HUC 1114

Lower Red Sub-basin

The Lower Red sub-basin (4-digit hydrologic unit 1114) is situated in the southeastern portion of the state. It originates in the central portion of Pontotoc County, continues eastward through portions of Murray, Johnston, Bryan, Hughes, Coal, Atoka, Pittsburg, Latimer, Pushmataha, and Choctaw Counties, and terminates in the eastern parts of LeFlore and McCurtain Counties. Major cities and County seats located within the basin include Coalgate, Atoka, Durant, Antlers, Hugo, Broken Bow, and Idabel. Minor cities of note include Kiowa, Fort Towson, Rattan, Clayton, Talihina, Smithville, and Valliant.

The basin is subdivided into nine 8-digit hydrologic units (HUC) that are all contained wholly within the state. These HUC's are the Bois D'Arc–Island (11140101), the Blue (11140102), the Muddy Boggy (11140103), the Clear Boggy (11140104), the Kiamichi (11140105), the Pecan–Waterhole (11140106), the Upper Little (11140107), the Mountain Fork (11140108), and Lower Little (11140109). The major surface water in the basin is the lower Red River. Major tributaries include the Blue River, the Kiamichi River, the Little River, the Glover River, the Mountain Fork River, Island Bayou, Whitegrass Creek, Clear Boggy Creek, Muddy Boggy Creek, Jackfork Creek, Cedar Creek, Buzzard Creek, Black Fork, Lukfata Creek, and Big Eagle Creek. Six major lakes are located in the basin—Atoka Reservoir formed by North Boggy Creek, McGee Creek Reservoir formed by McGee Creek, Sardis Lake formed by Jackfork and Buffalo Creeks, Hugo Lake formed by the Kiamichi River, Pine Creek Lake formed by the Little River, and Broken Bow Lake formed by the Mountain Fork River. Sixteen active permanent water quality-monitoring stations are located in the basin. Two inactive water quality-monitoring stations (Muddy Boggy near Farris and Little River near Idabel) are located in the sub-basin. Muddy Boggy near Farris was last assessed in the 1999 BUMP report. Little River near Idabel was last included in the 2003 BUMP report, but will not be assessed further. Because the station is located within a regulatory mixing zone, the OWRB cannot support previously collected data and will not include in future federal and state lists. Little River near Holly Creek was established in the beginning of 2003 and will replace the Idabel station.

The basin is characterized by three ecoregions. The Central Oklahoma/Texas Plains is the primary ecoregion beginning in the northwestern portion and continuing through the southern one-half (½) of the sub-basin. The Ouachita Mountains cover the remainder of the northern one-half (½) of the sub-basin. The South Central Plains cover the southeastern quarter (¼) of the McCurtain County. The primary land usage in the sub-basin is forestland (shortleaf pine, loblolly pine, pine plantations, and oak–hickory). It dominates the central and most of the eastern portions and is further interspersed throughout the sub-basin. The secondary land use is pastureland (brushy and mixed) that dominates parts of the western portion of the sub-basin and is interspersed throughout the sub-basin with areas of concentration in Pushmataha and southern McCurtain Counties. The tertiary land use is rangeland (open grasslands and woody areas) that is prevalent in the northwestern portion and is interspersed throughout the central and southern portions of the sub-basin. Other land uses of note are cropland, bottom woodlands, farmsteads, major urban areas, wetlands, and confined animal feeding operations.

STATION NAME	FWP	PBCR	PPWS	AG	AES
Blue River, US 70, Durant	S	NS (6, 8)	S	S	NS(18)
Clear Boggy Creek, off US 69, Caney	NS (5, 16, 18)	NS (8)	S	S	NS(18)
Glover River, SH 3, Glover	NS (5)	S	S	S	NT
Kiamichi River, off US 271, Tuskahoma	NS (2, 3)	NS (8)	S	S	NT
Kiamichi River, SH 63, Big Cedar	NS (3)	NS (8)	S	S	NS(18)
Kiamichi River, US 271, Antlers	NS (3)	NS (8)	S	S	NS(18)
Kiamichi River, SH 109, Fort Towson	NS (3)	NS (8)	NS (9)	S	NT
Little River, off SH 3, Cloudy	NS (3, 5)	NS (8)	S	S	S
Little River, off US 70, near Holly Creek	NS (1, 3, 5)	S	S	S	NT
Little River, SH 56, Sasakwa	NS (5)	NS (6, 8)	S	S	NS(13, 18)
Mountain Fork, SH 4, Smithville	NS (2, 3)	S	S	S	S
Mountain Fork, US 70, Eagletown	NS (3)	NS (8)	S	S	NT
Muddy Boggy Creek, US 70, Unger	NS (5)	NS (8)	S	S	NT
Muddy Boggy Creek, US 69, Atoka	NS (3, 5)	NS (6, 8)	S	S	NS
Red River, US 259, Harris	NS (5)	S	S	S	NT
Red River, US 271, Hugo	S	NS (8)	S	NS(10, 11, 12)	NT

ASSIGNED OWQS BENEFICIAL USES

FWP = Fish & Wildlife Propagation	PBCR = Primary Body Contact Recreation
PPWS = Public and Private Water Supply	AG = Agriculture
AES = Aesthetics	

SUPPORT CODES

S—Fully Supporting	NS—Not Supporting	T-Threatened (Nutrients)
NT-Not Threatened (Nutrients)	NEI—Not Enough Information	N/A—Not Applicable

WATER QUALITY VARIABLES

1—Dissolved Oxygen	2—Metals (Acute)	3—Metals (Chronic)
4—pH	5—Turbidity	6—Fecal Coliform
7— *Escherichia coli*	8— Enterococci	9—Metals
10— Total Dissolved Solids	11— Chlorides	12— Sulfates
13— Total Phosphorus (TP)	14—TP Ok Scenic River Criterion	15— Nitrite + Nitrate
16—Biocriteria	17—Sestonic Chlorophylll-a (TSI)	18—Sedimintation