

# Chapter 2

## LEGAL ASPECTS

This chapter is intended to provide general legal information. It is not intended to provide legal advice on any particular project or issue or to substitute for legal counsel.

## **SOUTH DAKOTA DRAINAGE MANUAL**

*October 2011*



**Table of Contents**

<b><u>Section</u></b>	<b><u>Page</u></b>
2.1 OVERVIEW .....	2-1
2.1.1 Introduction .....	2-1
2.1.2 Order of Authority .....	2-1
2.1.3 Related Publications .....	2-2
2.2 FEDERAL LAWS .....	2-3
2.2.1 General Laws .....	2-3
2.2.2 Drainage and Water Flows .....	2-3
2.2.3 Significant Laws .....	2-3
2.3 NAVIGABLE WATERS REGULATIONS .....	2-5
2.3.1 Constitutional Power .....	2-5
2.3.2 Federal Agencies .....	2-5
2.3.2.1 US Coast Guard (USCG) .....	2-5
2.3.2.2 US Army Corps of Engineers (USACE) .....	2-6
2.3.2.3 Federal Highway Administration (FHWA) .....	2-7
2.3.2.4 US Environmental Protection Agency (USEPA) .....	2-7
2.4 FISH AND WILDLIFE SERVICE .....	2-9
2.4.1 Requirements .....	2-9
2.4.2 USFWS Role .....	2-9
2.5 NATIONAL FLOOD INSURANCE PROGRAM .....	2-10
2.5.1 Flood Insurance .....	2-10
2.5.2 Flood Disaster Protection .....	2-10
2.5.3 Local Community .....	2-11
2.5.4 NFIP Maps .....	2-11
2.5.5 Coordination with FEMA .....	2-11
2.5.6 Levee Systems .....	2-11
2.6 EXECUTIVE ORDERS .....	2-13
2.6.1 Background .....	2-13
2.6.2 EO 11988 .....	2-13

**Table of Contents**

<b><u>Section</u></b>	<b><u>Page</u></b>
2.6.3 EO 11990.....	2-13
2.7 STATE WATERLAW BACKGROUND AND DEFINITIONS.....	2-14
2.7.1 Derived From .....	2-14
2.7.2 Common Law.....	2-14
2.7.3 Statutory Laws and Ordinances .....	2-14
2.7.4 Predominates.....	2-14
2.7.5 Classification of Waters.....	2-14
2.8 STATE WATER REQUIREMENTS .....	2-16
2.8.1 Basic Concepts- Runoff Drainage .....	2-16
2.8.2 Basic Concepts- Surface Waters .....	2-17
2.8.3 Basic Concepts-Flood Waters.....	2-18
2.8.4 Basic Concepts – Ground Water .....	2-18
2.8.5 Eminent Domain.....	2-19
2.8.6 Water Rights .....	2-19
2.8.7 Districts .....	2-20
2.8.7.1 Flood Control .....	2-20
2.8.7.2 Runoff Drainage Districts.....	2-20
2.8.7.3 Irrigation.....	2-21
2.8.8 Other Environmental Laws .....	2-21
2.9 LOCAL LAWS AND APPLICATIONS.....	2-22
2.9.1 Local Laws .....	2-22
2.9.2 Municipal Authority and Liability .....	2-22
2.9.3 County runoff drainage improvements .....	2-23
2.9.4 Special Issues.....	2-23
2.10 LEGAL REMEDIES .....	2-24
2.10.1 Common Actions.....	2-24
2.10.2 Inverse Condemnation .....	2-24
2.10.3 Injunction.....	2-24
2.10.4 Tort Claims.....	2-24

**Table of Contents**

<b><u>Section</u></b>	<b><u>Page</u></b>
2.11 ROLE OF THE DESIGNER .....	2-25
2.11.1 Responsibility .....	2-25
2.11.2 Investigating Complaints .....	2-25
2.11.3 Legal Opinion .....	2-27
2.12 REFERENCES .....	2-29



## Chapter 2

# LEGAL ASPECTS

### 2.1 OVERVIEW

#### 2.1.1 Introduction

Chapter 2 discusses various water laws, principally issues pertaining to drainage and rules applicable to highway facilities. The intention is only to provide information and guidance on the designer's role. This Chapter should not be considered a document upon which to base legal advice or make legal decisions. It is also not a summary of all existing water and drainage laws and, most emphatically, this Chapter is not intended as a substitute for legal counsel.

The following generalizations can be made regarding liability:

- A goal in highway drainage design should be to perpetuate natural drainage and water flows, insofar as practical.
- The courts look with disfavor upon infliction of injury or damage that could reasonably have been avoided by a prudent designer, even where some alteration in flow is legally permissible.

#### 2.1.2 Order of Authority

The descending order to law supremacy is Federal, State and local and, except as provided for in the statutes or constitution of the higher level of government, the superior level is not bound by the laws, rules or regulations of a lower level. State permit requirements are an example of law supremacy. Federal agencies do not secure permits issued by State agencies, except as required by Federal law. Many laws of one level of government are passed to enable that level to comply with or implement provisions of laws of the next higher level. In some instances, however, a lower level of government may promulgate a law, rule or regulation that would require an unreasonable or even illegal action by a higher level. An example is a local ordinance that would require an expenditure of State funds for a purpose not intended in the appropriation. Many such conflicts in the laws of different levels of government involve legal interpretation and must be determined case-by-case. These types of conflicts should be referred to the SDDOT legal counsel before any action is taken.

### **2.1.3 Related Publications**

There are numerous publications on the legal aspects of drainage and water laws. For additional information, see the AASHTO *Highway Drainage Guidelines* ([Reference \(1\)](#)), which also includes a glossary of legal definitions.

## 2.2 FEDERAL LAWS

### 2.2.1 General Laws

Federal law consists of the Constitution of the United States, *Acts* of Congress, regulations that governmental agencies issue to implement these *Acts*, Executive Orders issued by the President and case law. *Acts* of Congress are published immediately upon issuance and are accumulated for each session of Congress and published in the *United States Statutes At Large*. Compilations of Federal Statutory Law, revised annually, are available in the *United States Code (USC)* and the *United States Code Service (USCS)*.

