# *HABITAT CONDITIONS*

## QUATIC COMMUNITY CLASSIFICATIONS

Pflieger (1989) classified the streams of the Spring River Basin in the Ozark-Neosho and Prairie-Neosho divisions. The following information is based on his descriptions. Additional details are available in Pflieger (1989).

The Ozark Faunal Region lies primarily within the Ozark Plateaus Physiographic Province. This area is characterized by Mississippian or older bedrock consisting primarily of limestones and dolomites.

Streams of the Ozark Faunal Region are typically clear, have high gradients, and contain substrates comprised primarily of coarse gravel, rubble, boulders, and bedrock. Along the northern and western boundaries of this region, streams are typically transitional with those of the Prairie Faunal Region.

The Ozark-Neosho Division includes the entire Spring River Basin except the northern tributaries of the Spring River from (and including) the North Fork of the Spring River to the Kansas state line to the west. The headwaters of Dry Fork are included in the Ozark-Neosho Division.

Both local relief and stream gradient are generally less in the Ozark-Neosho Division than those of associated Ozark divisions. Streams within this division are typically transitional with those of the adjacent Prairie Faunal Region. The numerous springs found within this division are mostly small.

The Prairie Faunal Region covers most of Missouri north of the Missouri River and an area south of the Missouri River along the Kansas state line. This region is largely co-extensive with the Dissected Till Plains and the Osage Plains physiographic regions. Pennsylvanian shales and thin sandstones are the principal bedrock types over much of the region. The streams of the Prairie Faunal Region occupy relatively broad valleys with high alluvial banks. Stream pools are relatively long and riffles may be poorly defined. Base flows tend to be low.

The Prairie-Neosho Division includes the Little North Fork and North Fork of the Spring River drainages, excluding Buck Branch and lower Dry Fork. This division spans both the Osage Plains and Springfield Plateau in southwest Missouri. The uplands are level to gently rolling and the streams occupy broad, shallow valleys. Stream pools are long, separated by short riffles, and composed of rock and gravel.

## CHANNEL ALTERATIONS

Channel alterations in the watershed include modifications to urban stream courses, channelization associated with road and bridge construction, channel modifications related to gravel removal, and efforts by individual landowners to control streambank erosion and similar problems. Instream gravel mining operations are typically small, few in number, and scattered.

## UNIQUE HABITATS

There are six major categories of terrestrial natural resources classified in the state--Forest, Savanna, Prairie, Primary, Wetland, and Cave. The communities are divided based on characteristic features such

