

Water-Data Report 2012

0546431750 Cedar River at County Highway W26 near Urbana, IA

Iowa Basin
Middle Cedar Subbasin

LOCATION.--Lat 42°11'12.3", long 91°52'19.5" referenced to North American Datum of 1927, in SW ¼ NW ¼ SW ¼ sec.11, T.85 N., R.9 W., Benton County, IA, Hydrologic Unit 07080205, at bridge on County Highway W26, 2.3 mi south of Urbana, 2.3 mi upstream from Blue Creek, and 112 mi upstream from mouth.

DRAINAGE AREA.--6,170 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2001-2002, 2004, 2011-2012. Period of record includes water-quality data published in USGS annual reports and various project reports.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Part 1 of 12

[%, percent; CaCO₃, calcium carbonate; MPN/100 mL, most probable number per 100 milliliters; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Sample date-time	Barometric pressure, mm Hg (00025)	Discharge, instantaneous, ft ³ /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)	pH, water, unfiltered, laboratory, standard units (00403)	Specific conductance, water, unfiltered, laboratory, µS/cm at 25°C (90095)	Specific conductance, water, unfiltered, laboratory, µS/cm at 25°C (00095)	Temperature, water, °C (00010)
09-27-2012 0930	748	537	11.2	112	9.1	7.8	449	387	14.7

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**

Part 2 of 12

[%, percent; CaCO₃, calcium carbonate; MPN/100 mL, most probable number per 100 milliliters; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Sample date-time	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Stream width, ft (00004)	alpha-HCH-d6, surrogate, water, filtered (0.7 micron glass fiber filter), percent recovery (91065)	Diazinon-d10, surrogate, water, filtered (0.7 micron glass fiber filter), percent recovery (91063)	Dissolved solids, dried at 180°C, filtered, mg/L (70300)	Dissolved solids, water, filtered, sum of constituents, mg/L (70301)	Hardness, water, mg/L as CaCO ₃ (00900)	Non-carbonate hardness, water, filtered, mg/L as CaCO ₃ (00904)	Suspended solids, water, unfiltered, mg/L (00530)
09-27-2012 0930	24	425	101	107	241	209	153	55	65

0546431750 Cedar River at County Highway W26 near Urbana, IA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 3 of 12

[%, percent; CaCO₃, calcium carbonate; MPN/100 mL, most probable number per 100 milliliters; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Sample date-time	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium adsorption ratio, water, number (00931)	Sodium fraction of cations, percent in equivalents of major cations (00932)	Sodium, water, filtered, mg/L (00930)	Alkalinity, water, filtered, inflection-point, incremental titration method, field, mg/L as CaCO ₃ (39086)	Bicarbonate, water, filtered, inflection-point, incremental titration method, field, mg/L (00453)	Carbon (inorganic plus organic), suspended sediment, total, mg/L (00694)
09-27-2012 0930	24.1	22.6	2.92	0.78	24	22.3	98.1	112	8.73

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 4 of 12

[%, percent; CaCO₃, calcium carbonate; MPN/100 mL, most probable number per 100 milliliters; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Sample date-time	Carbonate, water, filtered, inflection-point incremental titration method, field, mg/L (00452)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Inorganic carbon, suspended sediment, total, mg/L (00688)	Silica, water, filtered, mg/L as SiO ₂ (00955)	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, water, filtered, mg/L as N (00623)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)	Ammonia, water, filtered, mg/L as N (00608)
09-27-2012 0930	3.5	38.9	0.16	0.07	0.020	37.4	0.33	2.5	< .010

0546431750 Cedar River at County Highway W26 near Urbana, IA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 5 of 12

[%, percent; CaCO₃, calcium carbonate; MPN/100 mL, most probable number per 100 milliliters; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Sample date-time	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Nitrite, water, filtered, mg/L as N (00613)	Organic nitrogen, water, unfiltered, mg/L (00605)	Orthophosphate, water, filtered, mg/L as P (00671)	Particulate nitrogen, suspended in water, mg/L (49570)	Phosphorus, water, filtered, mg/L as P (00666)	Phosphorus, water, unfiltered, mg/L as P (00665)	Escherichia coli, Defined Substrate Technology, water, MPN/100 mL (50468)	Total coliform, Defined Substrate Technology, water, MPN/100 mL (50569)
	09-27-2012 0930	0.441	0.014	< 2.5	< .004	1.41	0.017	0.391	17

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 6 of 12

[%, percent; CaCO₃, calcium carbonate; MPN/100 mL, most probable number per 100 milliliters; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Sample date-time	Chlorophyll a, phytoplankton, chromatographic-fluorometric method, µg/L (70953)	Pheophytin a, phytoplankton, µg/L (62360)	Iron, water, filtered, µg/L (01046)	Manganese, water, filtered, µg/L (01056)	2,6-Diethyl-aniline, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82660)	2-Chloro-4-isopropyl-amino-6-amino-s-triazine, water, filtered, recoverable, µg/L (04040)	Acetochlor, water, filtered, recoverable, µg/L (49260)	Alachlor, water, filtered, recoverable, µg/L (46342)	alpha-HCH, water, filtered, recoverable, µg/L (34253)
	09-27-2012 0930	231	87.8	6.8	3.54	< .0060	E .050	< .010	< .008

