	X			X
Missouri R	10240005	73	X		X	
Mosquito Cr	10240005	69				X
Rittenhouse Branch	10240005	65				X
Spring Cr	10240005	72				X
Striker Branch	10240005	55				X
Unnamed Stream	10240005	53			X	
Wolf R	10240005	54	X			X
Wolf R	10240005	56	X			X
Wolf R	10240005	67				X
Wolf R, Middle Fk	10240005	66				X
Wolf R, N Fk	10240005	57				X
Wolf R, S Fk	10240005					

SUBBASIN: SOUTH FORK BIG NEMAHA (HUC 10240007)

Big Nemaha R, S Fk	10240007	15	X		X	
Big Nemaha R, S Fk	10240007	16	X			X
Big Nemaha R, S Fk	10240007	3	X			X
Burger Cr	10240007	24				X
Clear Cr	10240007	132				

HUC=Hydrological Unit Code
 UAA=Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

MISSOURI RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: SOUTH FORK BIG NEMAHA (HUC 10240007)

Deer Cr	10240007	18				X
Fisher Cr	10240007	28				X
Harris Cr	10240007	166				X
Honey Cr	10240007	26	X			X
Illinois Cr	10240007	30				X
Manley Cr	10240007	14	X			X
Rattlesnake Cr	10240007	27				X
Rock Cr	10240007	20				X
Tennessee Cr	10240007	29				X
Turkey Cr	10240007	4				X
Turkey Cr	10240007	5				X
Unnamed Stream	10240007	212				X
Wildcat Cr	10240007	22				X
Wildcat Cr	10240007	23				X
Wolf Cr	10240007	12		X		X
Wolf Cr	10240007	13		X		X
Wolf Pen Cr	10240007	25				X

SUBBASIN: BIG NEMAHA (HUC 10240008)

Noharts Cr	10240008	42				X
Pedee Cr	10240008	41				X
Pony Cr	10240008	38				X
Roys Cr	10240008	40				X
Terrapin Cr	10240008	308		O	X	X
Walnut Cr	10240008	39	X			X

SUBBASIN: INDEPENDENCE-SUGAR (HUC 10240011)

Brush Cr	10240011	26				X
Corral Cr	10240011	175		O	X	X
Deer Cr	10240011	32				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

MISSOURI RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: INDEPENDENCE-SUGAR (HUC 10240011)

						X
Fivemile Cr	10240011	35				
Independence Cr	10240011	20	X		X	
Independence Cr	10240011	22	X			X
Independence Cr, N Br	10240011	29				X
Island Cr	10240011	37	X		X	
Jersey Cr	10240011	38	X			X
Jordan Cr	10240011	30				X
Missouri R	10240011	1	X			X
Missouri R	10240011	11	X			X
Missouri R	10240011	13	X			X
Missouri R	10240011	15	X			X
Missouri R	10240011	19	X			X
Missouri R	10240011	2	X			X
Missouri R	10240011	4	X			X
Missouri R	10240011	5	X			X
Missouri R	10240011	7	X			X
Missouri R	10240011	9	X			X
Nine Mile Cr	10240011	161				X
Owl Cr	10240011	33				X
Peters Cr	10240011	27	X		X	
Quarry Cr	10240011	176				X
Rock Cr	10240011	21				X
Salt Cr	10240011	34				X
Seven Mile Cr	10240011	157				X
Smith Cr	10240011	28				X
Sorter Cr	10240011	142		O	X	
Threemile Cr	10240011	36				X
Walnut Cr	10240011	23				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

MISSOURI RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: INDEPENDENCE-SUGAR (HUC 10240011)						
Walnut Cr	10240011	25				X
Whiskey Cr	10240011	235				X
Whiskey Cr	10240011	9235				X
White Clay Cr	10240011	31				X
White Clay Cr	10240011	9031				
SUBBASIN: LOWER MISSOURI-CROOKED (HUC 10300101)						
Blue R	10300101	33	X		X	X
Brush Cr	10300101	54			X	
Camp Branch	10300101	56		O		X
Coffee Cr	10300101	57				X
Dyke Branch	10300101	55				X
Indian Cr	10300101	32				X
Negro Cr	10300101	58				X
Tomahawk Cr	10300101	53				X
Wolf Cr	10300101	1102	X			

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

NEOSHO RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: NEOSHO HEADWATERS (HUC 11070201)

Allen Cr	11070201	5				X
Badger Cr	11070201	45				X
Big John Cr	11070201	37				X
Bluff Cr	11070201	8				X
Crooked Cr	11070201	35				X
Dows Cr	11070201	3				X
Dows Cr	11070201	4				X
Eagle Cr	11070201	25				X
Eagle Cr, South	11070201	47				X
East Cr	11070201	39				X
Elm Cr	11070201	36				X
Four Mile Cr	11070201	24				X
Fourmile Cr	11070201	48				X
Haun Cr	11070201	29				X
Horse Cr	11070201	33				X
Kahola Cr	11070201	43				X
Lairds Cr	11070201	30				X
Lanos Cr	11070201	21				X
Lebo Cr	11070201	51				X
Level Cr	11070201	9023	X			X
Munkers Cr, E Br	11070201	31				X
Munkers Cr, Middle Br	11070201	32				X
Neosho R	11070201	1	X			X
Neosho R	11070201	10	X			X
Neosho R	11070201	11	X			X
Neosho R	11070201	2	X			X
Neosho R	11070201	23	X			X
Neosho R	11070201	26	X			X

HUC= Hydrological Unit Code
 UAA= Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

NEOSHO RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: NEOSHO HEADWATERS (HUC 11070201)

Neosho R	11070201	6	X			X
Neosho R, E Fk	11070201	18				X
Neosho R, W Fk	11070201	28				X
Parkers Cr	11070201	27				X
Plum Cr	11070201	50				X
Plumb Cr	11070201	49				X
Rock Cr	11070201	7				X
Rock Cr	11070201	9				X
Rock Cr, E Br	11070201	34				X
Spring Cr	11070201	40				X
Stillman Cr	11070201	44				X
Taylor Cr	11070201	46				X
Unnamed Stream	11070201	946				X
Walker Branch	11070201	42				X
Wolf Cr	11070201	41				X
Wrights Cr	11070201	38				X

SUBBASIN: UPPER COTTONWOOD (HUC 11070202)

Antelope Cr	11070202	19				X
Bills Cr	11070202	30				X
Bruno Cr	11070202	27				X
Catlin Cr	11070202	20				X
Cedar Cr	11070202	22		X		X
Clear Cr	11070202	4		X		X
Clear Cr	11070202	5				X
Clear Cr	11070202	24				X
Clear Cr, E Br	11070202	32				X
Coon Cr	11070202	1		X		X
Cottonwood R	11070202	14		X		X
Cottonwood R	11070202					

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

NEOSHO RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: UPPER COTTONWOOD (HUC 11070202)

Cottonwood R	11070202	2	X			X
Cottonwood R	11070202	3	X			X
Cottonwood R	11070202	7	X			X
Cottonwood R	11070202	8	X			X
Cottonwood R, South	11070202	17				X
Cottonwood R, South	11070202	18				X
Doyle Cr	11070202	21				X
Dry Cr	11070202	401		O	X	
French Cr	11070202	16				X
Mud Cr	11070202	6				X
Perry Cr	11070202	23				X
Spring Branch	11070202	26				X
Spring Cr	11070202	28				X
Spring Cr	11070202	29				X
Stony Brook	11070202	25				X
Turkey Cr	11070202	31				X
Unnamed Stream	11070202	456				X

SUBBASIN: LOWER COTTONWOOD (HUC 11070203)

Beaver Cr	11070203	29				X
Bloody Cr	11070203	40				X
Buck Cr	11070203	39				X
Buckeye Cr	11070203	44				X
Bull Cr	11070203	26				X
Camp Cr	11070203	14				X
Cannonball Cr	11070203	745				X
Coal Cr	11070203	43				X
Collett Cr	11070203	21				X
Corn Cr	11070203	47				X

HUC=Hydrological Unit Code
T & A=Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

NEOSHO RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: LOWER COTTONWOOD (HUC 11070203)

Cottonwood R.	11070203	1	X		X	
Cottonwood R.	11070203	2	X			X
Cottonwood R.	11070203	4	X			X
Cottonwood R.	11070203	6	X			X
Cottonwood R, S Fk	11070203	10	X			X
Cottonwood R, S Fk	11070203	9	X			X
Coyne Branch	11070203	33				X
Crocker Cr	11070203	46				X
Diamond Cr	11070203	3	X			X
Dodds Cr	11070203	15				X
Dry Cr	11070203	42		O	X	
Fox Cr	11070203	19				X
French Cr	11070203	32				X
Gannon Cr	11070203	24				X
Gould Cr	11070203	36				X
Holmes Cr	11070203	35				X
Jacob Cr	11070203	28				X
Kirk Cr	11070203	48				X
Little Cedar Cr	11070203	11				X
Little Cedar Cr	11070203	45				X
Mercer Cr	11070203	716				X
Middle Cr	11070203	5				X
Mile-and-a-Half Cr	11070203	13				X
Moon Cr	11070203	31				X
Mulvane Cr	11070203	22				X
Palmer Cr	11070203	403				X
Peyton Cr	11070203	25				X
Phenis Cr	11070203	30				X