The *Federal Register*, which is published daily, provides a uniform system for making regulations and legal notices available to the public. The *Federal Register* publishes Presidential Proclamations and Executive Orders, Federal agency regulations/ documents having general applicability and legal effect, documents required to be published by an *Act* of Congress and other Federal agency documents of public interest. Compilations of Federal regulatory material, revised annually, are available in the *Code of Federal Regulations (CFR)*.

### 2.2.2 Drainage and Water Flows

Federal highway law does not address water flows and drainage per se, but many laws have implications that affect drainage design. These laws include the following topics:

- flood insurance and construction in flood-hazard areas,
- navigation and construction in navigable waters,
- water pollution control,
- environmental protection, and
- protection of fish and wildlife.

Federal agencies formulate and promulgate rules and regulations to implement these laws, and highway designers and hydraulic engineers should remain informed on proposed and final regulations.

### 2.2.3 Significant Laws

Some of the more significant Federal laws affecting highway drainage and water flows are listed below with a brief description of their subject area:

1. *Department of Transportation Act (80 Stat. 941, 49 USC 1651 et seq.)*. This *Act* established the Department of Transportation and set forth its powers, duties and responsibilities to establish, coordinate and maintain an effective administration of the transportation programs of the Federal Government.

2. Federal-Aid Highway Acts (23 USC 101 et seq.). The *Federal-Aid Highway Acts* provide for the administration of the Federal-Aid Highway Program. Proposed Federal-aid projects must be adequate to meet the existing and probable future traffic needs and conditions in a manner conducive to safety, durability and economy of maintenance, and must be designed and constructed according to standards best suited to accomplish these objectives and to conform to the needs of each locality.
3. Federal-Aid Highway Act of 1970 (84 Stat. 1717, 23 USC 109 (h)). This *Act* provided for the establishment of general guidelines to ensure that possible adverse economic, social and environmental effects relating to any proposed Federal-aid project have been fully considered in developing the project. In compliance with the *Act*, FHWA issued process guidelines for the development of environmental action plans. These guidelines are contained in 23 CFR 771 and 23 CFR 795 et seq.
4. Federal-Aid Highway Act of 1966 (80 Stat. 766), Amended by the Act of 1970 (84 Stat. 1713, 23 USC 109 (g)). This *Act* required the issuance of guidelines for minimizing possible soil erosion from highway construction. In compliance with these requirements, FHWA issued guidelines that are applicable to all Federal-aid highway projects. Regulatory material is found in 23 CFR 650 Subpart B.

## 2.3 NAVIGABLE WATERS REGULATIONS

### 2.3.1 Constitutional Power

The Congress of the United States is granted constitutional power to regulate “commerce among the several states.” A part of that power is the right to legislate on matters concerning the instrumentalities of interstate commerce (e.g., navigable waters). The definition of navigable waters expands and contracts depending upon the breadth required to adequately implement the Federal purpose. The result is that Congress can properly assert regulatory authority over at least some aspects of waterways that are not in themselves subject to navigation. Since 2001 several federal courts have ruled on jurisdiction over “navigable waters.” Accordingly, federal agency determinations that a waterway is “jurisdictional” or “federally navigable” may be subject to revision if made before 2001. Some waterway previously deemed federally navigable may no longer be considered federally navigable, including isolated wetlands, potholes and other water bodies.

### 2.3.2 Federal Agencies

Basically, four Federal agencies implement existing Federal regulations, as discussed in the following subsections. When the designer becomes involved in obtaining approvals from the Federal agencies, however, these agencies do not always work in concert. Quite often, they will not be in agreement with one another. This can result in significant project delays unless early coordination is initiated and diligently pursued. These conflicts between Federal agencies occur as a result of their varying rules; some are “regulators” while others are “resource” motivated. For this reason, they will have different goals and, in some instances, different definitions of certain elements (e.g., wetlands). When conflicts occur, it is best to quickly determine which agency has primary responsibility and attempt to satisfy its needs.

#### 2.3.2.1 **US Coast Guard (USCG)**

USCG has regulatory authority under Section 9 of the *Rivers and Harbors Act of 1899*, 33 USC 401 (delegated through the Secretary of Transportation in accordance with 49 USC 1655 (g)) to approve plans and issue permits for bridges and causeways across navigable rivers. As outlined in 23 CFR 650, the area of jurisdiction of USCG and FHWA is established as follows:

1. FHWA Responsibility. FHWA has the responsibility under 23 USC 144(h) to determine that a USCG permit is not required. This determination is made at an early stage of project development so that any necessary coordination can be accomplished during environmental processing.
2. USCG Responsibility. USCG has the responsibility for the following:

- to determine whether or not a USCG permit is required for the improvement or construction of a bridge over navigable waters except for the exemption exercised by FHWA as stated above; and
- to approve the bridge location, alignment and appropriate navigational clearances in all bridge permit applications.

For more information related to navigational clearances for bridges, see 23 CFR 650 Subpart H and [Section 17.4.5](#).

### 2.3.2.2 US Army Corps of Engineers (USACE)

USACE has regulatory authority over the construction of dams, dikes or other obstructions (that are not bridges or causeways) under Section 9 (33 USC 401). USACE also has authority to regulate Section 10 of the *Rivers and Harbors Act of 1899* (33 USC 403), which prohibits the alteration or obstruction of any navigable waterway with the excavation or deposition of fill material. Section 11 of the *Rivers and Harbors Act of 1899* (33 USC 404) authorizes the Secretary of the Army to establish harbor lines. Work channelward of those lines requires separate approval of the Secretary of the Army and work shoreward requires Section 10 permits (see [Section 17.4.4](#)).

Section 404 of the *Clean Water Act* (33 USC 1344) prohibits the unauthorized discharge of dredged or fill material into waters of the United States, including navigable waters (see [Section 17.4.2](#)). These types of discharges require a permit. The term “discharge of fill material” means the addition of rock, sand, dirt, concrete or other material into the waters of the United States incidental to construction of any structure.

