

1.3 Water Quality Regulations

Water quality in the streams of Arkansas is regulated by the Arkansas Department of Environmental Quality through Arkansas Regulation 2. The water quality standards for a particular stream are determined based on the “designated uses” of the water in the stream and its location in the state.

The uses deemed appropriate for the Kings River include primary and secondary recreation, domestic, industrial, and agricultural water supply, and respective Boston Mountain and Ozark Highlands fisheries. The Kings has also been designated as an Extraordinary Resource Waterway.

See Section 3 for more information on water quality in the Kings River and long-term impacts of sediment and nutrients on the waterway.

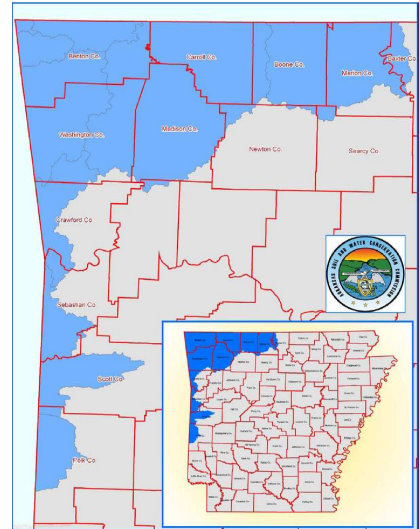
Kings River Water Quality Standards	
Dissolved Oxygen	Minimum = 6 mg/L
pH	Between 6.0 and 9.0
Total Dissolved Solids	Maximum = 150 mg/L
Turbidity	Base flow = Max 10 NTU Storm flow = Max 17 NTU
Temperature	Maximum = 84.2°F
Nutrients	Cannot cause objectionable algal densities or nuisance aquatic vegetation
Fecal Coliform	Cannot exceed 200/col per 100 mL between May 1 and September 30.

What does it mean to live in a Nutrient Surplus Area?

All of Carroll County and the majority of Madison County lie within a declared Nutrient Surplus Area. This means that the concentration of certain nutrients, primarily phosphorus and nitrates, is so high that the application of those nutrients could negatively impact soil fertility or water quality. Regulations accompanying this declaration include:

- Registration of all Poultry Operations with 2500 or more birds
- Landowners with 2.5 or more acres who are applying nutrients must have a certified Nutrient Management Plan or apply at a protective rate
- Nutrient Applications must be made by a Certified Applicator

Visit the Berryville or Huntsville USDA office for more information.



What does it mean to live on an Extraordinary Resource Waterway?

- No significant physical alterations of in-stream habitat allowed (i.e. channelization/impoundment)
- Bacteria concentrations must meet swimmable (primary contact) standards year-round.
- No commercial gravel mining below the ordinary high water mark.
- All point source (pipe) discharges must meet “advanced treatment” technology
- The highest level of pollution prevention is required for new road and bridge construction, major pipeline construction, and solid waste disposal sites.

Contact Arkansas Department of Environmental Quality for more detailed information.