HUC=Hydrological Unit Code
 UAA= Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

NEOSHO RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: LOWER COTTONWOOD (HUC 11070203)

Pickett Cr	11070203	18				X
Prather Cr	11070203	23				X
Rock Cr	11070203	37				X
Schaffer Cr	11070203	17				X
School Cr	11070203	16				X
Sharpes Cr	11070203	38				X
Silver Cr	11070203	34				X
Six Mile Cr	11070203	452	X			X
Spring Cr	11070203	41				X
Stout Run	11070203	27				X
Stribby Cr	11070203	20				X

SUBBASIN: UPPER NEOSHO (HUC 11070204)

Badger Cr	11070204	42				X
Big Cr	11070204	14	X			X
Big Cr	11070204	2	X		X	
Big Cr, North	11070204	16				X
Big Cr, South	11070204	17				X
Bloody Run	11070204	25				X
Carlyle Cr	11070204	47				X
Charles Branch	11070204	27				X
Cherry Cr	11070204	20				X
Coal Cr	11070204	4				X
Cottonwood Cr	11070204	48				X
Crooked Cr	11070204	44				X
Deer Cr	11070204	9	X		X	
Dinner Cr	11070204	823				X
Draw Cr	11070204	34				X
Elm Cr	11070204	1050				X

HUC=Hydrological Unit Code
 UAA= Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

NEOSHO RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: UPPER NEOSHO (HUC 11070204)

						X
Goose Cr	11070204	29				X
Indian Cr	11070204	924				X
Little Indian Cr	11070204	939				X
Little Turkey Cr	11070204	397		O	X	
Long Cr	11070204	12				X
Martin Cr	11070204	49				X
Mud Cr	11070204	26				X
Mud Cr	11070204	31				X
Neosho R	11070204	1	X			X
Neosho R	11070204	10	X			X
Neosho R	11070204	11	X			X
Neosho R	11070204	13	X			X
Neosho R	11070204	3	X			X
Neosho R	11070204	5	X			X
Neosho R	11070204	6	X			X
Neosho R	11070204	8	X			X
Onion Cr	11070204	24				X
Owl Cr	11070204	19				X
Owl Cr	11070204	21				X
Owl Cr, South	11070204	552				X
Plum Cr	11070204	22				X
Rock Cr	11070204	15				X
Rock Cr	11070204	23				X
Rock Cr	11070204	7				X
School Cr	11070204	38				X
Scott Cr	11070204	40				X
Slack Cr	11070204	30				X
Spring Cr	11070204	46				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

NEOSHO RIVER BASIN

<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
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SUBBASIN: UPPER NEOSHO (HUC 11070204)

Sutton Cr	11070204	35				X
Turkey Branch	11070204	28				X
Turkey Cr	11070204	18				X
Turkey Cr	11070204	32		O	X	
Twiss Cr	11070204	45				X
Varvel Cr	11070204	43				X
Village Cr	11070204	33				X
Wolf Cr	11070204	37				X

SUBBASIN: MIDDLE NEOSHO (HUC 11070205)

Bachelor Cr	11070205	396				X
Bachelor Cr	11070205	40				X
Canville Cr	11070205	16				X
Center Cr	11070205	25				X
Cherry Cr	11070205	4				X
Deer Cr	11070205	27				X
Denny Branch	11070205	31				X
Downey Cr	11070205	731				X
Elk Cr	11070205	19				X
Elin Cr	11070205	43				X
Flat Rock Cr	11070205	12				X
Flat Rock Cr	11070205	14				X
Fly Cr	11070205	1	X			X
Fourmile Cr	11070205	49				X
Grindstone Cr	11070205	42				X
Hackberry Cr	11070205	460				X
Hickory Cr	11070205	10				X
Labette Cr	11070205	20	X		X	
Labette Cr	11070205	21	X			X

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 UAA= Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

NEOSHO RIVER BASIN					
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>

SUBBASIN: MIDDLE NEOSHO (HUC 11070205)

<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
						X
Labette Cr	11070205	22	X			X
Lake Cr	11070205	24				X
Lightning Cr	11070205	6				X
Lightning Cr	11070205	8				X
Limestone Cr	11070205	7				X
Little Cherry Cr	11070205	32				X
Little Elk Cr	11070205	47				X
Little Fly Cr	11070205	26				X
Little Labette Cr	11070205	23				X
Little Walnut Cr	11070205	46				X
Litup Cr	11070205	36				X
Mulberry Cr	11070205	35				X
Murphy Cr	11070205	41				X
Neosho R	11070205	11	X			X
Neosho R	11070205	15	X			X
Neosho R	11070205	17	X			X
Neosho R	11070205	18	X			X
Neosho R	11070205	2	X			X
Neosho R	11070205	3	X		X	X
Neosho R	11070205	5	X			X
Neosho R	11070205	9	X			X
Ogeese Cr	11070205	38				X
Pecan Cr	11070205	45				X
Plum Cr	11070205	34				X
Rock Cr	11070205	48				X
Spring Cr	11070205	30				X
Stink Branch	11070205	37				X
Thunderbolt Cr	11070205	44				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

NEOSHO RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: MIDDLE NEOSHO (HUC 11070205)

Tolen Cr	11070205	39				X
Town Cr	11070205	28				X
Turkey Cr	11070205	29				X
Unnamed Stream	11070205	298		O	X	
Unnamed Stream	11070205	303		O	X	
Unnamed Stream	11070205	304		O	X	
Unnamed Stream	11070205	305		O	X	
Walnut Cr	11070205	13				X
Wolf Cr	11070205	33		O	X	

SUBBASIN: LAKE O' THE CHEROKEES (HUC 11070206)

Fourmile Cr	11070206	18				X
Tar Cr	11070206	19		O	X	

SUBBASIN: SPRING (HUC 11070207)

Brush Cr	11070207	23		O	X	
Brush Cr	11070207	26		O	X	/
Clear Cr	11070207	28		O	X	
Cow Cr	11070207	16	X		X	
Cow Cr, East	11070207	24		O	X	
First Cow Cr	11070207	27		O	X	
Little Shawnee Cr	11070207	22				X
Long Branch	11070207	21				X
Shawnee Cr	11070207	17				X
Shoal Cr	11070207	2	X			X
Short Cr	11070207	881				X
Spring R	11070207	1	X			X
Spring R	11070207	19	X			X
Spring R	11070207	3	X			X
Spring R	11070207	4	X			X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

NEOSHO RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: SPRING (HUC 11070207)						
Spring R	11070207	6	X			X
Spring R	11070207	7	X			X
Taylor Branch	11070207	25				X
Turkey Cr	11070207	18	X			X
Unnamed Stream	11070207	886	X			X
Willow Cr	11070207	20				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

SMOKY/SALINE RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: SMOKY HILL HEADWATERS (HUC 10260001)

Capper Draw	10260001	311		O		X
Coon Cr	10260001	20		O		X
Depperschmidt Draw	10260001	309		O		X
Eagletail Cr	10260001	17		O		X
Goose Cr	10260001	5		O		X
Lake Cr	10260001	2		O		X
Lake Cr, S Fk	10260001	18		O		X
Pond Cr	10260001	21		O		X
Rose Cr	10260001	19		O		X
Smoky Hill R	10260001	1		O		X
Smoky Hill R	10260001	10		O		X
Smoky Hill R	10260001	3		O		X
Smoky Hill R	10260001	4		O		X
Smoky Hill R	10260001	6		O		X
Smoky Hill R	10260001	8		O		X
Unnamed Stream	10260001	9		O		X
Willow Cr	10260001	7		O		X

SUBBASIN: NORTH FORK SMOKY HILL (HUC 10260002)

Sand Cr	10260002	2		O		X
Sandy Cr	10260002	4		O		X
Smoky Hill R, N Fk	10260002	1		O		X
Smoky Hill R, N Fk	10260002	3		O		X
Smoky Hill R, N Fk	10260002	5		O		X
Smoky Hill R, N Fk	10260002	6		O		X
Turtle Cr	10260002	15		O		X

SUBBASIN: UPPER SMOKY HILL (HUC 10260003)

Big Windy Cr	10260003	38		O		X
Cheyenne Cr	10260003	36		O		X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

SMOKY/SALINE RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: UPPER SMOKY HILL (HUC 10260003)