**Table 15. Unique terrestrial habitats found in the Spring River Basin.**

| COMMUNITY TYPE | AREA NAME | T R S | SIZE (AC) | OWNERSHIP |
|---|---|---|---|---|
| ACID SEEP | WEST STAR PRAIRIE | 31N 33W 11 | 2 | PRIVATE |
| CHERT GLADE | PIONEER GLADE | 25N 29W 36 | - | PRIVATE |
| CHERT GLADE | YO-KO-MO GLADE | 25N 29W 36 | - | PRIVATE |
| CHERT GLADE | JOYCE CREEK GLADES | 24N 29W 14 | - | PRIVATE |
| CHERT GLADE | FILMORE BRIDGE GLADE | 27N 33W 29 | 1.7 | PRIVATE |
| CHERT GLADE | CHRISTIAN CAMP GLADE | 27N 33W 29 | 1.0 | PRIVATE |
| CHERT GLADE | TANYARD HOLLOW GLADE | 27N 33W 20 | 1.5 | PRIVATE |
| CHERT GLADE | GRAND FALLS GLADE | 27N 33W 28 | - | JOPLIN WATER |
| CHERT GLADE | GLENDALE DRIVE GLADE | 27N 33W 27 | 4.0 | PRIVATE |
| CHERT GLADE | WILD CAT GLADE N.A. | 27N 33W 27 | 13.0 | MDC/CITY OF JOPLIN |
| CHERT GLADE | WILD CAT CITY PARK N. | 27N 33W 27 | 6.0 | CITY OF JOPLIN |
| CHERT GLADE | SILVER CREEK GLADE | 27N 33W 27 | 13.O | CITY OF JOPLIN |
| CHERT GLADE | SILVER CREEK GLADE E. | 27N 33W 26 | 2.5 | PRIVATE |
| CHERT GLADE | RICHARDSON GLADE S. | 27N 33W 34 | 6.5 | PRIVATE |
| CHERT GLADE | RICHARDSON GLADE N. | 27N 33W 34 | 5.0 | PRIVATE |
| CHERT GLADE | SHOAL BRIDGE GLADE | 27N 33W 35 | 3.0 | PRIVATE |
| CHERT GLADE | SHOAL BRANCH GLADE | 27N 33W 33 | 2.5 | PRIVATE |
| CHERT GLADE | RICHARDSON GLADE E. | 27N 33W 34 | 0.8 | PRIVATE |
| DRY SANDSTONE/SHALE PRAIRIE | LEDBETTER SCHOOL PRAIRIE | 32N 31W 34 | 125.0 | PRIVATE |
| DRY SANDSTONE/SHALE PRAIRIE | WADDELL PRAIRIE | 31N 31W 11 | 59.0 | PRIVATE |
| DRY SANDSTONE/SHALE PRAIRIE | BETHEL CHURCH PRAIRIE | 31N 31W 32 | 23.O | PRIVATE |
| DRY MESIC CHERT FOREST | WILDWOOD RANCH | 27N 34W 23 | 35.0 | PRIVATE |
| DRY MESIC CHERT PRAIRIE | SWEENEY PRAIRIE | 31N 29W 6 | 25.0 | PRIVATE |
| DRY MESIC CHERT PRAIRIE | SHELDON L. COOK MEM. MEADOW | 31N 29W 2 | 180.0 | THE NATURE CONSERVANCY |
| DRY MESIC CHERT PRAIRIE | LOUSY BRANCH PRAIRIE | 31N 28W 11 | 580.0 | PRIVATE |
| DRY MESIC CHERT PRAIRIE | MEINERT BRANCH PRAIRIE | 30N 28W 22 | 42.0 | PRIVATE |
| DRY MESIC CHERT PRAIRIE | ACME PRAIRIE | 28N 32W 32 | 541.0 | ACME LAND CO. |
| DRY MESIC CHERT PRAIRIE | DUQUESNE PRAIRIE | 27N 32W 17 | 234.0 | ACME LAND CO. |
| DRY MESIC CHERT PRAIRIE | COX PRAIRIE | 28N 27W 1 | 140.0 | PRIVATE |
| DRY MESIC CHERT PRAIRIE | PROVIDENCE PRAIRIE C.A. | 29N 28W 4 | 198.0 | MDC |
| DRY MESIC CHERT PRAIRIE | MOUNT VERNON PRAIRIE N.A. | 28N 26W 17 | 40.0 | THE NATURE CONSERVANCY |
| DRY MESIC CHERT PRAIRIE | POIROT PRAIRIE | 29N 28W 3 | 60.0 | PRIVATE |
| DRY MESIC CHERT PRAIRIE | HARRINGTON PRAIRIE | 28N 27W 30 | 60.0 | PRIVATE |
| DRY MESIC CHERT PRAIRIE | DIAMOND GROVE PARK N.A. | 27N 32W 36 | 782.0 | MDC/PRIVATE |
| DRY MESIC CHERT PRAIRIE | CRELDON PRAIRIE | 27N 32W 22 | 40.0 | PRIVATE |
| DRY MESIC LIMESTONE/DOLOMITE PRAIRIE | DORRIS CREEK C.A. | 31N 30W 33 | 293.0 | MDC/PRIVATE |
| DRY MESIC LIMESTONE/DOLOMITE PRAIRIE | PETTIS CREEK PRAIRIE | 31N 29W 28 | 35.0 | PRIVATE |
| DRY MESIC SANDSTONE/SHALE PRAIRIE | CENTRAL PRAIRIE | 32N 32W 15 | 346.0 | PRIVATE |
| DRY MESIC SANDSTONE/SHALE PRAIRIE | MOREY PRAIRIE | 32N 30W 34 | 19.0 | PRIVATE |
| DRY MESIC SNADSTONE/SHALE PRAIRIE | ESROM PRAIRIE | 31N 31W 30 | 175.O | PRIVATE |
| DRY MESIC SANDSTONE/SHALE PRAIRIE | LAMAR AIRPORT PRAIRIE | 32N 31W 26 | 43.0 | PRIVATE/CITY OF LAMAR |
| DRY MESIC SANDSTONE/SHALE PRAIRIE | ALYEA PRAIRIE | 31N 31W 2 | 62.0 | PRIVATE |
| DRY MESIC SANDSTONE/SHALE PRAIRIE | BARTON-JASPER CO. LINE PRAIRIE | 30N 33W 7 | 30.7 | PRIVATE |

