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Lee A. Norman, M.D., Secretary

Laura Kelly, Governor

October 5, 2021

Ms. Connie Owen  
Director  
Kansas Water Office  
900 SW Jackson Street; Suite 404  
Topeka, KS 66612

Dear Ms. Owen:

The Kansas Department of Health and Environment (KDHE) appreciates our long-standing partnership with the Kansas Water Office in the pursuit of improving the quality of Kansas water resources. KDHE has always been supportive of advancing water policy through the *Kansas Water Plan* and its process. Pursuant to that ongoing commitment of cooperation and collaboration, KDHE offers the following comments on the 2021 draft of *Kansas Water Plan*.

1. On page 6, under (3) Improve the State's Water Quality: KDHE suggests the following revised sentence: "Water quality issues affecting surface waters include nutrients, **including resulting stream and lake eutrophication and Harmful Algal Blooms (HABs), and** sedimentation, **bacteria HABs-and-nitrate** contamination **and mineral intrusion (chloride, sulfate, selenium, uranium).**"
2. On the following sentence, substitute "arsenic" for "selenium".
3. On page 11, we think it's not accurate to portray the 50-year Long Term Vision as "Its initial focus was on ensuring adequate quantity, although it also reflected water quality concerns." Actually, it did not and throughout its development the emphasis was always on quantity. The first sentence of the next paragraph is accurate and supports the transition for the KWP to be more comprehensive in addressing quantity and quality issues.
4. On page 13, KDHE also uses SWPF for Drinking Water Protection, including mineralization studies of private wells in western stream alluvia, where mineral intrusion has been problematic.
5. On page 20, we are not sure the safe yield policy of GMD's #2 and #5 considers impact to water quality. Water quality might benefit from safe yield appropriations by keeping water in the streams within the GMDs, but it is not a driver for those policies.
6. The first two paragraphs of page 20 repeat themselves.
7. On page 21, is it accurate to state "regulatory mechanisms exist to ensure the lawful use of water and to secure reduction in use when necessary to preserve the availability **(and sometimes the quality)** of a given water supply."? State law prohibits the Secretary of KDHE from having any authority "over the beneficial use of water, water quantity allocations, protection against water use impairment of a beneficial use, or any other function or authority under the jurisdiction of the Kansas water appropriation act,...". [K.S.A. 65-171d(a)]

8. On page 26, is the mention of the General Mills and Truterra initiatives appropriately placed within the discussion of conserving and extending the High Plains Aquifer? While water use reduction is a benefit, the main objective of the Cheney Lake project is more about soil health and water quality than conserving the HPA. We suggest asking Division of Conservation for a better example of soil health initiatives intended to conserve ground water.
9. On page 34, the supposition that HABs increase the cost of living for downstream Kansans seems unsubstantiated. Whereas, economic impacts to the communities adjacent to HAB-afflicted reservoirs is real as is the impact to recreation interests, both vendor and public.
10. On page 34, we'd suggest a language change: "...to provide dilution for naturally occurring background ~~levels of pollutants, such as chloride. naturally occurring water quality concerns, and the ....~~" Also, not sure if all reservoirs have an identified Water Quality pool.
11. On page 35, might mention that Wichita and irrigation groups (districts) contract with the U.S. Bureau of Reclamation. Move the last sentence of first paragraph ahead of the sentence starting "Multiple cities and agricultural irrigation..."
12. On page 37, are you sure there is designated Water Quality pools in Milford and Perry or is it storage not yet called into service? Regardless, those pools are not dedicated to supporting low flow requirements, they are managed on an interim basis for that purpose until they are called into service for the Water Marketing or Water Assurance programs.
13. On page 39, the discussions held by the KDHE nutrient reduction work group are now handled through the water resources subcabinet. The work group has not been active for years.
14. On page 43, first sentence, fourth paragraph should now read, "**Programs administered by the KDHE Monitoring, Assessment and Science Section (MASS) and the Policy, Planning and Standards (PPS) Unit are designed to meet ....**"
15. In next paragraph, the Integrated Water Quality Assessment identified those three statistics, not the KDHE list of impaired waters.
16. Bottom of page 43, WPMAS is now MASS
17. On page 44, the Water Quality Monitoring and Assessment Strategy is not a tool, but a plan for directing water quality surveillance.
18. On page 45, last sentence should read: KDHE has considered a number of HAB mitigation strategies at numerous lake, including Milford Lake, such as reservoir drawdowns to reduce lakeshore nutrient loading, peroxide-based algaecides, ultrasound, rough fish removal and placement of barley straw bales along shore lines.
19. Same page, suggest exchanging "~~with no agency sampling or laboratory analysis...~~", to, "**with limited sampling and laboratory analysis being conducted on private waters by Kansas State University.**"
20. On page 46, suggest switching "water quality concerns." with "pollutants."
21. Same page, water quality pool should be capitalized to be consistent with earlier text
22. Same page, the USGS gages monitor specific conductivity which is related to the level of chlorides and other dissolved solids in the rivers.
23. Page 48, the Fort Hays State project started in 2021.
24. Page 48, suggest adding that KDHE host information regarding private water well testing and other information for private water wells owners. <https://www.kdheks.gov/wellwateraware/>