Downer Cr	10260003	11		0		X
Downer Cr, E Br	10260003	39		0		X
Gibson Cr	10260003	34		0		X
Goat Canyon Cr	10260003	41		0		X
Hell Cr	10260003	25		0		X
Indian Cr	10260003	15		0		X
Indian Cr	10260003	7		0		X
Page Cr	10260003	31		0		X
Plum Cr	10260003	18		0		X
Salt Cr	10260003	26		0		X
Salt Cr, East	10260003	35		0		X
Sand Cr	10260003	29		0		X
Sand Cr	10260003	37		0		X
Sand Cr, E Br	10260003	40		0		X
Six Mile Cr	10260003	23		0		X
Smoky Hill R.	10260003	10		0		X
Smoky Hill R.	10260003	12		0		X
Smoky Hill R.	10260003	13		0		X
Smoky Hill R.	10260003	14		0		X
Smoky Hill R.	10260003	16		0		X
Smoky Hill R.	10260003	17		0		X
Smoky Hill R.	10260003	19		0		X
Smoky Hill R.	10260003	20		0		X
Smoky Hill R.	10260003	21		0		X
Smoky Hill R.	10260003	22		0		X
Smoky Hill R.	10260003	24		0		X
Smoky Hill R.	10260003	9		0		X
Spring Cr, West	10260003	33		0		X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

SMOKY/SALINE RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: UPPER SMOKY HILL (HUC 10260003)

Unnamed Stream	10260003	27		0		X
Wild Horse Cr	10260003	28		0		X

SUBBASIN: LADDER (HUC 10260004)

Chalk Cr	10260004	4		0		X
Ladder Cr	10260004	1		0		X
Ladder Cr	10260004	10		0		X
Ladder Cr	10260004	3		0		X
Ladder Cr	10260004	5		0		X
Ladder Cr	10260004	7		0		X
Ladder Cr	10260004	8		0		X
Ladder Cr	10260004	9		0		X
Ladder Cr, Middle	10260004	13		0		X
Ladder Cr, Middle, N Fk	10260004	17		0		X
Ladder Cr, Middle, S Fk	10260004	15		0		X
Ladder Cr, South	10260004	12		0		X
Ladder Cr, South	10260004	14		0		X
Twin Butte Cr	10260004	2		0		X
Unnamed Stream	10260004	11		0		X
Unnamed Stream	10260004	6		0		X

SUBBASIN: HACKBERRY (HUC 10260005)

Hackberry Cr	10260005	1		0		X
Hackberry Cr	10260005	3		0		X
Hackberry Cr, M Br	10260005	4		0		X
Hackberry Cr, M Br	10260005	6		0		X
Hackberry Cr, N Br	10260005	5		0		X
Hackberry Cr, S Br	10260005	7		0		X
Spring Cr	10260005	2		0		X
Spring Cr, West	10260005	8		0		X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

SMOKY/SALINE RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: MIDDLE SMOKY HILL (HUC 10260006)

Ash Cr	10260006	1190				X
Beaver Cr	10260006	33	X		X	
Big Timber Cr	10260006	24				X
Big Timber Cr	10260006	25				X
Big Timber Cr	10260006	27				X
Blood Cr	10260006	35				X
Buck Cr	10260006	29				X
Buffalo Cr	10260006	6				X
Clear Cr	10260006	42				X
Coal Cr	10260006	34				X
Cow Cr	10260006	38				X
Eagle Cr	10260006	30			X	
Fossil Cr	10260006	13		O		X
Goose Cr	10260006	39				X
Landon Cr	10260006	31				X
Loss Cr	10260006	44				X
Mud Cr	10260006	47				X
Oxide Cr	10260006	45				X
Sellens Cr	10260006	32				X
Shelter Cr	10260006	43				X
Skunk Cr	10260006	48				X
Smoky Hill R	10260006	10	X			X
Smoky Hill R	10260006	11	X			X
Smoky Hill R	10260006	12	X			X
Smoky Hill R	10260006	14	X			X
Smoky Hill R	10260006	15	X			X
Smoky Hill R	10260006	16	X			X
Smoky Hill R	10260006	17	X			X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

SMOKY/SALINE RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: MIDDLE SMOKY HILL (HUC 10260006)

Smoky Hill R	10260006	18	X			X
Smoky Hill R	10260006	19	X			X
Smoky Hill R	10260006	21	X			X
Smoky Hill R	10260006	22	X			X
Smoky Hill R	10260006	5	X			X
Smoky Hill R	10260006	7	X			X
Smoky Hill R	10260006	8	X			X
Smoky Hill R	10260006	9	X			X
Spring Cr	10260006	41				X
Thompson Cr	10260006	37				X
Timber Cr	10260006	26				X
Turkey Cr	10260006	46				X
Unnamed Stream	10260006	20				X
Unnamed Stream	10260006	23				X
Unnamed Stream	10260006	28				X
Wilson Cr	10260006	40				X
Wolf Cr	10260006	36				X

SUBBASIN: BIG (HUC 10260007)

Big Cr	10260007	1	X		X	
Big Cr	10260007	3	X			X
Big Cr	10260007	5	X			X
Big Cr	10260007	7		O	X	
Big Cr, N Fk	10260007	4		O	X	
Chetolah Cr	10260007	8		O	X	
Mud Cr	10260007	9				X
Ogallah Cr	10260007	6		O	X	
Walker Cr	10260007	2		O	X	

SUBBASIN: LOWER SMOKY HILL (HUC 10260008)

HUC=Hydrological Unit Code
 UAA= Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

SMOKY/SALINE RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: LOWER SMOKY HILL (HUC 10260008)

Basket Cr	10260008	40				X
Battle Cr	10260008	23				X
Carry Cr	10260008	35				X
Chapman Cr	10260008	3	X			X
Chapman Cr	10260008	4	X			X
Chapman Cr, West	10260008	5				X
Dry Cr	10260008	36				X
Dry Cr, East	10260008	43				X
Gypsum Cr	10260008	18		O	X	
Gypsum Cr	10260008	20		O	X	
Gypsum Cr	10260008	21		O	X	
Gypsum Cr	10260008	22		O	X	
Gypsum Cr, North	10260008	57		O	X	
Gypsum Cr, South	10260008	24		O	X	
Gypsum Cr, W Br	10260008	44		O	X	
Hobbs Cr	10260008	48				X
Holland Cr	10260008	25				X
Holland Cr, East	10260008	27				X
Holland Cr, West	10260008	26				X
Kentucky Cr	10260008	17				X
Kentucky Cr, West	10260008	54				X
Lime Cr	10260008	51	X		X	
Lone Tree Cr	10260008	41				X
Lyon Cr	10260008	31	X		X	
Lyon Cr	10260008	540	X			X
Lyon Cr, W Br	10260008	34				X
Mcallister Cr	10260008	49				X
Middle Branch	10260008	58				X

HUC= Hydrological Unit Code
 UAA= Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

SMOKY/SALINE RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: LOWER SMOKY HILL (HUC 10260008)

Mud Cr	10260008	8				X
Otter Cr	10260008	42				X
Paint Cr	10260008	52				X
Pewee Cr	10260008	56				X
Sand Cr	10260008	46				X
Sharps Cr	10260008	16				X
Smoky Hill R	10260008	1	X			X
Smoky Hill R	10260008	10	X			X
Smoky Hill R	10260008	11	X			X
Smoky Hill R	10260008	12	X			X
Smoky Hill R	10260008	13	X			X
Smoky Hill R	10260008	14	X			X
Smoky Hill R	10260008	15	X			X
Smoky Hill R	10260008	2	X			X
Smoky Hill R	10260008	6	X			X
Smoky Hill R	10260008	7	X			X
Smoky Hill R	10260008	9	X			X
Spring Cr	10260008	45				X
Stag Cr	10260008	19				X
Turkey Cr	10260008	28				X
Turkey Cr	10260008	30				X
Turkey Cr, East	10260008	50				X
Turkey Cr, W Br	10260008	29				X
Unnamed Stream	10260008	32				X
Unnamed Stream	10260008	515				X
Unnamed Stream	10260008	542				X
Unnamed Stream	10260008	618				X
Unnamed Stream	10260008	638		O	X	

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

SMOKY/SALINE RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: LOWER SMOKY HILL (HUC 10260008)

Wiley Cr	10260008	47				X
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SUBBASIN: UPPER SALINE (HUC 10260009)

Cedar Cr	10260009	30				X
Chalk Cr	10260009	26				X
Coyote Cr	10260009	23				X
Eagle Cr	10260009	6				X
Happy Cr	10260009	25				X
Paradise Cr	10260009	5				
Paradise Cr	10260009	7		O	X	
Plum Cr	10260009	22		O	X	
Saline R	10260009	11	X			X
Saline R	10260009	12	X			X
Saline R	10260009	14		O	X	
Saline R	10260009	16		O	X	
Saline R	10260009	4	X			X
Saline R	10260009	8	X			X
Saline R	10260009	9	X			X
Saline R, N Fk	10260009	15		O	X	
Saline R, N Fk	10260009	17		O	X	
Saline R, S Fk	10260009	18		O	X	
Salt Cr	10260009	20				X
Spring Brook Cr	10260009	21		O	X	
Spring Cr, East	10260009	10				X
Sweetwater Cr	10260009	29			X	
Tomcat Cr	10260009	28		O		X
Trego Cr	10260009	19			X	
Trego Cr	10260009	24		O		X
Unnamed Stream	10260009	1061				X

