# Testimony on SB 2324 Senate Political Subs Committee Senator Terry Wanzek

Good morning Chairman Burckhard and members of the Senate Political Subdivisions. I'm Terry Wanzek from Jamestown, State Senator representing district 29 in ND Legislature. I am here today to present SB 2324 to your committee and explain why it is before you. I introduced this bill on behalf of a constituent who approached me with a problem. She is here today to share her story with you. Her name is Ms. Sue Backer. I would ask Mr. Chairman that she be able to provide testimony immediately after me as she has a funeral to go back to in Jamestown at 12:30 today.

First before we tell her story, I want to make reference to a handout I gave to each of you from the state engineer. It is a good information piece on stream crossings and stream crossing determinations from the Office of the State Engineer(OSE) and how they work within our ND law. The reason I am sharing this is because it is a critical piece of her story. This handout explains the process Ms Backer went through to get to where we are today.

Ms. Backer brought it to my attention that the law affords her the right to pursue a stream crossing determination, with her local water board's permission or upon petition of the majority of landowners of the area affected or at the request of the board of county commissioners or township supervisors. And then the century code states that "the board of county commissioners, or the board of township supervisors, as the case may be, upon notification of the determination, shall install a culvert or bridge of sufficient capacity". Ms. Backers stream crossing determination revealed, and with the assistance of a private engineering firm there is need for at a minimum, a 30" culvert, where there was an 18" culvert.

Here is her problem. While the law states the political sub shall follow the stream crossing determination, there is no enforcement. Even though Ms. Backer spent thousands of dollars on private engineering analysis and legal fees to establish a reason for an OSE stream determination study and spent 2-3 years making her case, and ultimately prevailing according to the law, there is no enforcement. Her township continued to ignore all her efforts. Matter of fact, having knowledge of all this information I'm sharing, the township ignored it and then placed a new culvert in this specific road last fall with a new culvert, 18".

Mr. Chairman and members of committee, here is where I get upset. This bill did not have to be before you or us if this township authority would have communicated with Ms. Backer. She has expressed to me that she tried numerous times to reach out over the course of her endeavor, only to be ignored. It is the reason why we as legislators get approached every 2 years and have to clarify the law because 5 % of society is obstinate and wont follow the rules. IMO, A little communication from the township authority would have gone a long way in this case.

That brings us to the bill before you. It is an attempt to rectify this situation. Ms. Backers only recourse is to go to court now and spend more dollars. She could have paid for the culvert with the funds she has spent fighting the issue. The bill was hastily introduced as time was running out on me, as I was home quarantining with COVID at the deadline to introduce bills. Ms. Backer and her attorney feel the language in the bill still does not really do much as is. So I prepared amendments and have them here today. I believe the amendments do put more teeth into enforcement. I'll explain the amendments.

Mr. Chairman and committee members, I realize this is a delicate issue. Anytime you get into the middle of a water issue it gets sticky. I do understand the concern that this bill could become an unfounded mandate burdening counties and townships. I was our township treasure for over 25 years. I know townships have little resources. And I know county budgets are tight. I understand that. I want to work with the political subs that have concerns to find a reasonable mechanism that protects constituents like Ms. Backer without creating a burdensome financial stress on our counties and townships. I want to see more cooperation and communication in solving these issues. Thank you for your time.



# STREAM CROSSINGS

# FACTS & FAQS



# WHAT IS A...

#### STREAM CROSSING



According to North Dakota Administrative Code (N.D.A.C.) section 89-14-01-02, a "stream crossing means an opening to permit the flow of water under, adjacent to, or because of a highway."

#### **HIGHWAY**



According to North Dakota Century Code (N.D.C.C.) section 24-01-01.1(22), a "highway, street, or road" is "a general term denoting a public way for purposes of vehicular travel, including the entire area within the right of way. A highway in a rural area may be called a 'road', while a highway in an urban area may be called a 'street'."

#### STREAM CROSSING DETERMINATION



A stream crossing determination is a formal determination of flow (i.e., discharge) provided by the Office of the State Engineer (OSE) upon request from an eligible party under N.D.C.C. section 24-03-08.