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|---|---|---|---|---|
| DRY MESIC SANDSTONE/SHALE PRAIRIE | DUNKIN PRAIRIE | 32N 29W 27 | 37.7 | PRIVATE |
| DRY MESIC SANDSTONE/SHALE PRAIRIE | ADAMS PRAIRIE | 32N 30W 28 | 44.0 | PRIVATE |
| DRY MESIC SANDSTONE/SHALE PRAIRIE | DUVAL CREEK PRAIRIE | 30N 32W 11 | 118.0 | PRIVATE |
| DRY MESIC SANDSTONE/SHALE PRAIRIE | LUTHI PRAIRIE | 31N 32W 34 | 63.0 | PRIVATE |
| DRY MESIC SANDSTONE/SHALE PRAIRIE | DUVAL CREEK PRAIRIE | 31N 32W 35 | 93.0 | PRIVATE |
| | | | | |
| | | | | |
| **COMMUNITY TYPE** | **AREA NAME** | **T R S** | **SIZE (AC)** | **OWNERSHIP** |
| DRY MESIC SANDSTONE/SHALE PRAIRIE | BOWER PRAIRIE | 30N 33W 2 | 32.0 | PRIVATE |
| DRY MESIC SANDSTONE/SHALE PRAIRIE | MCKIBBEN PRAIRIE | 32N 31W 31 | 83.0 | PRIVATE |
| DRY MESIC SANDSTONE/SHALE PRAIRIE | FRIEDEN PRAIRIE | 31N 33W 22 | 232.0 | PRIVATE |
| DRY MESIC SANDSTONE/SHALE PRAIRIE | JOHNSON PRAIRIE | 30N 33W 14 | 258.0 | PRIVATE |
| HARDPAN PRAIRIE | GOLDEN PRAIRIE | 30N 29W 8 | 270.0 | MO. PRAIRIE FOUNDATION/PRIVATE |
| HARDPAN PRAIRIE | SHAWNEE TRAIL C.A. | 31N 33W 20 | 17.0 | MDC |
| HARDPAN PRAIRIE | RADIO TOWER PRAIRIE | 30N 30W 7 | 64.0 | PRIVATE |
| HARDPAN PRAIRIE | MILLER-OAKTON PRAIRIE | 31N 30W 22 | 95.0 | PRIVATE |
| HARDPAN PRAIRIE | PETTIS CREEK PRAIRIE | 31N 29W 28 | 85.0 | PRIVATE |
| HARDPAN PRAIRIE | BRINKERHOF PRAIRIE | 32N 30W 36 | 14.0 | PRIVATE |
| HARDPAN PRAIRIE | BANTA PRAIRIE | 31N 30W 23 | 38.9 | PRIVATE |
| HARDPAN PRAIRIE | MORGAN PRAIRIE | 32N 31W 35 | 35.0 | PRIVATE |
| HARDPAN PRAIRIE | LEDBETTER PRAIRIE | 32N 31W 34 | 35.0 | PRIVATE |
| HARDPAN PRAIRIE | ALYEA PRAIRIE | 31N 31W 2 | 81.0 | PRIVATE |
| HARDPAN PRAIRIE | ISENMANN PRAIRIE | 30N 31W 1 | 35.0 | PRIVATE |
| HARDPAN PRAIRIE | DALTON HARRIS PRAIRIE | 31N 30W 22 | 31.0 | PRIVATE |
| HARDPAN PRAIRIE | MARTI PRAIRIE | 31N 32W 3 | 40.0 | PRIVATE |
| HARDPAN PRAIRIE | BENNETT PRAIRIE | 30N 32W 4 | 28.0 | PRIVATE |
| HARDPAN PRAIRIE | DINGMAN PRAIRIE | 31N 32W 18 | 46.0 | PRIVATE |
| HARDPAN PRAIRIE | SELVEY PRAIRIE | 32N 32W 28 | 43.0 | PRIVATE |
| HARDPAN PRAIRIE | GLENDALE FORK PRAIRIE | 31N 33W 15 | 95.0 | PRIVATE |
| HARDPAN PRAIRIE | MOSS LAKE PRAIRIE | 31N 33W 21 | 72.0 | PRIVATE |
| HARDPAN PRAIRIE | GARDNER PRAIRIE | 31N 33W 22 | 153.0 | PRIVATE |
| HARDPAN PRAIRIE | SLAPPER PRAIRIE | 31N 33W 31 | 44.0 | PRIVATE |
| HARDPAN PRAIRIE | BURNS PRAIRIE | 31N 28W 28 | 23.0 | PRIVATE |
| HARDPAN PRAIRIE | KAELKE PRAIRIE | 30N 28W 16 | 165.0 | PRIVATE |
| HARDPAN PRAIRIE | GLANDLACH TRACT | 31N 28W 29 | 60.0 | PRIVATE |
| HARDPAN PRAIRIE | BURNS MEADOW | 31N 28W 28 | 240.0 | PRIVATE |
| HARDPAN PRAIRIE | HORSE CREEK PRAIRIE | 31N 28W 26 | 160.0 | PRIVATE |
| HARDPAN PRAIRIE | KAELKE PRAIRIE | 31N 28W 27 | 53.0 | PRIVATE |
| HARDPAN PRAIRIE | FISH FARM PRAIRIE | 30N 28W 2 | 30.0 | PRIVATE |
| HARDPAN PRAIRIE | WAH-SHA-SHE PRAIRIE | 30N 33W 31 | 260.0 | PRIVATE |
| HARDPAN PRAIRIE | BASTIN PRAIRIE | 30N 30W 23 | 62.0 | PRIVATE |
| HARDPAN PRAIRIE | BARTON-JASPER CO. LINE PRAIRIE | 30N 31W 17 | 136.0 | PRIVATE |
| HARDPAN PRAIRIE | ASBURY PRAIRIE | 29N 34W 2 | 70.0 | PRIVATE |
| HARDPAN PRAIRIE | WAH-SHA-SHE PRAIRIE S. | 29N 34W 2 | 58.0 | PRIVATE |
| HARDPAN PRAIRIE | WAH-SHA-SHE PRAIRIE N. | 30N 33W 31 | 90.0 | PRIVATE |
| HARDPAN PRAIRIE | WAH-SHA-SHE PRAIRIE E. | 30N 33W 32 | 98.0 | PRIVATE |