0546431750 Cedar River at County Highway W26 near Urbana, IA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[%, percent; CaCO₃, calcium carbonate; MPN/100 mL, most probable number per 100 milliliters; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Sample date-time	Azinphos-methyl, water, filtered	Benfluralin, water, filtered	Butylate, water, filtered	Carbaryl, water, filtered	Carbofuran, water, filtered	Chlorpyrifos, water, filtered	cis-Permethrin, water, filtered	Cyanazine, water, filtered	
	(0.7 micron glass fiber filter), recoverable, µg/L (39632)	(0.7 micron glass fiber filter), recoverable, µg/L (82686)	(0.7 micron glass fiber filter), recoverable, µg/L (82673)	(0.7 micron glass fiber filter), recoverable, µg/L (04028)	(0.7 micron glass fiber filter), recoverable, µg/L (82680)	(0.7 micron glass fiber filter), recoverable, µg/L (82674)	(0.7 micron glass fiber filter), recoverable, µg/L (38933)	(0.7 micron glass fiber filter), recoverable, µg/L (82687)	(0.7 micron glass fiber filter), recoverable, µg/L (04041)
09-27-2012 0930	0.050	< .120	< .014	< .0040	< .060	< .060	< .0036	< .010	< .022

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Sample date-time	DCPA, water, filtered	Desulfinyl-fipronil amide, water, filtered	Desulfinyl-fipronil, water, filtered	Diazinon, water, filtered	Dieldrin, water, filtered	Disulfoton, water, filtered	EPTC, water, filtered	Ethalfluralin, water, filtered	Ethoprop, water, filtered
	(0.7 micron glass fiber filter), recoverable, µg/L (82682)	(0.7 micron glass fiber filter), recoverable, µg/L (62169)	(0.7 micron glass fiber filter), recoverable, µg/L (62170)	(0.7 micron glass fiber filter), recoverable, µg/L (39572)	(0.7 micron glass fiber filter), recoverable, µg/L (39381)	(0.7 micron glass fiber filter), recoverable, µg/L (82677)	(0.7 micron glass fiber filter), recoverable, µg/L (82668)	(0.7 micron glass fiber filter), recoverable, µg/L (82663)	(0.7 micron glass fiber filter), recoverable, µg/L (82672)
09-27-2012 0930	< .0076	< .029	0.003	< .0060	< .008	< .040	< .0056	< .006	< .016

0546431750 Cedar River at County Highway W26 near Urbana, IA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[%, percent; CaCO₃, calcium carbonate; MPN/100 mL, most probable number per 100 milliliters; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Sample date-time	Fipronil sulfide, water, filtered, recoverable, µg/L (62167)	Fipronil sulfone, water, filtered, recoverable, µg/L (62168)	Fipronil, water, filtered, recoverable, µg/L (62166)	Fonofos, water, filtered, recoverable, µg/L (04095)	Lindane, water, filtered, recoverable, µg/L (39341)	Linuron, water, filtered, (0.7 micron glass fiber filter), recoverable, µg/L (82666)	Malathion, water, filtered, recoverable, µg/L (39532)	Methyl parathion, water, filtered, (0.7 micron glass fiber filter), recoverable, µg/L (82667)	Metolachlor, water, filtered, recoverable, µg/L (39415)
09-27-2012 0930	< .012	< .024	E .003	< .0048	< .0040	< .060	< .016	< .008	0.105

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WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

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[%, percent; CaCO₃, calcium carbonate; MPN/100 mL, most probable number per 100 milliliters; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Sample date-time	Metribuzin, water, filtered, recoverable, µg/L (82630)	Molinate, water, filtered, (0.7 micron glass fiber filter), recoverable, µg/L (82671)	Napropamide, water, filtered, (0.7 micron glass fiber filter), recoverable, µg/L (82684)	p,p'-DDE, water, filtered, recoverable, µg/L (34653)	Parathion, water, filtered, recoverable, µg/L (39542)	Pebulate, water, filtered, (0.7 micron glass fiber filter), recoverable, µg/L (82669)	Pendi-methalin, water, filtered, (0.7 micron glass fiber filter), recoverable, µg/L (82683)	Phorate, water, filtered, (0.7 micron glass fiber filter), recoverable, µg/L (82664)	Prometon, water, filtered, recoverable, µg/L (04037)
09-27-2012 0930	< .012	< .0040	< .008	< .002	< .020	< .0160	< .012	< .020	0.044

0546431750 Cedar River at County Highway W26 near Urbana, IA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 11 of 12

[%, percent; CaCO₃, calcium carbonate; MPN/100 mL, most probable number per 100 milliliters; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated]

Sample date-time	Propa-chlor, water, filtered, recoverable, µg/L (04024)	Propanil, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82679)	Propargite, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82685)	Propyz-amide, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82676)	Simazine, water, filtered, recoverable, µg/L (04035)	Tebu-thiuron, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82670)	Terbacil, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82665)	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82675)	Thioben-carb, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82681)
	09-27-2012 0930	< .006	< .010	< .020	< .0036	0.008	< .028	< .024	< .018

WATER-QUALITY DATA
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012

Part 12 of 12

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Sample date-time	Triallate, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82678)	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82661)	Organic carbon, suspended sediment, total, mg/L (00689)	Organic carbon, water, filtered, mg/L (00681)	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, tons per day (80155)
	09-27-2012 0930	< .0046	< .018	8.66	11.1	24