# WHO, WHAT, WHERE'S ON STREAM CROSSINGS



### WHO HAS JURISDICTION OVER STREAM CROSSINGS?

Generally, the road authority has jurisdiction over culverts, bridges, etc. in their roads, whether that be the township, county, municipal, or state road authority. Water resource districts only have authority over culverts needed to accommodate a "drain." Jurisdiction has been litigated in the North Dakota Supreme Court in several cases. A good resource for discussion on this topic is the "Roadways" section of the North Dakota Water Managers Handbook, which is available from the North Dakota Water Resource District Association.

## WHERE CAN I FIND THE APPLICABLE LAWS REGARDING STREAM CROSSINGS?

N.D.C.C. titles 24 and 61 include the laws directly or indirectly relating to stream crossings, depending on the specific issue. The specific laws generally governing stream crossing determinations include:

- N.D.C.C. section 24-03-06
- N.D.C.C. section 24-03-08
- N.D.C.C. section 24-06-26.1
- N.D.A.C. article 89-14

### WHAT ARE "STREAM CROSSING STANDARDS?"

"Stream Crossing Standards" are minimum design standards for road crossings that were developed by the OSE and N.D. Department of Transportation (NDDOT) to further refine the requirements of N.D.C.C. section 24-03-08. In short, Stream Crossing Standards are the minimum design standards for a stream crossing to convey a standard recurrence interval (e.g., 10-year, 15-year, 25-year, and 50-year) flow rate (e.g., cubic feet per second). The "minimum design standards" for a crossing are located in N.D.A.C. chapter 89-14-01.

## WHAT IS THE PURPOSE OF STREAM CROSSING STANDARDS?

Stream Crossing Standards were developed in the early 2000s through a cooperative effort between the OSE and NDDOT to ensure reasonable road design requirements for all road authorities regarding stream crossings. Stream Crossing Standards attempted to balance upstream, downstream, and road authority interests with proper roadway design. Stream Crossing Standards were also developed to provide liability protection for road authorities, their contractors, subcontractors, or agents, and any individual firm, corporation, or limited liability company that installs stream crossings that comply with Stream Crossing Standards.

## WHEN SHOULD A STREAM CROSSING COMPLY WITH STREAM CROSSING STANDARDS?

Crossings installed before Stream Crossing Standards were adopted are considered "grandfathered" or "legacy" crossings if their construction pre-dated the Stream Crossing Standards design requirements. However, when a crossing is constructed or reconstructed, or when a stream crossing determination is made by the OSE, the new crossing must comply with Stream Crossing Standards. Compliance with Stream Crossing Standards affords a road authority liability protection as described in N.D.C.C. section 24-03-08 and N.D.A.C. section 89-14-01-01. However, enforcing compliance with Stream Crossing Standards is outside of the OSE's jurisdiction.

## HOW DO I DETERMINE A CROSSING SIZE?

The crossing must be designed and installed under the road authority's supervision to convey the design flow rate within the allowable headwater limitations provided in the Stream Crossing Standards. The crossing design can be highly dependent on the site location and topography, the road authority's budget, availability of materials and contractors, etc.

# OSE STREAM CROSSING DETERMINATIONS

# WHO CAN REQUEST A "STREAM CROSSING DETERMINATION" AND HOW?

According to N.D.C.C. section 24-03-08, the following parties may request a stream crossing determination:

- · Board of county commissioners
- Township supervisors
- · A water resource board
- A petition of the majority of landowners of the area affected

The request can be submitted to the OSE by filling out a Stream Crossing Determination Request form (SFN 61885).

# WHAT INFORMATION WILL I GET IF I REQUEST AN OSE STREAM CROSSING DETERMINATION?

The requesting party will receive "the design discharge that the crossing is required to carry to meet the stream crossing standards" (see N.D.A.C. section 24-03-08). In other words, the requesting party will receive the minimum flow rate required at the crossing in question and for the particular recurrence interval required in Stream Crossing Standards.