HUC=Hydrological Unit Code

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

SMOKY/SALINE RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: UPPER SALINE (HUC 10260009)

Unnamed Stream	10260009	13				X
Wild Horse Cr	10260009	27				X

SUBBASIN: LOWER SALINE (HUC 10260010)

Bacon Cr	10260010	7				X
Blue Stem Cr	10260010	33				X
Bullfoot Cr	10260010	14	X		X	
Bullfoot Cr	10260010	15	X			X
Coon Cr	10260010	31				X
Dry Cr	10260010	29				X
Eff Cr	10260010	23				X
Elkhorn Cr	10260010	17				X
Elkhorn Cr , West	10260010	38				X
Fourmile Cr	10260010	30				X
Lost Cr	10260010	34				X
Mulberry Cr	10260010	21	X			X
Mulberry Cr	10260010	22	X			X
Owl Cr	10260010	18				X
Owl Cr	10260010	39				X
Ralston Cr	10260010	28				X
Saline R.	10260010	1	X			X
Saline R.	10260010	13	X			X
Saline R.	10260010	2	X		X	
Saline R.	10260010	3	X			X
Saline R.	10260010	4	X			X
Saline R.	10260010	5	X			X
Saline R.	10260010	9	X			X
Shaw Cr	10260010	41				X
Spillman Cr	10260010	6				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

SMOKY/SALINE RIVER BASIN					
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>

SUBBASIN: LOWER SALINE (HUC 10260010)

Spillman Cr, N Br	10260010	8			X
Spring Cr	10260010	16			X
Spring Cr	10260010	19			X
Spring Cr	10260010	20			X
Spring Cr	10260010	24			X
Spring Cr	10260010	26			X
Spring Cr	10260010	27			X
Spring Cr, West	10260010	25			X
Table Rock Cr	10260010	40			X
Trail Cr	10260010	32			X
Twelvemile Cr	10260010	36			X
Twin Cr, West	10260010	37			X
Wolf Cr	10260010	10			X
Wolf Cr, E Fk	10260010	11			X
Wolf Cr, W Fk	10260010	12			X
Yauger Cr	10260010	35			X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

SOLOMON RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: UPPER NORTH FORK SOLOMON (HUC 10260011)

Ash Cr	10260011	24				X
Beaver Cr	10260011	23				X
Big Timber Cr	10260011	8				X
Bow Cr	10260011	15				X
Bow Cr	10260011	16		O	X	
Bow Cr, South	10260011	17		O	X	
Cactus Cr	10260011	28				X
Crooked Cr	10260011	6				X
Elk Cr	10260011	12				X
Elk Cr, East	10260011	25				X
Game Cr	10260011	10				X
Game Cr	10260011	27				X
Lost Cr	10260011	20				X
Sand Cr	10260011	26				X
Scull Cr	10260011	21				X
Solomon R, N Fk	10260011	11	X			X
Solomon R, N Fk	10260011	13	X			X
Solomon R, N Fk	10260011	5	X			X
Solomon R, N Fk	10260011	7	X			X
Solomon R, N Fk	10260011	9	X			X
Spring Cr	10260011	19				X
Wolf Cr	10260011	22				X

SUBBASIN: LOWER NORTH FORK SOLOMON (HUC 10260012)

Beaver Cr	10260012	10				X
Beaver Cr, E Br	10260012	11				X
Beaver Cr, Middle	10260012	12				X
Beaver Cr, Middle	10260012	13				X
Beaver Cr, West	10260012	14				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

SOLOMON RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: LOWER NORTH FORK SOLOMON (HUC 10260012)

Big Cr	10260012	26				X
Boughton Cr	10260012	34				X
Buck Cr	10260012	43				X
Cedar Cr	10260012	16				X
Cedar Cr	10260012	18				X
Cedar Cr, East	10260012	17				X
Cedar Cr, East	10260012	37				X
Cedar Cr, Middle	10260012	19				X
Cedar Cr, West	10260012	20				X
Deer Cr	10260012	23				X
Deer Cr	10260012	25				X
Deer Cr	10260012	27				X
Deer Cr	10260012	29		0	X	
Deer Cr	10260012	31				X
Dry Cr	10260012	42				X
Glen Rock Cr	10260012	41				X
Lawrence Cr	10260012	44				X
Lindley Cr	10260012	45				X
Little Oak Cr	10260012	3				X
Medicine Cr	10260012	33				X
Oak Cr	10260012	2				X
Oak Cr	10260012	4				X
Oak Cr, West	10260012	39				X
Oak Cr, East	10260012	40				X
Plotner Cr	10260012	30		0	X	
Plum Cr	10260012	24				X
Solomon R, N Fk	10260012	15	X			X
Solomon R, N Fk	10260012	21	X			X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

SOLOMON RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: LOWER NORTH FORK SOLOMON (HUC 10260012)

Solomon R, N Fk	10260012	22	X			X
Solomon R, N Fk	10260012	5	X			X
Solomon R, N Fk	10260012	7	X		X	
Solomon R, N Fk	10260012	9	X			X
Spring Cr	10260012	28				X
Spring Cr	10260012	8				X
Starvation Cr	10260012	38				X
Twelvemile Cr	10260012	6				X

SUBBASIN: UPPER SOUTH FORK SOLOMON (HUC 10260013)

Antelope Cr	10260013	13		O	X	
Coon Cr	10260013	8		O	X	
Foster Cr	10260013	19		O	X	
Jackson Branch	10260013	17		O	X	
Jackson Branch	10260013	24		O	X	
Martin Cr, South	10260013	23		O	X	
Rock Cr	10260013	22		O	X	
Sand Cr	10260013	11		O	X	
Sand Cr	10260013	15		O	X	
Sand Cr	10260013	27		O	X	
Skunk Cr	10260013	26		O	X	
Slate Cr	10260013	25		O	X	
Solomon R, S Fk	10260013	10	X			X
Solomon R, S Fk	10260013	12	X			X
Solomon R, S Fk	10260013	14	X			X
Solomon R, S Fk	10260013	16	X			X
Solomon R, S Fk	10260013	4	X			X
Solomon R, S Fk	10260013	6	X			X
Solomon R, S Fk	10260013	7	X			X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

SOLOMON RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: UPPER SOUTH FORK SOLOMON (HUC 10260013)

Solomon R, S Fk	10260013	9	X			X
Spring Cr	10260013	5				X
Spring Cr	10260013	817				X
Storer Cr	10260013	20		O	X	
Wildhorse Cr	10260013	18		O	X	
Youngs Cr	10260013	21		O	X	

SUBBASIN: LOWER SOUTH FORK SOLOMON (HUC 10260014)

Ash Cr	10260014	22				X
Boxelder Cr	10260014	14				X
Carr Cr	10260014	21				X
Cocklebur Cr	10260014	23				X
Covert Cr	10260014	19				X
Crooked Cr	10260014	27				X
Dibble Cr	10260014	363				X
Elm Cr	10260014	15				X
Jim Cr	10260014	25				X
Kill Cr	10260014	18				X
Kill Cr, East	10260014	28				X
Lost Cr	10260014	13				X
Lucky Cr	10260014	26				X
Medicine Cr	10260014	16				X
Medicine Cr	10260014	17				X
Robbers Roost Cr	10260014	24				X
Sand Cr	10260014	395				X
Solomon R, S Fk	10260014	10	X			X
Solomon R, S Fk	10260014	2	X			X
Solomon R, S Fk	10260014	3	X		X	
Solomon R, S Fk	10260014	4	X			X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

SOLOMON RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: LOWER SOUTH FORK SOLOMON (HUC 10260014)

Solomon R, S Fk	10260014	5	X			X
Solomon R, S Fk	10260014	6	X			X
Solomon R, S Fk	10260014	7	X			X
Solomon R, S Fk	10260014	798	X			X
Solomon R, S Fk	10260014	8	X			X
Solomon R, S Fk	10260014	9	X			X
Twin Cr	10260014	20				X
Twin Cr, East	10260014	29				X

SUBBASIN: SOLOMON RIVER (HUC 10260015)

Antelope Cr	10260015	43				2001
Antelope Cr	10260015	58				2001
Battle Cr	10260015	33				2001
Battle Cr	10260015	57				2001
Brown Cr	10260015	15				2001
Coal Cr	10260015	2				2001
Cow Cr	10260015	28				2001
Cow Cr	10260015	55				2001
Cris Cr	10260015	48				2001
Disappointment Cr	10260015	35				2001
Dry Cr	10260015	37				2001
Dry Cr	10260015	52				2001
Blkhorn Cr, West	10260015	47				2001
Elm Cr	10260015	59				2001
Fifth Cr	10260015	45				2001
Fourth Cr	10260015	46				2001
Frog Cr	10260015	34				2001
Granite Cr	10260015	24				2001
Indian Cr	10260015	40				2001