USACE has granted 50 Nationwide General Permits for 28 categories of certain minor activities involving discharge of fill material which is updated every five years with the last revision on March 12, 2007. 72 Fed. Register 11092 (as corrected May 8, 2007. 72 Fed. Register 26082). These permits expire in 2012 unless extended. Under the provisions of 33 CFR 330.5(a)(15), fill associated with construction of bridges across navigable waters of the United States (including cofferdams, abutments, foundation seals, piers, temporary construction and access fills) are authorized under the Nationwide Section 404 Permit, provided that the fill has been permitted by USCG under Section 9 of the *Rivers and Harbors Act of 1899* as part of the bridge permit. Therefore, formal application to USACE for a Section 404 Permit is not required, unless bridge approach embankment is located in a wetland area contiguous to the navigable stream. Causeways and approach fills are not included in this Nationwide Permit and they require a separate 404 permit.

USACE has Section 404 regulatory authority over streams that USCG has placed in the “advance approval” category. This category of navigable streams is defined as navigable in law but not actually navigated other than by logs, log rafts, rowboats, canoes and motorboats. Notably, this regulation does not apply to the actual

excavation or “dredging of material,” provided that this material is not reintroduced into any regulated waterway including the one from which it was removed.

Section 404 of the *Clean Water Act* (33 USC 1344) requires any applicant for a Federal permit for any activity that may affect the quality of waters of the United States to obtain a water quality certification from the South Dakota Department of Environment and Natural Resources (see [Section 17.4.1](#)).

The *1992 Energy and Water Development Appropriation Act* provides guidance to use the USACE [Wetland Delineation Manual](#) of 1987. This allows more flexibility in the definition and determination of wetlands. Regional supplements to the Wetland delineation manual are available to address regional wetland characteristics and improve the accuracy and efficiency of wetland-delineation procedures.

### **2.3.2.3 Federal Highway Administration (FHWA)**

For Federal-aid highway projects processed under 23 CFR 771.115 (b), FHWA has the authority to implement categorical exclusions as defined by the Section 404 Permit Program (*Clean Water Act of 1977*). This authority was delegated to FHWA by USACE to reduce unnecessary Federal regulatory controls over activities adequately regulated by another agency. This Nationwide permit is granted for projects where the activity, work or discharge is categorically excluded from detailed environmental documentation because the activity does not have an individual or cumulative significant effect on the human environment (see [Section 17.4.2.8.2](#)).

### **2.3.2.4 US Environmental Protection Agency (USEPA)**

USEPA is authorized to prohibit the use of any area as a disposal site when it is determined that the discharge of materials at the site will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas, wildlife or recreational areas (Section 404(c), *Clean Water Act*, 33 USC 1344). Also, USEPA is authorized under Section 402 of the *Clean Water Act* (33 USC 1344) to administer and issue a “National Pollutant Discharge Elimination System” (NPDES) permit for point source discharges, provided that prescribed conditions are met.

In 1993, USEPA delegated the authority for issuing NPDES permits to South Dakota. In South Dakota, these permits are issued by the Department of Environment and Natural Resources (DENR) and are referred to as Surface Water Discharge permits. The applicable rules are in ARSD Ch. 74:52.\*

The DENR, through the Surface Water Quality Program, controls the quality of wastewater discharge to waters of the state as established under ARSD ch. 74:52. .. In compliance with these regulations, the following factors apply to the design and operation of sewage treatment facilities for highway safety rest areas:

- The Surface Water Discharge permit required shall be obtained prior to approval of the plans, specifications and estimate and authorization for the advertisement of bids.
- Sewage treatment must be accomplished at the site as may be necessary to meet effluent limitations. Any effluent is monitored in accordance with the standards established by the Surface Water Discharge permit.
- \* *South Dakota issues Surface Water Discharge Permits for discharges from municipal separate storm sewer systems serving 10,000 or more people. Under this permitting program, the SD DOT has received a permit for runoff from every point where DOT's storm water system discharges into stream, rivers, lakes and wetlands. Highway construction activities are regulated under South Dakota's General Permit for Discharges Associated with Construction Activity. If a construction project will disturb one or more acres, the DOT must obtain coverage under the General Permit. Then General Permit requires a storm water pollution prevention plan to minimize or eliminate erosion and sedimentation; see [Section 17.4.3](#).*

## **2.4 FISH AND WILDLIFE SERVICE**

### **2.4.1 Requirements**

The *Fish and Wildlife Act* of 1956 (16 USC 742 et seq.), the *Migratory Game-Fish Act* (16 USC 760c-760g) and the *Fish and Wildlife Coordination Act* (16 USC 611-666c) express the concern of Congress with the quality of the aquatic environment as it affects the conservation, improvement and enjoyment of fish and wildlife resources. The *Fish and Wildlife Coordination Act* requires that “whenever the waters of any stream or body of water are proposed or authorized to be impounded or diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, or by any public or private agency under Federal permit or license, such department or agency shall first consult with the United States Fish and Wildlife Service (USFWS), Department of the Interior, and with the head of the agency exercising administration over the wildlife resources of the particular State with a view to the conservation of wildlife resources by preventing loss of and damage to such resources as well as providing for the development and improvement thereof.”

### **2.4.2 USFWS Role**

The USFWS role in the permit review process is to review and comment on the effects of a proposal on fish and wildlife resources. It is the function of the regulatory agency (e.g., USACE, USCG) to consider and balance all factors, including anticipated benefits and costs in accordance with NEPA, in deciding whether to issue the permit (40 FR 55810, December 1, 1975). This requirement is addressed in the appropriate environmental document (see [Section 17.1](#)).

## 2.5 NATIONAL FLOOD INSURANCE PROGRAM

### 2.5.1 Flood Insurance

The *National Flood Insurance Act* of 1968, as amended, (42 USC 4001-4127) requires that communities adopt adequate land-use and control measures to qualify for insurance. Federal criteria promulgated to implement this provision contain the following requirements that can affect certain highways:

- In riverine situations, when the Administrator of the Federal Insurance Administration has identified the flood-prone area, the community must require that, until a floodway has been designated, no use, including land fill, be permitted within the floodplain area having special flood hazards for which base flood elevations have been provided, unless it is demonstrated that the cumulative effect of the proposed use, when combined with all other existing and reasonably anticipated uses of a similar nature, will not increase the water surface elevation of the 100-year flood more than 1 ft at any point within the community.
- After the floodplain area having special flood hazards has been identified and the water surface elevation for the 100-year flood and floodway data have been provided, the community must designate a floodway which will convey the 100-year flood without increasing the water surface elevation of the flood more than 1 ft at any point and prohibit, within the designated floodway, fill, encroachments and new construction and substantial improvements of existing structures that would result in any increase in flood heights within the community during the occurrence of the 100-year flood discharge.
- The participating cities and/or counties agree to regulate new development in the designated floodplain and floodway through regulations adopted in a floodplain ordinance. The ordinance requires that development in the designated floodplain be consistent with the intent, standards and criteria set by the National Flood Insurance Program (NFIP). See [Reference \(2\)](#).