The road authority shall install a culvert or bridge of sufficient capacity upon notification of the stream crossing determination made by the OSE, as described in N.D.C.C. section 24-03-08. The OSE does not recommend or suggest the size or shape opening necessary to meet "sufficient capacity" to convey the identified minimum flow. This is a task left to the road authority.

# HOW DOES THE OSE MAKE A DETERMINATION?

OSE staff will assess the location and determine the best engineering method to calculate the minimum flow rate. Typically, the acceptable engineering practice is to utilize the U.S. Geological Survey's regression equations, which are summarized in <u>USGS's Scientific Investigations Report 2015-5096</u>. OSE staff will use these equations in combination with analyzing the most recent topographic data, typically GIS software and LiDAR data, to delineate a drainage area contributing to the crossing and develop the variables needed for the equations.

The OSE will verify culvert locations via aerial photography investigation. Typically, the OSE will not make a site visit to verify culvert locations unless it would make a substantial difference in the OSE's determination. OSE staff will also identify non-contributing areas from several data sources and decide whether those areas should be included in the drainage area.

### **USGS STREAM STATS**

OSE staff often use <u>USGS's Stream Stats</u> when feasible to do an initial approximation of the drainage area. This tool is publicly available online. While this tool provides an approximation of the drainage area and anticipated flow rate, the OSE does not recommend usage of this tool for formal stream crossing studies or determinations.

#### **OTHER METHODS**

There are limitations to using the regression equations to determine a flow rate, so OSE staff may use other hydrology methods to verify the regression equations' results or determine a flow rate.

# IS A ROAD CROSSING EVER CONSIDERED A "DAM?"

Generally, the State Engineer does not regulate highways or stream crossings as "dams" as long as the crossing meets Stream Crossing Standards. However, road authorities should properly place culverts at grade or channel bottom to ensure the crossing acts as an "opening to permit the flow of water" and does not otherwise impound water.

# WHAT ABOUT PRIVATE ROAD STREAM CROSSINGS?

Private road stream crossings are not subject to Stream Crossing Standards. However, any approach crossing within a road right of way must meet Stream Crossing Standards. Additionally, it is recommended that all private roads comply with Stream Crossing Standards so that the road does not act as a dam, as defined in N.D.A.C. section 89-08-01-01, or as an obstruction, as defined in N.D. Century Code section 61-16.1-51.

## WHAT IF I DISAGREE WITH AN OSE STREAM CROSSING DETERMINATION?

OSE stream crossing determinations are considered an "action or decision" by the State Engineer as described in N.D.C.C. section 61-03-22. Any person aggrieved by a stream crossing determination has 30 days to request a State Engineer hearing on the matter.



# OTHER IMPORTANT CONSIDERATIONS

- The OSE does not provide culvert or bridge sizing services.
- The OSE hydrologic review process incorporates NDDOT's approach to determinations, which takes a conservative regional approach.
- Site-specific detailed hydraulics modeling and review is beyond the scope of the OSE's determination services.
- Compliance with Stream Crossing Standards provides liability protection to the road authority and others (see N.D.C.C. sections 24-03-06, 24-03-08, and 24-06-26.1). Non-compliance may remove this liability protection.
- Nothing contained in the Stream Crossing Standards is intended to restrict a road authority from providing greater flow capacity in a crossing beyond minimum standards.
- If multiple crossings or an entire watershed is being considered, it may be more beneficial and economical to seek the assistance of a consult-

- ing engineer with experience in water resources engineering. They will be able to determine both the flow rate and crossing design necessary to comply with Stream Crossing Standards.
- If requesting a stream crossing determination for a NDDOT stream crossing, the OSE recommends contacting the applicable <u>NDDOT District Engineer</u> before submitting stream crossing request to the OSE.
- Road authorities may request a deviation from Stream Crossing Standards, but such a deviation must be approved by both the OSE and NDDOT. NDDOT has deviation authority over Stream Crossing Standards if it "determines it is appropriate to do so and the crossings are designed under scientific highway construction and engineering standards" (see N.D.A.C. section 89-14-01-06).

#### MORE INFORMATION

Contact the OSE at (701) 328-2752 or by email at swcregpermits@nd.gov.

More information is available on the OSE's "Other Regulations" webpage website.