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

SOLOMON RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: SOLOMON RIVER (HUC 10260015)

						2001
Leban Cr	10260015	41				
Limestone Cr	10260015	18	X		X	
Limestone Cr	10260015	19	X			X
Limestone Cr, Middle	10260015	21				2001
Limestone Cr, West	10260015	20				2001
Limestone Cr, West	10260015	22				2001
Lindsey Cr	10260015	7				2001
Little Cr	10260015	44				2001
Lost Cr	10260015	56				2001
Marshall Cr	10260015	42				2001
Mill Cr	10260015	38				2001
Mortimer Cr	10260015	49				2001
Mulberry Cr	10260015	36				2001
Pipe Cr	10260015	10				2001
Pipe Cr	10260015	9				2001
Pipe Cr, West	10260015	11				2001
Plum Cr	10260015	13				2001
Rattlesnake Cr	10260015	31				2001
Rattlesnake Cr	10260015	32				2001
Salt Cr	10260015	27	X		X	
Salt Cr	10260015	29	X			X
Salt Cr	10260015	30	X			X
Sand Cr	10260015	4				2001
Second Cr	10260015	51				2001
Second Cr	10260015	54				2001
Solomon R.	10260015	1	X		X	
Solomon R.	10260015	12	X			X
Solomon R.	10260015	14	X			X

HUC=Hydrological Unit Code
 UAA= Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

SOLOMON RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: SOLOMON RIVER (HUC 10260015)

Solomon R	10260015	16	X			X
Solomon R	10260015	23	X			X
Solomon R	10260015	3	X			X
Solomon R	10260015	5	X			X
Solomon R	10260015	6	X			X
Solomon R	10260015	8	X			X
Spring Cr	10260015	53				2001
Turkey Cr	10260015	39				2001
Walnut Cr	10260015	26				2001
Yockey Cr	10260015	50				2001

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

UPPER ARKANSAS RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: MIDDLE ARKANSAS-LAKE MCKINNEY HUC (11030001)

Amazon Ditch	11030001	15		O	X	
Arkansas R	11030001	1	X			X
Arkansas R	11030001	3	X			X
Arkansas R	11030001	5	X			X
Arkansas R	11030001	7	X			X
Arkansas R	11030001	9	X			X
Bridge Cr, East	11030001	6		O	X	
Bridge Cr, West	11030001	8		O	X	
Fort Aubrey Ditch	11030001	17	X			X
Frontier Ditch	11030001	16	X			X
Great Eastern Ditch	11030001	2				X
James Draw	11030001	10		O	X	
Mattox Draw	11030001	11		O	X	
Sand Cr	11030001	13		O	X	
Sand Cr	11030001	14		O	X	
Shirley Cr	11030001	4		O	X	
Unnamed Stream	11030001	18		O	X	

SUBBASIN: WHITEWOMAN (HUC 11030002)

Sand Cr	11030002	3		O	X	
Whitewoman Cr	11030002	1		O	X	
Whitewoman Cr	11030002	2		O	X	

SUBBASIN: ARKANSAS-DODGECITY (HUC 11030003)

Arkansas R	11030003	1		O	X	
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SUBBASIN: ARKANSAS-PICKEREL (HUC 11030004)

Arkansas R	11030004	1		O	X	
Arkansas R	11030004	10		O	X	
Arkansas R	11030004	11		O	X	
Arkansas R	11030004	2		O	X	

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

UPPER ARKANSAS RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: ARKANSAS-PICKEREL (HUC 110300004)

Arkansas R	11030004	4		O		X
Arkansas R	11030004	5		O		X
Arkansas R	11030004	6		O		X
Ash Cr	11030004	3		O		X
Coon Cr	11030004	7		O		X
Coon Cr	11030004	9		O		X
Cow Cr	11030004	14		O		X
Little Coon Cr	11030004	8		O		X
Mulberry Cr	11030004	12		O		X
Pickereel Cr	11030004	13		O		X
White Woman Cr	11030004	15		O		X

SUBBASIN: PAWNEE (HUC 110300005)

Cocklebur Cr	11030005	12		O		X
Cottonwood Cr	11030005	10		O		X
Cottonwood Cr	11030005	8		O		X
Hackberry Cr	11030005	4		O		X
Pawnee R	11030005	1	X			X
Pawnee R	11030005	2		O		X
Pawnee R	11030005	3		O		X
Pawnee R	11030005	5		O		X
Plum Cr	11030005	7		O		X
Sand Cr	11030005	11		O		X
Sand Cr	11030005	9		O		X
Sawmill Cr	11030005	6		O		X

SUBBASIN: BUCKNER (HUC 110300006)

Buckner Cr	11030006	1		O		X
Buckner Cr	11030006	2		O		X
Buckner Cr, S Fk	11030006	6				

2001

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

UPPER ARKANSAS RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: BUCKNER (HUC 11030006)

Duck Cr	11030006	8				2001
Elm Cr	11030006	5				2001
Rock Cr	11030006	9				2001
Saw Log Cr	11030006	3				2001
Saw Log Cr	11030006	4				2001
Spring Cr	11030006	7		O	X	

SUBBASIN: UPPER WALNUT CREEK (HUC 11030007)

Darr Cr	11030007	12		O	X	
Walnut Cr, Long Branch	11030007	2		O	X	
Walnut Cr, Middle Fk	11030007	7		O	X	
Walnut Cr, Middle Fk	11030007	9		O	X	
Walnut Cr, N Fk	11030007	1		O	X	
Walnut Cr, N Fk	11030007	3		O	X	
Walnut Cr, N Fk	11030007	5		O	X	
Walnut Cr, N Fk	11030007	6		O	X	
Walnut Cr, N Fk of M Fk	11030007	8		O	X	
Walnut Cr, S Fk	11030007	10		O	X	
Wild Horse Cr	11030007	11		O	X	
Wild Horse Cr	11030007	4		O	X	

SUBBASIN: LOWER WALNUT CREEK (HUC 11030008)

Alexander Dry Cr	11030008	7				2001
Bazine Cr	11030008	9				2001
Boot Cr	11030008	15				2001
Dry Cr	11030008	14				2001
Dry Walnut Cr	11030008	13				2001
Otter Cr	11030008	12				2001
Sand Cr	11030008	3				2001
Sandy Cr	11030008	11				2001

HUC= Hydrological Unit Code

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

UPPER ARKANSAS RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: LOWER WALNUT CREEK (HUC 11030008)

Walnut Cr	11030008	1				2001
Walnut Cr	11030008	10				2001
Walnut Cr	11030008	2				2001
Walnut Cr	11030008	4				2001
Walnut Cr	11030008	5				2001
Walnut Cr	11030008	6				2001
Walnut Cr	11030008	8				2001

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

UPPER REPUBLICAN RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: ARIKAREE (HUC 10250001)

Arikaree R	10250001	1	X		X	
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SUBBASIN: SOUTH FORK REPUBLICAN (HUC 10250003)

Battle Cr	10250003	71				2001
Big Timber Cr	10250003	61				2001
Bluff Cr	10250003	70		O	X	
Cherry Cr	10250003	5		O	X	
Cowpe Cr	10250003	8		O	X	
Crosby Cr	10250003	72		O	X	
Delay Cr	10250003	66		O	X	
Drury Cr	10250003	60				2001
Hackberry Cr	10250003	3		O	X	
Republican R, S Fk	10250003	2	X		X	
Republican R, S Fk	10250003	4	X			X
Republican R, S Fk	10250003	6	X			X
Republican R, S Fk	10250003	7	X			X
Republican R, S Fk	10250003	9	X			X
Sand Cr	10250003	68		O	X	
Spring Cr	10250003	67		O	X	
Valley Cr	10250003	69		O	X	

SUBBASIN: UPPER REPUBLICAN (HUC 10250004)

Driftwood Cr	10250004	59		O	X	
Jones Canyon	10250004	50		O	X	

SUBBASIN: UPPER SAPPA (HUC 10250010)

Sappa Cr, M Fk	10250010	1		O	X	
Sappa Cr, M Fk	10250010	3		O	X	
Sappa Cr, N Fk	10250010	2		O	X	
Sappa Cr, S Fk	10250010	4		O	X	
Sappa Cr, S Fk	10250010	6		O	X	

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

UPPER REPUBLICAN RIVER BASIN					
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u> <u>UAAs not completed</u>

SUBBASIN: UPPER SAPP (HUC 10250010)

Unnamed Stream	10250010	5		0	X
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SUBBASIN: LOWER SAPP (HUC 10250011)

Boy Cr	10250011	13		0	X
Cotton Cr	10250011	15		0	X
Deer Cr	10250011	7		0	X
Dry Cr	10250011	8		0	X
Dutch Cr	10250011	16		0	X
Jones Cr	10250011	17		0	X
Maple Cr	10250011	18		0	X
Rock Branch	10250011	10		0	X
Sappa Cr	10250011	3		0	X
Sappa Cr	10250011	4		0	X
Sappa Cr, Long Branch	10250011	5		0	X
Sheep Cr	10250011	19		0	X
Spring Branch	10250011	9		0	X
Squaw Branch	10250011	12		0	X
Walnut Cr	10250011	11		0	X

