



Policy Title: Stream Buffer Policy

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Friends of the Kaw Position on Stream Buffer Advocacy Policy:

Friends of the Kaw affirms that a healthy stream buffer consisting of trees, grasses, and other native vegetation can greatly reduce the amount of pollutants reaching surface water channels and improve overall stream health and function (Schlosser and Karr, 1981a; Daniels and Gilliam, 1996; Liu, 2006).

Friends of the Kaw stands by the following recommendations for stream buffers:

- All streams and rivers, including intermittent and ephemeral headwaters, should have a continuous, unbroken buffer of native vegetation (native grasses or trees).
- The lateral width of the buffer should be a minimum of two times the active width of the stream. Wider areas are preferable, especially on eroding stream meanders.
- A healthy stream maintains connections to its floodplain and wetlands. This can be achieved through protection of existing wetlands and oxbows; restoration of wetlands, oxbows and floodplain connections where possible; and levee setbacks on larger rivers.
- Development of any kind should be disallowed in the immediate stream corridor. Certain types of development can be compatible with the wider floodplain, but with an emphasis on protection of existing wetlands and retaining and infiltrating water.
- Where natural vegetation cannot feasibly be restored, we promote the implementation of green infrastructure that will slow and retain water as much as possible, and provide opportunities for plant uptake of nutrients and other pollutants.

- Infrastructure that bypasses the riparian zone and delivers runoff directly to the stream channel (storm drains in urban/suburban areas, tile drainage in agricultural areas) negates many of the benefits provided by riparian zones. The water is delivered to the stream channel quickly and in large volumes, causing erosion of the bed and banks (stream incision). This erosion threatens infrastructure like bridges, roads, and walking/biking trails. Additionally, because there is no filtering function in these types of infrastructure, the water delivered to the stream is polluted with fertilizers (nutrients), chemicals, oil, sediment, and is often warmer than the receiving stream (thermal pollution). We encourage the use of alternatives for stormwater retention, including:
 - a. In urban areas:
 - i. Green roofs
 - ii. Rain gardens
 - iii. Bioretention areas
 - iv. Stormwater wetlands
 - v. Saturated buffer (distribute through riparian zone)
 - b. In agricultural areas:
 - i. Grassed waterways and prairie strips to absorb runoff, as an alternative to tile drainage (field/soil specific)
 - ii. Restored or constructed wetlands
 - iii. Bioreactor to treat tile drainage water
 - iv. Saturated buffer (distribute through riparian zone)
 - v. Drainage water recycling system - good option for storing water for dry periods.
 - vi. Tailwater recovery system



Reference Materials:

<https://www.marc.org/environment/environment-plans/stormwater-best-management-practices>