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|---|---|---|---|---|
| HARDPAN PRAIRIE | BLACKBERRY TRIBUTARY PRAIRIE | 30N 33W 21 | 152.0 | PRIVATE |
| HARDPAN PRAIRIE | GRAVES PRAIRIE | 29N 38W 5 | 135.0 | PRIVATE |
| HARDPAN PRAIRIE | POIROT PRAIRIE | 29N 28W 6 | 229.0 | PRIVATE |
| HARDPAN PRAIRIE | WILDWOOD RANCH | 27N 34W 23 | 120.0 | PRIVATE |
| MESIC PRAIRIE | PLOVER PRAIRIE | 31N 33W 25 | - | PRIVATE |
| WET MESIC PRAIRIE | ESROM PRAIRIE | 31N 31W 30 | 17.0 | PRIVATE |
| WET MESIC PRAIRIE | GOLDEN PRAIRIE | 30N 29W 8 | 38.0 | MO. PRAIRIE FOUNDATION |
| WET MESIC PRAIRIE | MOREY PRAIRIE | 32N 30W 34 | 09.0 | PRIVATE |
| WET MESIC PRAIRIE | MARTI PRAIRIE | 31N 32W 3 | 10.0 | PRIVATE |
| WET MESIC PRAIRIE | DINGMAN PRAIRIE | 31N 32W 18 | 08.0 | PRIVATE |
| WET MESIC PRAIRIE | DUVAL SCHOOL PRAIRIE | 31N 32W 27 | 09.0 | PRIVATE |
| WET MESIC PRAIRIE | DADE-BARTON CO.LINE | 31N 29W 36 | 08.0 | PRIVATE |

Source: MDC (1996b).

as topography, size, distribution, and characteristic plants associated with the community (Nelson 1985).