SUBBASIN: SOUTH FORK BEAVER (HUC 10250012)

Beaver Cr	10250012	1		0	X
Beaver Cr, Middle	10250012	2		0	X
Beaver Cr, Middle	10250012	8		0	X
Beaver Cr, N Fk	10250012	3		0	X
Beaver Cr, South	10250012	11		0	X
Beaver Cr, South	10250012	9		0	X
Unnamed Stream	10250012	10		0	X

SUBBASIN: LITTLE BEAVER (HUC 10250013)

Beaver Cr, North	10250013	2		0	X
Little Beaver Cr	10250013	1		0	X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

UPPER REPUBLICAN RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: LITTLE BEAVER (HUC 10250013)

Little Beaver Cr	10250013	3		O	X	
Little Beaver Cr	10250013	4		O	X	
Sand Cr	10250013	7		O	X	

SUBBASIN: BEAVER (HUC 10250014)

Beaver Cr	10250014	2				2001
Elm Cr	10250014	64		O	X	

SUBBASIN: PRAIRIE DOG (HUC 10250015)

Battle Cr	10250015	24		O	X	
Big Timber Cr	10250015	9		O	X	
Buffalo Cr	10250015	21		O	X	
Dry Cr	10250015	23		O	X	
Elk Cr	10250015	3		O	X	
Fancy Cr	10250015	19		O	X	
Horse Cr	10250015	18		O	X	
Jack Cr	10250015	22		O	X	
Plum Cr	10250015	14		O	X	
Prairie Dog Cr	10250015	10	X			X
Prairie Dog Cr	10250015	12	X			X
Prairie Dog Cr	10250015	2	X		X	
Prairie Dog Cr	10250015	4	X			X
Prairie Dog Cr	10250015	8	X			X
Prairie Dog Cr, N Fk	10250015	11		O	X	
Prairie Dog Cr, N Fk	10250015	17		O	X	
Robinson Cr	10250015	16		O	X	
Sand Cr	10250015	20		O	X	
Spring Cr	10250015	15		O	X	
Walnut Cr	10250015	13		O	X	
Walnut Cr	10250015	25		O	X	

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

UPPER REPUBLICAN RIVER BASIN					
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>

SUBBASIN: PRAIRIE DOG (HUC 10250015)

Wildcat Cr	10250015	26		0	X
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Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

VERDIGRIS RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: UPPER VERDIGRIS (HUC 11070101)

Bachelor Cr	11070101	21				X
Bernard Cr	11070101	24				X
Big Cedar Cr	11070101	39				X
Brazil Cr	11070101	31				X
Buffalo Cr	11070101	2				X
Buffalo Cr, West	11070101	34				X
Cedar Cr	11070101	32				X
Chetopa Cr	11070101	22				X
Crooked Cr	11070101	38				X
Dry Cr	11070101	27				X
Elder Branch	11070101	37				X
Fancy Cr	11070101	28				X
Greenhall Cr	11070101	26				X
Holderman Cr	11070101	47				X
Homer Cr	11070101	20				X
Kelly Branch	11070101	42				X
Kuntz Branch	11070101	29				X
Little Chetopa Cr	11070101	471				X
Little Sandy Cr	11070101	33				X
Long Cr	11070101	45				X
Miller Cr	11070101	30				X
Moon Branch	11070101	43				X
Onion Cr	11070101	23				X
Rock Cr	11070101	14				X
Ross Branch	11070101	35				X
Sandy Cr	11070101	4				X
Shaw Cr	11070101	40				X
Slate Cr	11070101	25				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

VERDIGRIS RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: UPPER VERDIGRIS (HUC 11070101)

Snake Cr	11070101	36				X
Tate Branch Cr	11070101	44				X
Van Horn Cr	11070101	46				X
Verdigris R	11070101	1	X			X
Verdigris R	11070101	11	X			X
Verdigris R	11070101	12	X		X	
Verdigris R	11070101	3	X			X
Verdigris R	11070101	5	X			X
Verdigris R, Bernard Br	11070101	16				X
Verdigris R, N Br	11070101	13				X
Verdigris R, N Br	11070101	15				X
Walnut Cr	11070101	19				X
West Cr	11070101	17				X
Wolf Cr	11070101	41				X

SUBBASIN: FALL (HUC 11070102)

Battle Cr	11070102	18				X
Burnt Cr	11070102	24				X
Clear Cr	11070102	37		O	X	
Coon Cr	11070102	25				X
Coon Cr	11070102	36				X
Crain Cr	11070102	32				X
Fall R	11070102	1	X		X	
Fall R	11070102	2	X			X
Fall R	11070102	3	X			X
Fall R	11070102	7	X			X
Fall R	11070102	8	X			X
Fall R	11070102	9	X			X
Fall R, E Br	11070102	635	X			X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

VERDIGRIS RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: FALL (HUC 11070102)

Fall R, W Br	11070102	11	X			X
Honey Cr	11070102	26				X
Indian Cr	11070102	15				X
Ivanpah Cr	11070102	19				X
Kitty Cr	11070102	27				X
Little Indian Cr	11070102	34				X
Little Salt Cr	11070102	35				X
Oleson Cr	11070102	21				X
Otis Cr	11070102	20				X
Otter Cr	11070102	13	X			X
Otter Cr, S Br	11070102	28	X			X
Plum Cr	11070102	30				X
Rainbow Cr, East	11070102	17				X
Salt Cr	11070102	14				X
Salt Cr	11070102	38				X
Silver Cr	11070102	33				X
Snake Cr	11070102	31				X
Spring Cr	11070102	12				X
Swing Cr	11070102	989				X
Tadpole Cr	11070102	29				X
Watson Branch	11070102	23				X

SUBBASIN: MIDDLE VERDIGRIS (HUC 11070103)

Big Cr	11070103	21				X
Big Hill Cr	11070103	30	X		X	
Big Hill Cr	11070103	32	X			X
Biscuit Cr	11070103	53				X
Bluff Run	11070103	54				X
Choteau Cr	11070103	63				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

VERDIGRIS RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: MIDDLE VERDIGRIS (HUC 11070103)

						X
Claymore Cr	11070103	50				X
Deadman Cr	11070103	57				X
Deer Cr	11070103	51				X
Drum Cr	11070103	34				X
Dry Cr	11070103	37				X
Fawn Cr	11070103	56				X
Mud Cr	11070103	59				X
Onion Cr	11070103	39				X
Potatoe Cr	11070103	31				X
Prior Cr	11070103	62				X
Pumpkin Cr	11070103	28				X
Richland Cr	11070103	49				X
Rock Cr	11070103	58				X
Rock Cr	11070103	61				X
Snow Cr	11070103	25				X
Spring Cr	11070103	55				X
Sycamore Cr	11070103	52				X
Verdigris R	11070103	27	X			X
Verdigris R	11070103	29	X			X
Verdigris R	11070103	33	X			X
Verdigris R	11070103	35	X			X
Verdigris R	11070103	36	X			X
Verdigris R	11070103	38	X			X
Wildcat Cr	11070103	60				X

SUBBASIN: ELK (HUC 11070104)

						X
Bachelor Cr	11070104	25				X
Bloody Run	11070104	26				X
Bull Cr	11070104	33				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

VERDIGRIS RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: ELK (HUC 11070104)

Card Cr	11070104	19				X
Chetopa Cr	11070104	18				X
Clear Cr	11070104	30				X
Clear Cr	11070104	32				X
Coffey Branch	11070104	20				X
Duck Cr	11070104	3				X
Elk R	11070104	1	X		X	
Elk R	11070104	10	X			X
Elk R	11070104	12	X			X
Elk R	11070104	14	X			X
Elk R	11070104	2	X			X
Elk R	11070104	4	X			X
Elk R	11070104	6	X			X
Elk R	11070104	8	X			X
Elk R	11070104	9	X			X
Elk R, Mound Br	11070104	15				X
Elk R, S Br	11070104	38				X
Elrn Branch	11070104	23				X
Hickory Cr	11070104	28				X
Hitchen Cr	11070104	7				X
Hitchen Cr, East	11070104	35				X
Little Duck Cr	11070104	24				X
Little Hitchen Cr	11070104	37				X
Painterhood Cr	11070104	5				X
Painterhood Cr, East	11070104	36				X
Pan Cr	11070104	27				X
Pawpaw Cr	11070104	11				X
Racket Cr	11070104	21				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

VERDIGRIS RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: ELK (HUC 11070104)

Rock Cr	11070104	13				X
Rowe Branch Elk R	11070104	39				X
Salt Cr	11070104	17				X
Salt Cr, South	11070104	29				X
Skull Cr	11070104	31				X
Snake Cr	11070104	34				X
Sycamore Cr	11070104	22				X
Wildcat Cr	11070104	16				X

