

Testimony
Senate Bill 2080 – State Water Commission
Senate Energy and Natural Resources Committee
Senator Kreun, Chair
January 7, 2021

Chairman Kreun, and members of the Senate Energy and Natural Resources Committee – I am Aaron Carranza, Regulatory Division Director of the State Water Commission. I am here today to provide you an overview of Senate Bill No. 2080, which proposes to amend North Dakota Century Code (N.D.C.C.) § 61-16.1-38, relating to the State Engineer's authority regarding construction permit thresholds for dikes, dams, and other devices.

N.D.C.C. § 61-16.1-38 currently requires the following for the construction or modification of a dam, dike, or other device:

- Any low-hazard dam or other device that retains, obstructs, or diverts more than 50 acre-feet of water requires a permit.
- Any medium or high-hazard dam that retains, obstructs, or diverts more than 25 acre-feet of water requires a permit.
- Any dike that protects more than 50 acre-feet of volume (i.e., protected volume behind a dike) requires a permit.

If a permit is required, there is a second threshold in the statute regarding a professional engineer requirement, which includes:

- Any dam over 10 feet in height requires a professional engineer to design.
- Any dike over 2 feet in height requires a professional engineer to design.

Senate Bill 2080 proposes to amend these requirements in the following ways:

1. The bill introduces a “risk” classification concept for dikes, where the permitting thresholds for dikes will be tiered based upon risk to life and infrastructure resulting from the dike's failure.

- a. The permit threshold for low-risk dikes would be amended from a 50 acre-feet volume threshold to an 80-acre protected area threshold.
 - b. Any moderate or high risk dike would require a permit regardless of protected area.
2. The bill removes the specific professional engineer requirements for dams, dikes, and other devices, thereby allowing the State Engineer more flexibility to adopt more specific professional engineer requirements in N.D. Administrative Code chapter 89-08.

The current State Engineer construction permit application review process would remain the same, with the State Engineer reviewing all construction permit applications from a safety and orderly flow of water perspective. Senate Bill 2080 does not propose to amend the permitting thresholds for dams.

Since 1979, the permit threshold and permit application requirements for dike construction have generally remained the same. These requirements have often been met with questions of inequities regarding the need for a permit or the permit application requirements themselves. For example, an agricultural dike currently has the same permit application needs and requirements as a new levee constructed in the City of Fargo. While consistent in application, static requirements like this have led to an over regulation of lesser risk dike projects and potentially under regulation of higher risk dike projects.

Additionally, determining when a permit is required for a dike or dike system has long been an overly complex technical task. With current technology, in order to determine if a permit is required for a dike, an analysis of LiDAR data using GIS software is necessary in order to calculate the dike's protected volume. This process is often difficult to explain, and this analysis is time consuming for agency staff. It also could constitute considerable expense for potential applicants and is not easily repeatable by someone not knowledgeable or skilled with GIS software.

The proliferation of large-scale flood control projects in the state in recent years, such as the Fargo-Moorhead Diversion Project, Mouse River Enhanced Flood Protection Project, City of Grafton Flood Control, and Valley City Flood Control Project, to name a few, has complicated dike regulation in the state. The State Engineer believes it shares responsibility for the safety of the dikes or levees in these new and existing flood control projects.

The current permitting framework for dikes does not allow the State Engineer to differentiate, and therefore, optimize, regulation between different dike types and potential risks to the public. The proposed changes would allow the State Engineer to vary the regulation of dikes based upon the risk of the dike or dike system. Additionally, the proposed changes to the professional engineer language would allow the State Engineer to put those sorts of proscriptive professional engineer requirements in Administrative Code with the intent to provide more flexibility and reasonability in the permitting and design process. This will allow permit application requirements to be more readily adapted to changes in the state of engineering practice as well as tailored to the specific type of water project being regulated.

The proposed changes would also lay the future groundwork necessary for a state levee safety program. The State Engineer believes a future state levee safety program is inevitable and that the State Engineer is well positioned, with existing permitting and data management infrastructure, to develop and adopt a levee safety program when funding for additional, full-time positions allows.

The State Engineer believes the inequities regarding dike regulation must be corrected to not only allow more transparency and fairness regarding permit application requirements, but also allow the State Engineer more flexibility to tier permit requirements based on public safety or risk to life for those living behind dike or levee systems. The optimization of the permitting process will help the State Engineer prioritize agency resources while also enabling a commensurate and

reasonable application and review process to be experienced by all permit applicants.

The State Engineer supports the passage of Senate Bill 2080 with the ultimate goal to provide clearer regulations and guidance to agency staff, water resource districts, and the general public regarding dams and dikes in North Dakota.

Thank you for the opportunity to comment and I would be happy to answer any questions you might have.