The Missouri Department of Conservation Natural Heritage Program has identified unique natural communities in the Spring River drainage in four of the major categories; Forest, Prairie, Primary, and Wetland (Table 15).

The Forest community is an upland chert forest. The Primary community is a glade community, and the Wetland community is a groundwater seep (Nelson 1985).

The Prairie category is the most prevalent of the listed communities and contains representatives from limestone/shale, limestone/dolomite, chert glade, sandstone/shale, mesic, and hardpan prairie subdivisions (Nelson 1985).

In addition to unique terrestrial communities, the basin supports several natural areas designated by the Missouri Natural Areas Committee. The Committee defines a natural area as ". . . biological communities or geological sites that preserve and are managed to perpetuate the natural character, diversity, and ecological processes of Missouri's native landscapes. They are permanently protected and managed for the purpose of preserving their natural qualities."

These areas are designated by the committee to aid in the management and restoration of the best examples of the extant communities found in each section of the state (Kramer et. al 1996). The Missouri Natural Areas Committee has designated four natural areas within the basin. These are: Wildcat Glade and Diamond Grove Prairie Natural Areas, Newton County; Mt. Vernon Prairie Natural Area, Lawrence County; and Wah-Sha-She Prairie Natural Area, Jasper County. More detailed information on each of these areas can be found in the Public Areas section of this document and Kramer et. al (1996).

## IMPROVEMENT PROJECTS

As in most basins, there have been a variety of attempts by private landowners to stabilize streambanks. These attempts include channelization and bank armoring using a variety of materials including rock, gravel, and construction debris.

MDC personnel have installed three improvement projects since 1989, one on MDC property and two on private property (Table 16).

## STREAM HABITAT ASSESSMENT

Stream habitat assessments (SHAD) were completed at 107 sites throughout the basin in 1990 by Fisheries District 9 staff (Table 17 and Figure 5A-F). SHAD sites were selected in all of the major sub-basins using the guidelines of Bovee (1982).

SHAD assessments are summarized in Table 18. More detailed information is available from MDC's Southwest Regional Office in Springfield, MO.

Stream habitat quality is fair to good throughout most of the basin. Some areas suffer from a lack of riparian vegetation. The lack of adequate riparian vegetation, effects of runoff from mined lands, excessive nutrient loading, streambank erosion, excessive runoff and erosion, and the effects of instream activities such as gravel mining are among the problems observed.

**Table 16. Missouri Department of Conservation streambank restoration and habitat improvement projects in the Spring River Basin.**

| STREAM | COUNTY | PRACTICE | LOCATION (T R S) | OWNER | INSTALLATION DATE |
|---|---|---|---|---|---|
| Dry Fork Creek | Lawrence | Rock Blanket | 28N,27W,05 | MDC | 1994 |
| Shoal Creek | Barry | Revetment | 24N,29W,14 | Private | 1992 |
| Shoal Creek | Newton | Revegtation | 21N,30W,25 | Private | 1992 |

