HUC 1113

Upper Red Sub-basin

The Upper Red sub-basin (4-digit hydrologic unit 1113) is situated in the southwestern portion of the state. It originates in the western portion of Roger Mills County, continues eastward through portions of Beckham, Dewey, Custer, Washita, Kiowa, Caddo, Comanche, Tillman, Cotton, Grady, Stephens, Jefferson, McClain, Garvin, Murray, Pontotoc, Carter, Johnston, and Love Counties and terminates in the western part of Marshall and Bryan Counties, briefly touching Harmon and Jackson Counties. Major cities and County seats located within the basin include Cheyenne, Hollis, Arapaho, Clinton, Frederick, Anadarko, Lawton, Walters, Chickasha, Marlow, Duncan, Waurika, Lindsay, Pauls Valley, Sulphur, Lone Grove, Ardmore, Marietta, Madill, and Tishomingo. Minor cities of note include Hammon, Fort Cobb, Binger, Rush Springs, Davis, and Wynnewood.

The basin is subdivided into eleven 8-digit hydrologic units (HUC) within the state. These HUC's are the Groesbeck–Sandy (11130101), the Blue–China (11130102), the Farmer's–Mud (11130201), the Cache (11130202), the West Cache (11130203), the Northern Beaver (11130208), the Lake Texoma (11130210), the Washita Headwaters (11130301), the Upper Washita (11130302), the Middle Washita (11130303), and the Lower Washita (11130304). The major surface water in the basin is the upper Red River. Major tributaries include the Prairie Dog Town Fork of the Red River, the Washita River, the Little Washita River, Barnitz Creek, Cobb Creek, Bitter Creek, Rush Creek, Wildhorse Creek, Rock Creek, Caddo Creek, Mill Creek, Sandy Creek, Deep Red Creek, West Cache Creek, East Cache Creek, Cow Creek, Beaver Creek, Mud Creek, Walnut Bayou, and Hickory Creek. Eight major lakes are located in the basin—Foss Reservoir formed by the Washita River, Fort Cobb Reservoir formed by Cobb Creek, Lake Ellsworth formed by East Cache Creek, Lake Lawtonka formed by Medicine Creek, Waurika Lake formed by Beaver Creek, Lake of the Arbuckles formed by Rock Creek, Lake Murray formed by Anadarche Creek, and Lake Texoma formed by the Red and Washita Rivers and Hickory Creek. Eleven active permanent water quality-monitoring stations are located in the basin. Four inactive water quality-monitoring stations are in this sub-basin(Cow Creek near Waurika, Walnut Bayou near Burneyville, Red River near Gainsville, and Hickory Creek near Marietta). Walnut Bayou near Burneyville and Hickory Creek near Marietta were last assessed in the 2000 BUMP report while Red River near Gainsville was last assessed in the 1999 BUMP report. Cow Creek near Waurika was last assessed in the 2003 BUMP report.

The basin is characterized by three ecoregions. The Central Great Plains is the primary ecoregion beginning in the western portion of Roger Mills County and continuing through the western parts of Grady, Stephens, and Jefferson Counties. The Central Oklahoma/Texas Plains begins in the eastern parts of Grady, Stephens, and Jefferson Counties and continues eastward over the rest of the sub-basin. The Southwestern Tablelands typify portions of Roger Mills, Custer, and Beckham Counties. The primary land usage in the sub-basin is rangeland (open grasslands, mesquite, and other woody areas). It is prevalent in the western, southern and central portions of the sub-basin and is interspersed throughout the sub-basin. The secondary land use is cropland, which dominates the southwestern portion and is interspersed throughout the sub-basin. The tertiary land uses are pastureland (brushy or mixed) and forestland (post oak–blackjack oak, hickory–oak, and bottomland hardwoods). Other land uses of note are woodlands, bottom woodlands, farmsteads, major urban areas, and wetlands.

STATION NAME	FWP	PBCR	PPWS	AG	AES
East Cache Creek, SH 53, Walters	NS (5)	NS (6, 8)	S	NS(10)	T(13, 15)
Mud Creek, SH 32, Courtney	NS (5, 16, 18)	NS (6, 8)	S	S	NS(18)
Red River, US 183, Davidson	NS (3, 5)	NS (6, 8)	N/A	NS (10, 11, 12)	T (17)
Red River, US 81, Terral	NS (3, 5)	NS (8)	S	NS (11, 12)	T(13, 17)
Sandy Creek, SH 6, Eldorado	NS (2, 3, 5)	NS(9)	N/A	NS (10, 11, 12)	NT
Washita River, SH 152, Cordell	NS (5, 16, 18)	NS (6, 7, 8)	S	S	TS(13, 18)
Washita River, SH 19, Pauls Valley	NS (5)	NS (6, 8)	S	S	T(13, 17)
Washita River, SH 33, mcclure	NS (5, 16, 18)	NS (6, 7, 8)	S	S	NT
Washita River, US 177, Durwood	NS (5)	NS (6, 8)	S	S	T(13, 17)
Washita River, off SH 19, Alex	NS (5)	NS (6, 8)	S	S	T(13, 17)
Washita River, US 281, Anadarko	NS (5, 16, 18)	NS (6, 8)	S	S	NS (17, 18)
West Cache Creek, SH 5B, Taylor	NS (5)	NS (6, 7, 8)	S	NS (10,11)	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