### 2.5.2 Flood Disaster Protection

The *Flood Disaster Protection Act* of 1973 (PL 93-234, 87 Stat. 975) denies Federal financial assistance to local communities that fail to qualify for flood insurance. Formula grants to States are excluded from the definition of financial assistance, and the definition of construction in the *Act* does not include highway construction; therefore, Federal-aid for highways is not affected by the *Act*. The *Act* does require communities to adopt certain land-use controls to qualify for flood insurance. These land-use requirements could impose restrictions on the construction of highways in floodplains and floodways in communities that have qualified for flood insurance.

### **2.5.3 Local Community**

The local community with land-use jurisdiction, whether it is a city, county or State, has the responsibility for enforcing NFIP regulations in that community if the community is participating in the NFIP. Consistency with NFIP standards is a requirement for Federal-aid highway actions involving regulatory floodways. The community, by necessity, is the entity that must submit proposals to FEMA for amendments to NFIP ordinances and maps in that community should it be necessary. SDDOT should work directly with the community and, through them, with FEMA. Determination of the status of a community's participation in the NFIP and the review of applicable NFIP maps and ordinances are, therefore, essential first steps in conducting location hydraulic studies and preparing environmental documents (see [Section 17.3.1](#)).

### **2.5.4 NFIP Maps**

Where NFIP maps are available, their use is mandatory in determining whether a highway location alternative will include an encroachment on the base floodplain. Three types of NFIP maps (see [Sections 17.3.2 through 17.3.5](#)) are published:

- Flood Hazard Boundary Map (FHBM),
- Flood Boundary and Floodway Map (FBFM), and
- Flood Insurance Rate Map (FIRM).

### **2.5.5 Coordination with FEMA**

SDDOT must coordinate with FEMA where administrative determinations are needed involving a regulatory floodway or where flood risks in NFIP communities are significantly impacted (see [Section 17.3.6](#)).

### **2.5.6 Levee Systems**

For purposes of the NFIP, FEMA will only recognize in its flood hazard and risk mapping effort those levee systems that meet, and continue to meet, minimum design operation and maintenance standards that are consistent with the level of protection sought through the comprehensive floodplain management criteria as outlined in the NFIP. The levee system must provide adequate protection from the base flood. Information supporting this must be supplied to FEMA by the community or other party seeking recognition of a levee system at the time a flood risk study or restudy is conducted, when a map revision is sought based on a levee system, and upon request by the Administrator during the review of previously recognized structures. The FEMA review will be solely to establish appropriate risk zone determinations for NFIP maps and will not constitute a determination by FEMA on how a structure or system will perform in a flood event. For more information on the requirements related to levee systems, see

the *National Flood Insurance Program and Related Regulations*, FEMA, Revised October 1, 1986 and Amended June 30, 1987 (44 CFR 65.10) and the [FEMA web site](#) "What is required to certify a levee as providing protection from the base flood?"

## 2.6 EXECUTIVE ORDERS

### 2.6.1 Background

Presidential Executive Orders (EO) have the effect of law in the administration of programs by Federal agencies. Although Executive Orders do not directly apply to State departments of transportation, these requirements are usually implemented through general regulations.

### 2.6.2 EO 11988

Executive Order 11988, May 24, 1977, requires each Federal agency, in implementing its activities, to take the following actions:

- to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare and to restore and preserve the natural and beneficial values served by floodplains; and
- to evaluate the potential effect of any actions it may take in a floodplain and to ensure that its planning programs reflect consideration of flood hazards and floodplain management.

These requirements are contained in 23 CFR 650 Subpart A and were published in the *Federal Register*, April 26, 1979 (44 FR 24678). SDDOT addresses the floodplain avoidance and evaluation requirements (see [Section 17.2](#)) in the environmental document (see [Section 17.1](#)). SDDOT addresses floodplain encroachment impacts in the design standards found in each Chapter of this *Manual*.

### 2.6.3 EO 11990

Executive Order 11990, May 24, 1977, orders each Federal agency:

- to take action to minimize the destruction, loss or degradation of wetlands and to preserve and enhance the natural and beneficial values to wetlands;
- to avoid undertaking or providing assistance for new construction in wetlands unless the head of the agency finds that there is no practical alternative and all practical measures are taken to minimize harm that may result from the action; and
- to consider factors relevant to the proposal's effects on the survival and quality of the wetlands.

These requirements are contained in 23 CFR 771. SDDOT addresses these requirements in the environmental document (see [Section 17.1](#)).

## **2.7 STATE WATERLAW BACKGROUND AND DEFINITIONS**

### **2.7.1 Derived From**

State water laws are derived mainly from two sources: (1) common law and (2) statutory law.

### **2.7.2 Common Law**

Common law is that body of principles that developed from usage and custom and that receives judicial recognition through repeated use. These principles were developed without legislative action and are embodied in the decisions of the courts.

### **2.7.3 Statutory Laws and Ordinances**

Statutes are provisions enacted by the legislature to enlarge, modify, clarify or change the common law applying to water. Ordinances are provisions enacted by counties and cities to address drainage, storm water, and other water issues.

### **2.7.4 Predominates**

In most instances where statutory provisions have been enacted, it is possible to determine the intent of the law. If, however, there is a lack of clarity in the statute, the point in question may have been litigated for clarification. In the absence of either clarity of the statute or litigation, a definitive statement of the law is not possible, although the factors that are likely to be controlling may be indicated.

As stated in section 2.1.2, state statutes and city and county ordinances sometimes conflict in particular situations. If so, counsel should be consulted.