**Table 17. Location of stream habitat sampling sites (SHAD) in the Spring River basin.**

| Stream | ID# | Order | Location | Stream Mile | Topographic Map | Date |
|---|---|---|---|---|---|---|
| Baynham Branch | 089 | 3 | 26N-31W-19 | 2.7 | Granby | 08-17-90 |
| Blackberry Cr. | 002 | 4 | 29N-33W-05 | 1.9 | Asbury | 12-13-90 |
| Blackberry Cr. | 003 | 3 | 30N-33W-21 | 6.9 | Asbury | 12-13-90 |
| Capps Creek | 101 | 4 | 25N-29W-15 | .5 | Pierce City | 08-16-90 |
| Capps Creek | 102 | 3 | 25N-29W-12 | 3.0 | Pierce City | 08-14-90 |
| Capps Creek | 103 | 3 | 25N-28W-21 | 6.5 | Wheaton | 08-14-90 |
| Cave Spring Br. | 045 | 3 | 28N-29W-22 | 1.1 | La Russell | 10-26-90 |
| Cave Spring Br. | 046 | 3 | 28N-29W-26 | 3.8 | Sarcoxie | 10-26-90 |
| Center Creek | 007 | 6 | 28N-34W-12 | 3.0 | Carl Jnc. | 12-12-90 |
| Center Creek | 070 | 6 | 28N-33W-01 | 10.0 | Webb City | 12-12-90 |
| Center Creek | 071 | 6 | 28N-32W-24 | 19.6 | Webb City | 12-05-90 |
| Center Creek | 074 | 6 | 28N-31W-32 | 24.1 | Fidelity | 12-05-90 |
| Center Creek | 079 | 5 | 27N-29W-03 | 35.5 | Reeds | 12-06-90 |
| Center Creek | 080 | 5 | 26N-28W-22 | 46.7 | Sarcoxie | 11-26-90 |
| Center Creek | 081 | 4 | 27N-28W-17 | 52.4 | Sarcoxie | 12-06-90 |
| Center Creek | 082 | 4 | 26N-27W-26 | 56.1 | Stotts City | 08-16-90 |
| Clear Creek | 095 | 5 | 26N-29W-29 | 1.5 | Newtonia | 08-09-90 |
| Clear Creek | 098 | 4 | 26N-28W-29 | 9.3 | Pierce City | 08-09-90 |
| Clear Creek | 099 | 4 | 26N-28W-26 | 12.9 | Monett | 08-09-90 |
| Coon Creek | 035 | 3 | 30N-29W-12 | .7 | Dudenville | 12-12-90 |
| Coon Creek | 036 | 3 | 29N-29W-02 | 7.1 | Dudenville | 12-12-90 |
| Coon Creek | 019 | 4 | 30N-30W-17 | 3.5 | Jasper | 12-13-90 |
| Coon Creek | 020 | 4 | 30N-30W-10 | 6.0 | Maple Grove | 12-13-90 |
| Coon Creek | 021 | 4 | 30N-29W-20 | 11.3 | Maple Grove | 12-12-90 |
| Deer Creek | 016 | 3 | 29N-29W-02 | 3.7 | Maple Grove | 12-10-90 |
| Deer Creek | 017 | 3 | 29N-29W-04 | 8.9 | Dudenville | 12-10-90 |
| Dicks Ford | 024 | 3 | 31N-31W-03 | .8 | Lamar South | 12-07-90 |
| Dicks Ford | 025 | 3 | 32N-31W-27 | 4.4 | Lamar South | 12-07-90 |
| Dorris Creek | 029 | 4 | 31N-30W-21 | 2.5 | Kenoma | 12-06-90 |
| Douthit Branch | 096 | 4 | 26N-29W-29 | 1.2 | Pierce City | 08-09-90 |
| Douthit Branch | 097 | 3 | 26N-29W-21 | 1.9 | Pierce City | 08-09-90 |
| Dry Fork | 052 | 3 | 28N-27W-05 | 1.5 | Rescue | 08-10-90 |