25. Page 49, the stream probabilistic monitoring program is the basis for the biennial Integrated Water Quality Assessment, but the KDHE list of impaired waters is largely informed by the routine monitoring networks.
26. Page 50, data are plural, so it should be these data.
27. Page 50, add information regarding the Drinking Water Protection Program. "KDHE facilitates the Kansas Drinking Water Protection (DWP) program. The program focuses on communities with nitrate contamination with upward trends or in violation of the State's Maximum Contaminate Level (MCL). The purpose of the DWP program is to assess, identify, and develop strategic action steps to address the sources of nitrate contamination as an alternative to communities expanding or building costly water treatment facilities.
28. Page 51, suggest changes to language to be "The Kansas Nonpoint Source (NPS) Pollution Management Plan(28) is the main strategic plan for addressing NPS management in Kansas. The plan addresses the nine key program elements required by EPA as well as provides a framework for coordination and collaboration among agencies and organizations involved in NPS-related management activities. The plan's management objectives include projects and partnerships implemented and documented improvements in water quality attributable to NPS pollution control efforts based on focused work on impaired waters."
29. Page 52, again, no KDHE nutrient reduction work group, substitute KDHE nutrient reduction efforts.
30. Page 67, last Implementation Action, suggest including sedimentation as a water quality concern affected by flooding.
31. Page 99, this is where you might insert the paragraph on General Mills from page 26.
32. Page 123, is Goal 3 speaking to surface water quality, groundwater quality or both?
33. Page 143 and 144, Goal 4 text box is repeated. Not sure what the empty Goal box on page 144 is?
34. Page 170, another empty Goal text box, same as page 173
35. Page 207, are you sure there is water quality storage in Kanopolis Lake?
36. Page 223, in the water quality text, note land use runoff is no a non-point source, not a non-point source pollutant.
37. Page 238, uranium concentrations are also higher than the MCL under moderate flows, not just low flows
38. Same page, selenium concentrations are higher in the winter than the summer because the summer irrigation deliveries from John Martin Reservoir to the Kansas ditches provides some dilution; in the winter, those releases cease and the highly mineralized ground water return flows in Colorado comprise most of the water arriving at the stateline.
39. Same page, the highest surface water concentrations of selenium are seen at the state line up to the Bear Creek Fault; the highest ground water concentrations are seen east of the fault as regional irrigation induces migration of river water into the surrounding alluvium and underlying High Plains Aquifer.
40. Page 256, clarify the Action Step: what is a baseline of potable water quality?
41. Page 284 SWQUA is never used in the text of the KWP

As always, KDHE enjoys the proactive relationship with the Kansas Water Office and hopes the development of the 2021 *Kansas Water Plan* supports a blueprint for successful management of Kansas

water resources. If you have any questions, do not hesitate to call me. Thank you for the opportunity to provide comments on the proposed *Kansas Water Plan*.

Sincerely,

A handwritten signature in blue ink that reads "Leo G. Henning". The signature is fluid and cursive, with the first name "Leo" being the most prominent.

Leo G. Henning  
Deputy Secretary and Director of Environment  
Kansas Department of Health and Environment