### **2.7.5 Classification of Waters**

The first step in the evaluation of a water flow or drainage problem is to classify the water as (1) runoff drainage (2) surface water, (3) flood water or (4) groundwater. These terms are defined below. Once the classification has been established, the rule that applies to the particular class of water determines responsibilities with respect to disposition of the water. This classification is also necessary to determine what other governmental bodies to consult, if any.

The following definitions apply:

1. Drainage. There are at least two definitions for the term “drainage.”

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The following definitions apply:

1. Drainage. There are at least two definitions for the term “drainage.”

- a. In general the term “drainage” refers to the natural or manmade flow of water from one place to another, regardless of the type of waters involved. This manual generally refers to drainage in this context.
  - b. The second meaning of “drainage” applies to a more narrow concept-precipitation or snowmelt that has spread over the surface of the ground without being collected into a definite body or channel i.e. runoff. Runoff or drainage activities or projects generally involve the control or evacuation of excess water. To avoid confusion in this manual, this latter type of drainage is referred to as “runoff” or “runoff drainage.”
2. Runoff drainage. Precipitation or snowmelt that has spread over the surface of the ground without being collected into a definite water body or channel. This term is also referred to in other contexts as “drainage.” Under South Dakota law, counties have authority to regulate and control runoff drainage on rural lands. SDCL Ch. 46A-10A. Cities have authority to control and regulate this type of drainage within their boundaries.
  3. Surface Water. Surface waters are surface or ground waters that have entered waterways and flow in well-defined natural watercourses, including lakes, rivers, and streams. A watercourse, in the legal sense, refers to a definite channel with bed and banks within which water flows either continuously or intermittently.
  4. Flood Waters. Flood waters are surface waters that have escaped from a channeled watercourse (and its overflow channels), lakes, reservoirs and other water bodies and flow or stand over adjoining lands. They remain flood waters until they return to water bodies like rivers, streams, lakes, and reservoirs.
  5. Ground Waters. The term “groundwater” includes aquifers, underground streams, and water percolating below the surface without a definite channel.

## 2.8 STATE WATER REQUIREMENTS

### 2.8.1 Basic Concepts- Runoff Drainage

The current state laws applying to runoff drainage (see definition above) are based on the civil law rule. The civil law rule is a general principle established in various states years ago through common law. The civil rule places a natural easement or servitude upon the lower land for the drainage of runoff or excess diffused surface water as it would flow naturally, and the natural flow of the water cannot be obstructed by the servant owner to the detriment of the dominant owner.

Most States following this rule, including South Dakota, have modified it by court decisions and statutes. By statute, permissible runoff drainage for rural landowners is described in SDCL 46A-10A-20:

Subject to any official controls pursuant to this chapter and chapter 46A-11, owners of land may drain the land in the general course of natural drainage by constructing open or covered drains and discharging the water into any natural watercourse, into any established watercourse, or into any natural depression whereby the water will be carried into a natural watercourse, into an established watercourse, or into a drain on a public highway, conditioned on consent of the board having supervision of the highway. If such drainage is wholly upon an owner's land, the owner is not liable in damages to any person. Nothing in this section affects the rights or liabilities of landowners in respect to running waters or streams.

Court decisions have explained that such runoff drainage in rural areas must follow general common law principles so as not to cause undue injury to other landowners. These general principles require that the land being drained must be used in a reasonable manner, the drainage cannot create unreasonable hardship or injury to the owner of the land receiving the drainage, the drainage must be natural and the drainage may not substantially alter the course, amount, or timing of the flow on a permanent basis. In determining whether drainage is proper, courts would also consider whether there is a method of drainage available that would cause less harm to the party receiving the drainage without substantially increasing the cost to the owner of the land being drained.

Counties currently have authority to regulate drainage. The foregoing runoff drainage principles have now been included in state statute (SDCL 46A-10A-20) to serve as a guideline for counties that intend to establish more specific ordinances, or to engage in comprehensive planning, develop runoff drainage projects, resolve disputes among landowners, or engage in other activities related to runoff drainage.

Construction of highways may intercept or impact existing natural or manmade runoff drainage ditches, tile, berms, or other structures. If the projects were in existence before 1992, they may be recorded as “vested drainage rights” with the county register

of deeds. If the projects were initiated after 1985, the landowner may have obtained a permit from the county, if the county has a permit system. Not all runoff drainage is recorded or covered by permits. The requirements vary from county to county.

#### 2.8.1.1.1 Runoff Drains Along or Across Highways

SDCL 46A-10A-71 and 46A-11 provide that drains may be laid along, within the limits of, or across any public highway. If a highway is constructed along or across a drain, the board or officers in charge of such highway shall keep the drain free and clear of obstruction.

#### 2.8.1.1.2 Open Ditches

SDCL 46A-10A-72 provides that no open ditch may be constructed within the limits of any public highway unless the topography makes such construction advisable. If construction is advisable, the ditch shall be located at a sufficient distance from the center of the highway to permit construction of a highway of standard width.

#### 2.8.1.1.3 Highway Bridges and Culverts (Construction, Maintenance, Modification)

SDCL 46A-10A-76 provides that the contracts for building public highway bridges and culverts necessary after construction of a drainage project may be let separately after the project is completed. The expense of constructing bridges or culverts initially shall be charged as part of the drainage costs, but thereafter such bridges and culverts shall be maintained as part of the highway. The expense of removing, repairing, enlarging, or replacing existing bridges or culverts across the line of a proposed drainage project shall be borne in equal shares by the drainage project and the county highway fund.

### 2.8.2 **Basic Concepts- Surface Waters**

Where natural watercourses are unquestioned in fact and in permanence and stability, they are to flow naturally. Highways cross channels on bridges or culverts, usually with some constriction of the width of the channel and obstruction by substructure within the channel, both causing backwater upstream and acceleration of flow downstream. The changes in regime must be so small as to be tolerable by adjoining owners, or there may be liability of any injuries or damages suffered.

Surface waters from highways are often discharged into the most convenient watercourse. The right is unquestioned if those waters were naturally tributary to the watercourse and unchallenged if the watercourse has adequate capacity. However, if all or parts of the surface waters have been diverted from another watershed to a small watercourse, any lower owner may complain and arguably recover for ensuing damage.