| Stream | ID# | Order | Location | Stream Mile | Topographic Map | Date |
|---|---|---|---|---|---|---|
| Dry Fork | 014 | 5 | 29N-31W-05 | 1.5 | Jasper | 12-14-90 |
| Dry Fork | 015 | 5 | 29N-30W-08 | 9.1 | Maple Grove | 12-10-90 |
| Dry Fork | 018 | 3 | 29N-30W-15 | 11.7 | Avilla | 12-10-90 |
| Dry Hollow | 048 | 4 | 28N-28W-27 | 1.6 | Stotts City | 08-22-90 |
| Dry Hollow | 049 | 3 | 28N-28W-35 | 2.9 | Stotts City | 08-22-90 |
| Duvall Creek | 011 | 3 | 30N-32W-32 | 1.5 | Neck City | 12-14-90 |
| Duvall Creek | 012 | 3 | 30N-32W-14 | 8.4 | Neck City | 12-14-90 |
| Elm Branch | 064 | 3 | 27N-26W-24 | .2 | Chesapeake | 08-08-90 |
| Elm Branch | 032 | 4 | 32N-30W-09 | 2.2 | Milford | 12-06-90 |
| Elm Spring Br. | 091 | 3 | 24N-31W-06 | 1.7 | Neosho | 08-17-90 |
| Glendale Fork | 007 | 4 | 31N-33W-35 | .7 | Mindenmines | 12-12-90 |
| Glendale Fork | 008 | 4 | 31N-33W-23 | 3.9 | Mindenmines | 12-12-90 |
| Glendale Fork | 009 | 3 | 31N-33W-15 | 5.4 | Mindenmines | 12-12-90 |
| Grove Creek | 072 | 3 | 28N-32W-25 | .6 | Joplin East | 12-07-90 |
| Grove Creek | 073 | 3 | 27N-32W-13 | 4.9 | Fidelity | 12-07-90 |
| Hickory Creek | 090 | 4 | 25N-31W-26 | 4.1 | Neosho East | 08-17-90 |
| Hickory Creek | 092 | 2 | 25N-31W-28 | 7.5 | Neosho East | 08-17-90 |
| Honey Creek | 062 | 4 | 27N-27W-02 | 1.2 | Mt Vernon | 08-08-90 |
| Honey Creek | 063 | 4 | 27N-26W-23 | 8.8 | Mt Vernon | 08-08-90 |
| Honey Creek | 065 | 3 | 27N-25W-27 | 15.6 | Chesapeake | 08-08-90 |
| Jenkins Creek | 076 | 4 | 27N-30W-16 | 4.3 | Reeds | 11-26-90 |
| Jenkins Creek | 077 | 2 | 27N-30W-27 | 7.6 | Reeds | 12-06-90 |
| Jones Creek | 075 | 5 | 27N-31W-02 | 1.8 | Fidelity | 12-05-90 |
| Jones Creek | 078 | 4 | 27N-31W-24 | 5.6 | Fidelity | 11-26-90 |
| Joyce Creek | 107 | 3 | 24N-28W-17 | 2.9 | Purdy | 08-13-90 |
| L. N. Fork | 004 | 5 | 30N-33W-35 | 1.9 | Asbury | 12-13-90 |
| L. N. Fork | 005 | 5 | 30N-33W-12 | 8.7 | Asbury | 12-12-90 |
| L. N. Fork | 006 | 4 | 31N-32W-30 | 14.5 | Mindenmines | 12-12-90 |
| N. Fk. Spring R | 010 | 6 | 29N-33W-03 | 2.7 | Asbury | 12-13-90 |
| N. Fk. Spring R | 013 | 6 | 29N-32W-02 | 14.7 | Neck City | 12-14-90 |
| N. Fk. Spring R | 022 | 6 | 31N-31W-23 | 32.3 | Lamar South | 12-13-90 |
| N. Fk. Spring R | 033 | 5 | 31N-29W-09 | 59.0 | Golden City | 12-06-90 |