SUBBASIN: CANEY (HUC 11070106)

Bachelor Cr	11070106	47				X
Bee Cr	11070106	9				X
California Cr	11070106	48				X
Caney Cr	11070106	12				X
Caney Cr, North	11070106	11				X
Caney R.	11070106	19	X		X	
Caney R	11070106	20	X			X
Caney R, B Fk	11070106	52				X
Cedar Cr	11070106	30				X
Cedar Cr	11070106	32				X
Cheyenne Cr	11070106	40				X
Coon Cr	11070106	36				X
Corum Cr	11070106	51				X
Cotton Cr	11070106	38				X
Cotton Cr, N Fk	11070106	37				X
Dry Cr	11070106	29				X
Fly Cr	11070106	46				X
Hafer Run	11070106	509				X
Illinois Cr	11070106	39				X

HUC=Hydrological Unit Code
 11070106 - Flow & Sediment Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

VERDIGRIS RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: CANEY (HUC 11070106)

Jim Cr	11070106	49				X
Lake Cr	11070106	34				X
Little Canev Cr	11070106	10	X			X
Little Canev Cr	11070106	8	X		X	
Otter Cr	11070106	21	X			X
Otter Cr	11070106	33				X
Pool Cr	11070106	43				X
Possum Trot Cr	11070106	74				X
Rock Cr	11070106	28				X
Spring Cr	11070106	44				X
Spring Cr	11070106	53				X
Squaw Cr	11070106	42				X
Sycamore Cr	11070106	31				X
Turkey Cr	11070106	45				X
Union Cr	11070106	41				X
Wolf Cr	11070106	35				X
Wolf Cr	11070106	50				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

WALNUT RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: UPPER WALNUT RIVER (HUC 11030017)

Badger Cr	11030017	36				X
Bemis Cr	11030017	8				X
Bird Cr	11030017	213				X
Coke Cr	11030017	15				X
Constant Cr	11030017	41				X
Dry Cr	11030017	27				X
Dry Cr	11030017	32				X
Durechen Cr	11030017	12				X
Elm Cr	11030017	43				X
Fourmile Cr	11030017	20				X
Gilmore Branch	11030017	39				X
Gypsum Cr	11030017	30				X
Henry Cr	11030017	33				X
Lower Branch	11030017	42				X
Prairie Cr	11030017	35				X
Rock Cr	11030017	37				X
Sand Cr	11030017	29				X
Satchel Cr	11030017	10				X
School Branch	11030017	45				X
Sutton Cr	11030017	40				X
Walnut Cr	11030017	44				X
Walnut R	11030017	1	X			X
Walnut R	11030017	14	X		X	
Walnut R	11030017	2	X			X
Walnut R	11030017	3	X			X
Walnut R, W Br	11030017	16	X		X	
Whitewater Cr	11030017	34				X
Whitewater Cr, E Br	11030017	31				X

HUC=Hydrological Unit Code
 UAA=Use Attainability Analysis

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

WALNUT RIVER BASIN						
<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>

SUBBASIN: UPPER WALNUT RIVER (HUC 11030017)

Whitewater R	11030017	17	X			X
Whitewater R	11030017	18	X			X
Whitewater R	11030017	19	X			X
Whitewater R	11030017	21	X			X
Whitewater R	11030017	23	X			X
Whitewater R, E Br	11030017	22				X
Whitewater R, W Br	11030017	24				X
Whitewater R, W Br	11030017	25				X
Wildcat Cr	11030017	26				X
Wildcat Cr, West	11030017	28				X

SUBBASIN: LOWER WALNUT RIVER (HUC 11030018)

Black Crook Cr	11030018	18				X
Cedar Cr	11030018	19				X
Chigger Cr	11030018	21				X
Crooked Cr	11030018	31				X
Durham Cr	11030018	23				X
Dutch Cr	11030018	2				X
Dutch Cr	11030018	4				X
Eightmile Cr	11030018	30				X
Foos Cr	11030018	26				X
Fourmile Cr	11030018	16	X			X
Hickory Cr	11030018	12				X
Honey Cr	11030018	33				X
Little Dutch Cr	11030018	27				X
Little Walnut R	11030018	11	X			X
Little Walnut R	11030018	13	X			X
Little Walnut R, S Br	11030018	34	X			X
Lower Dutch Cr	11030018	20				X

Designated uses of major classified streams and streams constituting outstanding national resource waters (continued)

WALNUT RIVER BASIN

<u>STREAM SEGMENT NAME</u>	<u>HUC8</u>	<u>Segment</u>	<u>Primary Contact</u>	<u>Primary Contact not attainable</u>	<u>UAAs completed</u>	<u>UAAs not completed</u>
SUBBASIN: LOWER WALNUT RIVER (HUC 11030018)						
Muddy Cr	11030018	9	X		X	
Plum Cr	11030018	36				X
Polecat Cr	11030018	17				X
Posey Cr	11030018	37				X
Richland Cr	11030018	25				X
Rock Cr	11030018	6	X			X
Rock Cr, N Br	11030018	35				X
Sanford Cr	11030018	29				X
Spring Branch	11030018	32				X
Stalter Branch	11030018	24				X
Stewart Cr	11030018	28				X
Swisher Branch	11030018	22				X
Timber Cr	11030018	3	X			X
Walnut R	11030018	1	X			X
Walnut R	11030018	10	X			X
Walnut R	11030018	14	X			X
Walnut R	11030018	15	X			X
Walnut R	11030018	5	X			X
Walnut R	11030018	7	X			X
Walnut R	11030018	8	X			X

HUC=Hydrological Unit Code
 UAA= Use Attainability Analysis



STATE OF KANSAS
DEPARTMENT OF WILDLIFE & PARKS

Office of the Secretary
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Topeka, KS 66612-1233
785/296-2281 FAX 785/296-6953



January 14, 2002

Chairman Robert Tyson
Senate Committee on Energy and Natural Resources
State Capitol, Room 128-S
Topeka, Kansas 66612

Dear Chairman Tyson:

The Kansas Department of Wildlife and Parks wishes to request introduction of two pieces of legislation through the Senate Committee on Energy and Natural Resources for the 2002 Legislative Session:

1. Minimum Age for Turkey Hunting: Amendment to K.S.A. 32-937 to eliminate the current minimum age for hunting turkey in Kansas.
2. Crossbow/Disability Permits: Amendment to K.S.A. 32-932 and 32-933 concerning eligibility for crossbow permits and for disability assistant permits, to allow certification by nonresident physicians and Christian Science practitioners.

Drafts of these two proposals have been submitted to the Office of the Revisor. We look forward to presenting them to the Committee at your earliest convenience. If you have any questions or concerns about any of these legislative initiatives, you can contact me directly, or Clint Riley, Department Legal Counsel, at 296-2780.

Sincerely,

J. Michael Hayden
Secretary

Senate Natural Resources Committee

Date 1-24-02

Attachment # 3

By

AN ACT relating to big game permits; amending K.S.A. 32-937 and repealing the existing section.

Be it enacted by the Legislature of the State of Kansas:

Section 1. K.S.A. 32-937 is hereby amended to read as follows: 32-937. (a) When used in this section:

(1) "Landowner" means a resident owner of farm or ranch land of 80 acres or more located in the state of Kansas.

(2) "Tenant" means an individual who is actively engaged in the agricultural operation of 80 acres or more of Kansas farm or ranch land for the purpose of producing agricultural commodities or livestock and who: (A) Has a substantial financial investment in the production of agricultural commodities or livestock on such farm or ranch land and the potential to realize substantial financial benefit from such production; or (B) is a bona fide manager having an overall responsibility to direct, supervise and conduct such agricultural operation and has the potential to realize substantial benefit from such production in the form of salary, shares of such production or some other economic incentive based upon such production.

(3) "Regular season" means a statewide big game hunting season authorized annually which may include one or more seasons restricted to specific types of equipment.

(4) "Special season" means a big game hunting season in addition to a regular season authorized on an irregular basis or at different times of the year other than the regular season.

(5) "General permit" means a big game hunting permit available to Kansas residents not applying for big game permits as a landowner or tenant.

(6) "Nonresident landowner" means a nonresident of the state of Kansas who owns farm or ranch land of 80 acres or more which is located in the state of Kansas.

(7) "Nonresident permit" means a big game hunting permit available to individuals who are not Kansas residents.

(b) Except as otherwise provided by law or rules and

regulations of the secretary and in addition to any other license, permit or stamp required by law or rules and regulations of the secretary, a valid big game permit and game tags are required to take any big game in this state.

(c) The fee for big game permits and game tags shall be the amount prescribed pursuant to K.S.A. 32-988, and amendments thereto.

(d) A big game permit and game tags are valid throughout the state or such portion thereof as provided by rules and regulations adopted by the secretary in accordance with K.S.A. 32-805 and amendments thereto.

(e) Unless otherwise provided by law or rules and regulations of the secretary, a big game permit and game tags are valid from the date of issuance and shall expire at the end of the season for which issued.