Projects that may change the stage, level or flow of a water body may require consideration by the DENR under SDCL 46-5-1 and 46-5-1.1 or other statutes and may also involve city or county requirements. Also state dam safety requirements may apply

under ARSD 74:02:08. Landowners may use surface water for the benefit of agriculture, manufacturing, irrigation, etc. The right to use water for such beneficial uses is a “water right.” The legal principles applying to water rights are discussed more fully in a section below.

### **2.8.3 Basic Concepts-Flood Waters**

Historically, flood waters were held to be a “common enemy” whereby all affected landowners, including owners of highways, could act in any reasonable way to protect themselves and their property from the common enemy. They could obstruct flood flows from entering their land, and could divert water onto lands of another without penalty by gravity or pumping, by diverting dikes or ditches, or by any other reasonable means. The “common enemy” doctrine applies only in true flooding emergency situations.

The designer should, however, make provision for overflow in areas where it is foreseeable that it will occur. There is risk of liability if waters are impounded on an upper owner or, worse yet, are diverted into an area where they would not otherwise have gone. Merely to label waters as “flood waters” does not mean that they can be disregarded. Again, if flooding is anticipated and occurs periodically, planners should not assume they can avoid liability for damages or overflows on lands that are not part of the project,

If the highway project involves the construction of levees or redirects the channels of waterways or other similar designs that would change the stage, level or flow of a water body, the DENR authority may come into play under SDCL 45-5-1.1. Flood control permits may be needed from the DENR under SDCL 46-2A-11 and SDCL 46-5-47 and SDCL 46-5-48. Also state dam safety requirements may apply under ARSD 74:02:08. Further flood control projects may involve city or county requirements.

### **2.8.4 Basic Concepts-Ground Water**

Landowners may use groundwater for the benefit of agriculture, manufacturing, irrigation, etc. The right to use water for beneficial uses is a “water right.” The legal principles applying to water rights are discussed more fully in a section below.

Water rights for groundwater may need to be considered during highway construction. For example, an excavation of a deep “cut section” that intercepts or diverts underground water to the detriment of adjacent property owners may be considered an impairment of water rights. There are also cases where highway construction has permitted the introduction of surface contamination into subsurface waters and thus incurred liability for resulting damages.

### 2.8.5 Eminent Domain

Generally, public agencies may acquire the right to discharge highway drainage across adjoining lands through the use of the right of eminent domain. Eminent domain is the power of public agencies to take private property for public use.

South Dakota Codified Law (SDCL) 31-19 and 21-35 grants the South Dakota DOT the right of eminent domain, which allows the taking of property for public purposes. It is important to remember, however, that whenever any property is taken under eminent domain, the private landowner must be compensated for his loss.

County and city governments have the right of eminent domain to construct, operate, repair or maintain any floodway, reservoir spillway, levee or diversion, or other flood control improvements. Similarly, any levee or drainage district, through its Board of Directors, has eminent domain powers if it is declared necessary by the Chief of Engineers, United States Army, for the location, construction, operation or maintenance of any levee, channel rectification, drainage canal, floodway, reservoir, spillway or diversion to be constructed by the United States government.

### 2.8.6 Water Rights

As stated above, the use of surface water and groundwater for beneficial uses is governed by the laws pertaining to water rights. A water right is the right to use the water, not ownership of the water itself. This right of use is a property right, entitled to protection to the same extent as other forms of property and is regarded as real property. After the water has been diverted from a stream or from the ground, and reduced to possession, the water itself becomes the personal property of the riparian owner or the appropriator. According to [South Dakota Codified Law \(SDCL\) 46-1-3](#), all water within the State is the property of the people of the State, but the right to the use of water may be acquired by appropriation as provided by law. The following applies:

1. Riparian Doctrine. Historically, owners of lands contiguous to surface watercourses (“riparian” lands) held the right to use stream water solely by reason of their location next to a stream. This law has changed and landowners generally need to obtain water permits from the DENR for beneficial use of surface water regardless of location. Still, landowners next to streams continue to hold some unique rights based on proximity to water: (a) the right to use water from streams and lakes for stock watering and domestic purposes without any water permit, provided they use less than 18 gpm (b) the right to construct small “dry draw” dams of less than 25 acre-ft for agricultural use without getting a DENR permit (SDCL46-4-1), and (c) the right to use water next to riparian property for recreational purposes and to install docks and other structures in waterways subject to possible GF&P approval. Further, while the state holds title to the beds of most streams and lakes, landowners sometimes hold title depending on the history of the parcel involved. SDCL 5-2-4.

2. Doctrine of Prior Appropriation. The water rights permits for groundwater or surface water are administered by the DENR and are generally based on the prior appropriation doctrine. These permits are based on the law that the “first in time is first in right.” Any water right or permit for a dam on a stream or a dry-draw for domestic or other use is subject to the doctrine of prior appropriation if it is over the sizes listed above.
3. The important concept for designers to remember regarding water rights is that proposed work in the vicinity of a stream (or a groundwater use) should not impair either the quality or quantity of flow of any water rights held by others.

In addition, use of water for highway construction may require a temporary water rights permit from the DENR under SDCL 46-5-40.11 This in addition to any storm water permits or surface water discharge permits required by other DENR rules and statutes.

### **2.8.7 Districts**

The highway design may encroach on flood control, drainage or irrigation districts that have been established under State law. The differences are discussed in the following sections.

#### **2.8.7.1 Flood Control**

South Dakota flood control projects are often constructed by a variety of entities, including watershed districts, cities, a consortium of governmental districts, and other entities.

Flood control projects must obtain flood control permits from the DENR. The requirements for flood control permits are in SDCL 46-2A-11 and SDCL 46-5-48. SDCL 46-5-47 applies to temporary flood control permits (less than one construction season). The DENR permit application records include flood flow analyses and plans that are filed with such applications.

