HUC 1110

Beaver/North Canadian Sub-basin

The Beaver/North Canadian sub-basin (4-digit hydrologic unit 1110) is situated in the Panhandle, northwest, and central portions of the state. It originates in Cimarron County, continues eastward through portions of Texas, Beaver, Harper, Ellis, Woodward, Major, Dewey, Blaine, Canadian, Oklahoma, Logan, Lincoln, Pottawatomie, Seminole, Creek, Okfuskee, Hughes, and Okmulgee Counties and terminates in the central part of McIntosh County. Major cities and County seats located within the basin include Boise City, Guymon, Beaver, Woodward, Watonga, El Reno, Yukon, Oklahoma City, Midwest City, Del City, Choctaw, Harrah, Edmond, Chandler, Shawnee, Tecumseh, Seminole, Bristow, Okemah, Wewoka, Okmulgee, Henryetta, and Eufaula. Minor cities of note include Goodwell, Laverne, Shattuck, Seiling, Meeker, Stroud, Prague, Wetumka, and Beggs.

The sub-basin is subdivided into nine 8-digit hydrologic units (HUC) within the state. These HUC's are the Upper Beaver (11100101), the Middle Beaver (11100102), the Coldwater (11100103), the Palo Duro (11100104), the Lower Beaver (11100201), the Lower Wolf (11100203), the Middle North Canadian (11100301), the Lower North Canadian (11100302), and the Deep Fork (11100303). The major surface water in the sub-basin is the Beaver/North Canadian River. Major tributaries include Goff Creek, Palo Duro Creek, Kiowa Creek, Clear Creek, Wolf Creek, Wewoka Creek, the Deep Fork River, and Little Deep Fork Creek. Ten major lakes are located in the sub-basin—Optima Lake formed by the Beaver River and Coldwater Creek, Fort Supply Lake formed by Wolf Creek, Canton Lake formed by the North Canadian River, Lake Overholser formed by the North Canadian River, Lake Hefner, Lake Arcadia formed by the Deep Fork River, Wes Watkins Lake formed by North Deer Creek, the Shawnee Twin Lakes, Bell Cow Lake formed by Bell Cow Creek, and the upper portion of Eufaula Lake formed by the North Canadian and Deep Fork Rivers. Fourteen active permanent water quality-monitoring stations are located in the basin. Three inactive water quality-monitoring stations (Palo Duro Creek near Bryans Corner, Kiowa Creek near Laverne, and Clear Creek near May) are located in the sub-basin and were last assessed in the 2000 BUMP report.

The basin is characterized by five ecoregions. The Western High Plains cover all Cimarron County, most of Texas County, and half of Beaver County. The Southwestern Tablelands begin in Texas County and terminate in Ellis and Woodward Counties. The Central Great Plains begins in Ellis County and terminates in western Oklahoma County. The Central Oklahoma/Texas Plains begin in eastern Oklahoma County and end in western Okmulgee and McIntosh Counties. The Central Irregular Plains cover eastern Okmulgee and McIntosh Counties. The primary land usage in the sub-basin is rangeland (open grasslands and woody areas). It is prevalent throughout the sub-basin with areas of concentration west central and central portions. The secondary land use is cropland, which is prevalent in the western and central portions and is interspersed throughout the eastern portion. The tertiary land uses is pastureland (brushy or mixed) and forestland (post oak, blackjack oak and bottomland hardwoods). Pastureland is prevalent in the eastern portion and is interspersed through the rest of the sub-basin. Forestland is prevalent in the eastern part of the sub-basin. Other land uses of note are farmsteads, major urban areas, wetlands, and confined animal feeding operations.

STATION NAME	FWP	PBCR	PPWS	AG	AES
Beaver River, off US 64, Guymon	NS (1)	NS (6, 7, 8)	S	S	NT
Beaver River, US 83, Turpin	NS (16, 18)	NS (6, 7, 8)	N/A	NS (10, 11)	NS(18)
Beaver River, SH 23, Beaver	NS(16)	NS (6, 7, 8)	N/A	NS (10, 11, 12)	NS(18)
Beaver River, CR N1650, Gate	NS(16, 18)	NS (6, 8)	N/A	NS (10, 11)	NS(18)
Beaver River, US 183, Fort Supply	S	NS (6, 8)	N/A	S	S
Deep Fork River, off SH 16, Beggs	NS (5)	NS (6, 8)	S	S	NS(18)
Deep Fork River, US 377, Stroud	NS (5)	NS (6, 8)	S	S	NS(13, 18)
North Canadian River, SH 3E, Shawnee	NS (3, 4, 5)	NS (8)	N/A	NS(10)	T (13, 17)
North Canadian River, off US 62, Harrah	NS (5)	NS (6, 8)	N/A	NS (10)	T (13, 17)
North Canadian River, US 281, Seiling	S	NS (8)	S	S	S
North Canadian River, US 75, Wetumka	NS (5)	NS (8)	S	S	T (13, 17)
North Canadian River, Ind. Nat. Tpk., Dustin	NS (5)	NS (6, 8)	S	S	T (13)
North Canadian River, US 412, Woodward	S	NS (8)	N/A	S	S
North Canadian River, US 81, El Reno	NS(3)	NS (8)	S	S	T (13, 17)
Wolf Creek, off US 270, Fort Supply	S	NS (8)	S	S	S

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