| Stream | ID# | Order | Location | Stream Mile | Topographic Map | Date |
|---|---|---|---|---|---|---|
| N. Fk. Spring R | 034 | 5 | 31N-29W-35 | 65.1 | Golden City | 12-06-90 |
| N. Fk. Spring R | 037 | 4 | 30N-28W-17 | 71.2 | Dudenville | 12-12-90 |
| N. Fk. Spring R | 038 | 3 | 30N-28W-17 | 72.0 | Dudenville | 12-12-90 |
| Pettis Creek | 028 | 5 | 31N-30W-18 | 2.2 | Lamar South | 12-13-90 |
| Pettis Creek | 030 | 4 | 31N-30W-09 | 4.7 | Kenoma | 12-13-90 |
| Pettis Creek | 031 | 3 | 31N-30W-24 | 9.1 | Kenoma | 12-06-90 |
| Shoal Creek | 086 | 6 | 27N-33W-29 | 10.6 | Joplin West | 10-31-90 |
| Shoal Creek | 087 | 6 | 26N-32W-06 | 17.6 | Joplin East | 10-31-90 |
| Shoal Creek | 088 | 6 | 26N-32W-16 | 21.0 | Tipton Ford | 10-31-90 |
| Shoal Creek | 093 | 6 | 25N-31W-05 | 34.5 | Granby | 10-31-90 |
| Shoal Creek | 094 | 6 | 26N-30W-27 | 47.4 | Newtonia | 08-16-90 |
| Shoal Creek | 100 | 5 | 25N-29W-08 | 53.5 | Newtonia | 08-16-90 |
| Shoal Creek | 104 | 4 | 24N-29W-10 | 63.3 | Wheaton | 08-13-90 |
| Shoal Creek | 105 | 4 | 23N-28W-12 | 71.2 | Rocky Comfort | 08-13-90 |
| Shoal Creek | 106 | 3 | 23N-28W-29 | 75.3 | Exeter | 08-13-90 |
| Spring River | 001 | 7 | 29N-33W-07 | 48.66 | Carl Jnc. | 12-13-90 |
| Spring River | 039 | 6 | 29N-32W-17 | 59.8 | Webb City | 12-12-90 |
| Spring River | 040 | 6 | 29N-31W-31 | 67.1 | Carthage | 12-12-90 |
| Spring River | 041 | 6 | 28N-30W-04 | 76.9 | Avilla | 12-12-90 |
| Spring River | 047 | 6 | 28N-29W-11 | 88.6 | La Russell | 10-26-90 |
| Spring River | 050 | 6 | 28N-27W-18 | 99.3 | Rescue | 10-15-90 |
| Spring River | 054 | 6 | 28N-27W-29 | 103.5 | Stotts City | 08-10-90 |
| Spring River | 061 | 4 | 27N-27W-02 | 108.3 | Mt Vernon | 08-10-90 |
| Spring River | 066 | 4 | 27N-27W-25 | 114.4 | Mt Vernon | 08-07-90 |
| Spring River | 067 | 4 | 26N-26W-08 | 119.5 | Verona | 08-07-90 |
| Spring River | 068 | 3 | 26N-26W-28 | 122.8 | Verona | 08-07-90 |
| Stahl Creek | 051 | 4 | 28N-27W-18 | .7 | Rescue | 08-10-90 |
| Stahl Creek | 053 | 3 | 28N-27W-04 | 3.4 | Rescue | 08-10-90 |
| Truitt Creek | 057 | 4 | 28N-27W-23 | 1.7 | Mt Vernon | 08-09-90 |
| Truitt Creek | 058 | 3 | 29N-26W-33 | 8.3 | Miller | 0809-90 |
| Turkey Creek | 083 | 4 | 28N-34W-26 | 1.3 | Carl Jnc. | 12-07-90 |
| Turkey Creek | 084 | 4 | 28N-33W-33 | 5.6 | Joplin West | 12-07-90 |

| Stream | ID# | Order | Location | Stream Mile | Topographic Map | Date |
|---|---|---|---|---|---|---|
| Turkey Creek | 085 | 3 | 27N-32W-05 | 11.5 | Joplin East | 12-07-90 |
| West Fork | 023 | 4 | 31N-31W-10 | 2.6 | Lamar South | 12-07-90 |
| West Fork | 026 | 4 | 31N-31W-06 | 7.4 | Nashville | 12-07-90 |
| West Fork | 027 | 3 | 32N-32W-36 | 10.7 | Nashville | 12-07-90 |
| White Oak Cr. | 042 | 4 | 28N-29W-05 | 2.6 | Avilla | 09-10-90 |
| White Oak Cr. | 043 | 4 | 28N-29W-24 | 9.8 | La Russell | 09-10-90 |
| White Oak Cr. | 044 | 3 | 29N-28W-08 | 13.4 | La Russell | 09-10-90 |
| Williams Cr. | 056 | 5 | 28N-27W-34 | 2.5 | Mt Vernon | 08-09-90 |
| Williams Cr. | 059 | 4 | 28N-26W-30 | 6.3 | Mt Vernon | 08-09-90 |
| Williams Cr. | 060 | 3 | 28N-26W-34 | 9.8 | Mt Vernon | 08-09-90 |
| Unnamed trib to Spring R. | 055 | 4 | 28N-27W-32 | 1.0 | Stotts City | 08-10-90 |