#### **2.8.7.2 Runoff Drainage Districts**

There are many types of runoff drainage projects (generally referred to as “drainage projects”) designed to evacuate or manage runoff. These projects are operated by either government entities or non-government entities. Governmental entities include, for example, drainage basin utility districts that have the authority to “implement water quality standards, or to alleviate conditions in one or more drainage basins that may, because of flooding or other surface drainage, threaten human life, produce severe damage to property, seriously impact the environment, produce serious sociological impact, or cause serious adverse economic impacts in the basin.” SDCL 46A-10B-2. Interstate drainage districts may also have drainage projects. SDCL ch.46A-13. Other entities with authority to drain water are conservation districts (SDCL ch 38-8A, 38-8-50,

38-8-64), water development districts (SDCL 46A-3-7 and SDCL 46A-2-4(5)), water user districts (SDCL 46A-9-2, 46A-9-69 to 46A-9-72); water project districts (SDCL §§ 46A-18-38, 46A-18-64); and watershed districts (SDCL §§ 46A-14-4, 46A-14-44, 46A-14-46, 46A-14-91). In addition to these specified types of districts, entities entitled “drainage districts” also operate and maintain drainage works. They are subject to the limitations and authorities in SDCL 46A-10A-43 and SDCL 46A-10A-98 through 46A-10A-123. Many of the works of such drainage districts were constructed prior to 1930.

The districts are in addition to private landowners or groups of landowners that may also maintain and operate drainage ditches or projects for control or evacuation of runoff.

If a runoff drainage project is affected by a highway project, the entity administering the drainage project should be contacted

### **2.8.7.3 Irrigation**

SDCL 46A-4 implements the state constitution by providing for the creation and operation of irrigation districts. Irrigation districts use “ditches” (canals) to distribute water and to control return flows. Irrigation districts have authority to drain water as well. SDCL 46A-6-5 to SDCL 46A-6-7, inclusive; §§ 46A-7A-156, 46A-7A-157. There are also private irrigation “ditch companies” that use ditches or canals and have operated since before statehood that use open ditches (largely in the Black Hills). If an irrigation facility is affected by a highway project, the irrigation district or ditch company should be contacted. If information on the ditch companies is not readily available, the DENR Water Rights Program may have information on who to contact.

### **2.8.8 Other Environmental Laws**

Only a few of the SDCL 34A provisions that effect the environment are referenced in this section. SDCL 34A-3A provides for the regulation of public drinking water systems. SDCL 34A-2 provides for the protection and control of pollution to the groundwater, which includes groundwater discharge permits, a groundwater quality classification system, groundwater quality standards, underground storage tank and above-ground storage tank regulations, regulation of wastewater treatment facilities, and regulation of on-site disposal of wastewater. SDCL 45-6 provides for the regulation of sand and gravel operations.

## **2.9 LOCAL LAWS AND APPLICATIONS**

### **2.9.1 Local Laws**

Local governments (i.e., cities, counties, improvement districts) have ordinances and codes that require consideration during design. For example, zoning ordinances can have a substantial effect on the design of a highway and future drainage from an area. On occasion, a question may arise as to whether the State must comply with local ordinances. Generally, the State is not legally required to comply with local ordinances except where compliance is required by specific State statute. Quite often, however, the State conforms with local ordinances as a matter of courtesy, especially when it can be done without imposing a burden on the State.

Following is a discussion of the application of some of the principles and concepts of drainage law.

### **2.9.2 Municipal Authority and Liability**

Cities generally have authority to construct drainage projects. SDCL 9-40-1, 9-47-1, 9-48-2. Also 9-36-11 allows cities to construct stream channel improvements. As a general rule, municipalities are under no legal duty to construct drainage improvements unless public improvements necessitate drainage, as in those situations in which street grading and paving or construction accelerate or alter storm runoff.

1. When Cities operate in a “proprietary” capacity (like the sale of sewer and water services), they are more likely to be found responsible for damages than if they are undertaking functions that only governmental entities can perform, like issuing building permits or zoning property.
2. When cities perform governmental functions, they are more likely to be held responsible for negligence in performing ministerial activities (like maintenance, repair, and construction activities) than when they engage in discretionary planning or regulatory functions pertaining to drainage.
3. An “act of God” defense may apply if the damage is caused by extraordinary unforeseeable rains or flooding and not the actions of the city.
4. Courts have found that cities are accountable if they directly cause water to flow or pond on private property when it would not have naturally done so – and such action causes substantial injury on the private land. Each such drainage case depends on the facts at issue, however.
5. Courts have applied drainage law to the damming or rechanneling of water. In other words, they may find a city responsible for such damming or rechanneling if it causes water to overflow its banks and cause damage on private property. Again, a finding of liability would depend on the facts of the case.

6. For specific advice, legal counsel should be consulted.

### **2.9.3 County runoff drainage improvements**

Counties have authority in SDCL Ch. 46A-10A to construct runoff drainage improvements. Under SDCL 46A-10A-11, 12, 66 and 76 counties have authority to charge address fees, collect assessments and otherwise fund runoff drainage improvements constructed by counties or with county approval.

### **2.9.4 Special Issues**

The following provides a brief discussion on special issues related to water flows in South Dakota:

1. Irrigation Ditches. Where an irrigation ditch intersects a drainage basin, the irrigation ditch need not take underground waters diverted by a tile-drain. However, the surface drainage must be accepted if the irrigation ditch is constructed in a way into which surface water would naturally flow.
2. Dams and Detention Facilities. The provisions for the Safety of Dams are contained in [SD Administrative Rule 74:02:08](#). “Dam,” for the purpose of this provision, is an artificial barrier, including appurtenant works, which impounds or diverts water and which is 25 feet or more in height from the natural bed of the stream or watercourse measured at the downstream toe of the barrier or from the lowest elevation of the outside limit of the barrier, if it is not across a stream channel or watercourse, to the maximum water storage elevation or has an impounding capacity at maximum water storage elevation of 50 acre-ft or more. A barrier is not considered a dam for the purpose of this Chapter if the height does not exceed 6 ft regardless of storage capacity or if the storage capacity at maximum water storage elevation does not exceed 15 acre-ft regardless of height.
3. Water Quality. SDSD Ch. 74:52, Surface Water Quality Standards, should be consulted for requirements. As stated above, Surface Water Discharge permits may be required for highway construction.

## **2.10 LEGAL REMEDIES**

### **2.10.1 Common Actions**

The most common legal actions through which a complainant may seek legal recourse include inverse condemnation, injunction, tort claims and legislative claims.

