

TODEEN DARLINGTON

My name is Toddi Darlington, I live in the Wind River Canyon, 3 miles north of Boysen Dam. I attended the public meeting held in Thermopolis on the Atheon Discharge Permit. This permit depends on a holding bay strategy, where discharge water is mixed with clean water as it enters Badwater Bay. It assumes Boysen remains in a constant state. What happens if the mixing bay no longer exists?

I asked one of the Wyoming DEQ representatives if they had considered the possibility of the dam being destroyed by an earth quake. They hadn't. That thought had not entered their mind. I doubt they considered drought as well. Assuming Boysen will stay in a constant state with an ever-present mixing bay is foolish. No one can predict the future. This permitting process should address the possibility of the mixing bay no longer existing. Not doing so is irresponsible.

I have experienced two earth quakes in the Wind River Canyon. Boysen dam is an earthen dam. The permit does not address what happens if the dam is damaged or destroyed by a natural disaster like an earth quake, or by a manmade disaster like a terrorist act? Boysen carrying capacity would be reduced considerably. The mixing bay could no longer exist. What is the contingency plan if this happens? This should be addressed in the permit.

I have also experienced severe droughts over the years I have lived in the Canyon. I have seen Boysen water levels lowered drastically. I have seen the proposed mixing bay itself lowered considerably during drought years. What happens if water levels in Boysen lower to the point of eliminating the mixing bay through drought? This is not addressed in the permit.

I would also like to address the following, as presented through bullet points.

1. The executive summary mentions, in its opening statement, that the Wind river and Big Horn River below Boysen Dam is a Class 1 water. The Water Quality Compliance Analysis fails to confirm that the Class 1 waters below the dam will not be degraded.
 2. DEQ's Anti-degradation Policy (2013 Wyoming Surface Water Quality Standards), states that no permit shall degrade water quality in any tributary to Class 1 waters. By Approving this Discharge Permit, DEQ would violate its own Anti-Degradation Policy.
 3. The Executive Summary only addresses the methodology, and does not summarize the findings or conclusions of the Water Quality Compliance Analysis. It is a prelude to, rather than a summary, of the main document. The Executive Summary should conclude with a summary of the findings of the Water Quality Compliance Analysis.
 4. The last paragraph of the Executive Summary on Page 22 states "Chronic water quality criteria outside the mixing zone (Badwater Bay) with the reservoir is met in all three flow conditions." This assumes that mixing is thorough and instantaneous beyond Badwater Bay, and ignores the effects of stratification – a known factor in Boysen Reservoir. These questions raise significant concerns about future water quality in future dam releases.
 5. Irrigators below the dam are already troubled by high salt content in irrigation water from the Big Horn River. This proposal would cause DEQ to raise the upper limit of allowed levels of chloride in Boysen. Elevated salinity would be detrimental to downstream agriculture.
- Until these concerns are addressed in the permit, I object to the discharging of water into Boysen

Reservoir.