(f) The secretary may adopt, in accordance with K.S.A. 32-805, and amendments thereto, rules and regulations for each regular or special big game hunting season and for each management unit regarding big game permits and game tags. The secretary is hereby authorized to issue big game permits and game tags pertaining to the taking of big game. Separate big game permits and game tags may be issued for each species of big game. No big game permits or game tags shall be issued until the secretary has established, by rules and regulations adopted in accordance with K.S.A. 32-805, and amendments thereto, a regular or special big game hunting season.

(g) The secretary may authorize, by rule and regulation adopted in accordance with K.S.A. 32-805, and amendments thereto, landowner or tenant hunt-on-your-own-land big game permits. Such permits and applications may contain provisions and restrictions as prescribed by rule and regulation adopted by the secretary in accordance with K.S.A. 32-805, and amendments thereto.

(h) The secretary may authorize, by rule and regulation adopted in accordance with K.S.A. 32-805 and amendments thereto, special landowner or tenant hunt-on-your-own-land deer permits.

Such special permits shall not be issued to landowners or tenants in possession of a hunt-on-your-own-land deer permit as authorized in subsection (g). The special permits shall be transferable to any immediate family member of the landowner or tenant, whether or not a Kansas resident, or the permit may be retained for use by the landowner or tenant. The special permits shall be transferable through the secretary at the request of the landowner or tenant and by paying the required fee for a general deer permit. The special permits and applications may contain provisions and restrictions as prescribed by rule and regulation adopted by the secretary in accordance with K.S.A. 32-805 and amendments thereto. For the purposes of this subsection, "member of the immediate family" means lineal or collateral ascendants or descendants, and their spouses.

(i) Fifty percent of the big game permits authorized for a regular season in any management unit shall be issued to landowners or tenants, provided that a limited number of big game permits have been authorized and landowner or tenant hunt-on-your-own-land big game permits for that unit have not been authorized. A landowner or tenant is not eligible to apply for a big game permit as a landowner or as a tenant in a management unit other than the unit or units which includes such landowner's or tenant's land. Any big game permits not issued to landowners or tenants within the time period prescribed by rule and regulation may be issued without regard to the 50% limitation.

(j) Members of the immediate family who are domiciled with a landowner or tenant may apply for a resident big game permit as a landowner or as a tenant, but the total number of landowner or tenant hunt-on-your-own-land or special hunt-on-your-own-land permits issued to a landowner or tenant and a landowner's or tenant's immediate family for each big game species shall not exceed one permit for each 80 acres owned by such landowner or operated by such tenant. The secretary may require proof of ownership or tenancy from individuals applying for a big game

permit as a landowner or as a tenant.

(k) The secretary may issue permits for deer or turkey to nonresident landowners, but any such permit shall be restricted to hunting only on lands owned by the nonresident landowner.

(l) The secretary may issue turkey hunting permits to nonresidents in turkey management units with unlimited turkey hunting permits available.

(m) The secretary may issue deer hunting permits to nonresidents, subject to the following limitations:

(1) The total number of nonresident deer firearm permits of each type specified by rules and regulations that may be issued for a deer season in a management unit and which may be used to take antlered deer shall not exceed 10% of the total number of resident deer firearm permits of such type authorized for such season in such management unit; and

(2) the total number of nonresident deer archery permits of each type specified by rules and regulations that may be issued for a deer season in a management unit and which may be used to take antlered deer shall not exceed 15% of the total number of resident deer archery permits of such type authorized for such season in such management unit.

Nonresident deer archery permits may be restricted to a particular deer species without regard to resident deer archery permit species restrictions, or lack thereof.

If an unlimited number of resident deer permits that may be used to take antlered deer is authorized for a deer season or management unit, the percentage limitations of subsections (m)(1) and (m)(2) shall be based upon the total number of resident firearm permits that may be used to take antlered deer and the total number of archery permits that may be used to take antlered deer, respectively, issued in the management unit during the most recent preceding similar season. If in a management unit there are an unlimited number of resident permits that may be used to take only antlerless deer, the secretary, in the secretary's discretion and in accordance with rules and regulations, may

authorize the issuance of an unlimited number of nonresident permits that may be used to take only antlerless deer.

(n) Any nonresident deer hunting permits authorized under subsection (m) that remain unissued due to an insufficient number of nonresident applications as of a deadline determined by the secretary, shall be made available to residents.

(o) The secretary shall issue nonresident deer permits pursuant to subsection (m) to landowners and tenants applying for such permits, except that the total number of nonresident deer permits of each type specified by rules and regulations that may be issued to landowners and tenants for a deer season in a management unit shall not exceed 50% of the total number of nonresident deer permits of such a type authorized for such season in such management unit. A nonresident deer permit obtained by a landowner or tenant shall retain the permit's original designation, except that such permit shall be transferable, with or without consideration, to any resident or nonresident through the secretary at the request of the landowner or tenant. A landowner or tenant purchasing a nonresident deer permit pursuant to this subsection shall pay the established fee for a nonresident deer permit.

The provisions of this subsection shall expire on June 30, 2004.

(p) No big game permit issued to a person under 14 years of age shall be valid until such person reaches 14 years of age, except that a person under 14 years of age may be issued a wild turkey permit, and a person who is 12 years or 13 years of age may be issued a permit for a big game species other than wild turkey. Such permits shall be valid only while the person is hunting under the immediate supervision of an adult 21 years of age or older, to: (1) Take big game using a firearm; or (2) take big game using a bow, if the person submits to the secretary evidence satisfactory to the secretary of completion of a bow hunting safety education course.

(q) A big game permit shall state the species, number and

sex of the big game which may be killed by the permittee. The secretary may furnish an informational card with any big game permit and, at the conclusion of the open season, each permittee receiving such card shall return the card to the department, giving such information as is called for on the card.

(r) The permittee shall permanently affix the game tag to the carcass of any big game immediately after killing and thereafter, if required by rules and regulations, the permittee shall immediately take such killed game to a check station as required in the rules and regulations, where a check station tag shall be affixed to the game carcass if the kill is legal. The tags shall remain affixed until the carcass is consumed or processed for storage.

(s) The provisions of this section do not apply to big game animals sold in surplus property disposal sales of department exhibit herds or big game animals legally taken outside this state.

Sec. 2. K.S.A. 32-937 is hereby repealed.

Sec. 3. This act shall take effect and be in force from and after its publication in the statute book.

By

AN ACT relating to hunting; concerning certification of a disability for certain permits; amending K.S.A. 32-932 and 32-933 and repealing the existing sections.

Be it enacted by the Legislature of the State of Kansas:

Section 1. K.S.A. 32-932 is hereby amended to read as follows: 32-932. (a) Any person having a permanent disability to the extent that such person cannot physically use a conventional long bow or compound bow, as certified by a person licensed to ~~practice medicine-and-surgery-in-this-state~~ the healing arts in any state or a Christian Science practitioner listed in the Christian Science journal, shall be authorized to hunt and take deer, antelope, elk or wild turkey with a crossbow.

(b) The secretary of wildlife and parks shall adopt, in accordance with K.S.A. 32-805, and amendments thereto, rules and regulations requiring permits to hunt deer, antelope, elk or wild turkey pursuant to subsection (a) and providing for the approval of applicants for such permits and the issuance thereof. In addition, the secretary may adopt rules and regulations limiting the times and areas for hunting and taking deer, antelope, elk and wild turkey and limiting the number of deer, antelope, elk and wild turkey which may be taken pursuant to subsection (a).

(c) Falsely obtaining or using a permit authorized by this section is a class C misdemeanor.

Sec. 2. K.S.A. 32-933 is hereby amended to read as follows: 32-933. (a) Any person having a permanent physical or visual disability such that the person cannot safely hunt or fish in accordance with law and rules and regulations of the department, as certified by a person licensed to ~~practice optometry-or medicine-and-surgery-in-this-state~~ the healing arts in any state, a person licensed to practice optometry in any state or a Christian Science practitioner listed in the Christian Science journal, shall be eligible to obtain a disability assistance permit. The permit shall allow the permitholder to designate another person to take, on behalf of and while accompanied by the

permitholder, the permitholder's legal limit of game or fish. The person designated shall hold all licenses, permits, stamps or other issues of the department required for the activity being engaged in and the permitholder shall remain subject to all other laws and rules and regulations of the department for the activity being engaged in. On the determination of the secretary, the disability assistance permit may designate the hunting or fishing activity for which assistance to the permitholder may be provided.

(b) The secretary shall adopt, in accordance with K.S.A. 32-805, and amendments thereto, rules and regulations providing for the approval of applicants for permits pursuant to subsection (a) and for the issuance of such permits.

(c) Falsely obtaining or using a permit authorized by this section is a class C misdemeanor.

Sec. 3. K.S.A. 32-932 and 32-933 are hereby repealed.

Sec. 4. This act shall take effect and be in force from and after its publication in the statute book.