### **2.10.2 Inverse Condemnation**

The doctrine of sovereign immunity provides that the State is sovereign and may be sued only where it has given its consent to be sued. South Dakota allows damage suits to be brought against the State where the property owner has sustained a “taking or damaging” of his property by the State. These are “inverse condemnation” suits.

### **2.10.3 Injunction**

Where a statutory right is violated to the landowner’s material injury, courts ordinarily grant an injunction. The injunction could enjoin SDDOT from taking a certain action or require the abatement of a certain condition that it has created. This does not prevent the recoupment of compensation for damages that have occurred. As a general rule, injunctions may be granted even though the extent of the injury is incapable of being ascertained or of being computed in dollars.

### **2.10.4 Tort Claims**

In the early development of the law, the courts recognized that, whenever possible, compensation should be awarded to those persons harmed by the actions of another. This was the origin of the theory of tort liability. In essence then, a tort, or civil wrong, is the violation of a personal right guaranteed to the individual by law. A person has committed a tort if he has interfered with another person’s safety, liberty, reputation or private property. If the injured party can prove the defendant proximately caused him harm, the court will hold the defendant responsible for the plaintiff’s injury and the defendant will be forced to pay for the damage.

## 2.11 ROLE OF THE DESIGNER

### 2.11.1 Responsibility

The designer has a two-fold responsibility for the legal aspects of highway drainage. First, the designer should know the legal principles involved and apply this knowledge to all designs and, secondly, the designer should work closely with the legal staff of the organization, as necessary, in the preparation and trial of drainage cases. The duties of the designer include direct legal involvement in the following areas:

- conduct investigations, advise and provide expert testimony on the technical aspects of drainage claims involving existing highways; and
- provide drainage design information during right-of-way acquisition to assist appraisers in evaluating damages and provide testimony in subsequent condemnation proceedings, when necessary.

### 2.11.2 Investigating Complaints

It is imperative that drainage complaints be addressed promptly and in an unbiased manner. This means accepting that the flooding is a serious problem for the complainer, and not accepting anyone's preconceived conclusions. All facts must be assembled and analyzed before conclusions can be determined. Also, it is well to list any action by others that could possibly be responsible for the flooding.

When the hydraulic engineer is requested to investigate a complaint, the following guidelines are recommended:

#### *Step 1* Determine Facts about the Complaint

- Show on a map the location of the problem on which the complaint is based.
- Clearly determine the basis for the complaint by obtaining information including what was flooded, complainer's opinion on what caused the flooding, description of the alleged damages, dates, times and durations of flooding.
- Briefly relate the history of any other grievances that were expressed prior to the claim presently being investigated.
- Obtain approximate dates that the damaged property and/or improvements were acquired by those claiming damages.
- Collect facts about the specific flood event(s) involved:

- + Obtain rainfall data including dates, amounts, time periods and locations of gages. Rainfall data are often helpful regardless of the source.
  - + Document observed high-water information at or in the vicinity of the claim. Locate high-water marks on a map and specify datum. Always try to obtain high-water marks both upstream and downstream of the highway and the time the elevations occurred.
  - + Determine the duration of flooding at the site of alleged damage. Determine the direction of flood flow at the damaged site. Describe the condition of the stream before, after and during flood(s). Determine if the growth in the channel was light, medium or heavy and if there were drift jams. Determine if the stream carries much drift in flood stage. Determine if the flow was fast or sluggish and if light, moderate or severe erosion occurred.
  - + Document the flood history at the site. Determine if the highway was overtopped by the flood. If so, determine the depth of overtopping and, if possible, estimate a flow velocity across the highway. Obtain narratives of any eyewitnesses to the flooding. Obtain facts about the flood(s) from sources outside SDDOT (e.g., newspaper accounts, witnesses, measurements by other agencies (e.g., USGS, USACE, NRCS) individuals, maps, Weather Bureau rainfall records).
- State facts about the highway crossing involved.
  - Show a profile of the highway across the stream valley. Give the date of the original highway construction and dates of all subsequent alterations to the highway, and describe what the alterations were. Describe what existed prior to the highway (e.g., county road, city street, abandoned railroad embankment). Also, include a description of the drainage facilities and drainage patterns that were there prior to the highway. Give a description of the existing drainage facilities. Give the original drainage design criteria, or give capacity and frequency of the existing facility based upon current criteria.
  - List possible effects by others.
  - Determine if there are any other stream crossings in the vicinity of the damaged site that could have affected the flooding. Determine if there are any other contributing factors (e.g., pipelines, highways, streets, railroads, dams). Determine if there have been any significant

constructed changes to the stream or watershed that might affect the flooding.

**Step 2** Analyze the Facts

- From the facts, decide what should be done to relieve the problem regardless of who has responsibility for the remedy. Identify others who may possibly provide assistance.

**Step 3** Make Conclusions and Recommendations

- Determine the contributing factors leading to the alleged flood damage.
- Specify feasible remedies. This should be done without any regard for who has responsibility to affect a remedy.

The list under Step 1 “Determine Facts about the Complaint” is not all inclusive, nor is it intended that the entire list will be applied in each case. This outline is given as a guide to the type and scope of information desired from an investigation of a drainage complaint. It is advantageous to have available hydraulic design documentation as outlined in [Chapter 6 “Documentation”](#) of this *Manual*. When SDDOT’s investigation is completed, the hydraulic engineer should again analyze the facts, consider the conclusions and recommendations and prepare a response to the complainer explaining the results of the investigation. Documentation of the facts and findings is important if there is future action.

### **2.11.3** Legal Opinion

Drainage matters range from the simple to the complicated. If the facts are ascertained and a plan developed before initiating a proposed improvement, the likelihood of an injury to a landowner is remote, and SDDOT or a developer should be able to undertake these improvements relatively assured of no legal complications.

If the designer needs a legal opinion on a specific drainage problem or improvement, the request for an opinion should state at a minimum whether:

- The watercourse under study has been viewed.
- There are problems involved, and what causes them (e.g., obstructions, topography, present and future development).
- The proposed improvements will make the situation better.
- The proposal requires that the natural drainage be modified.
- There is potential liability for doing something versus doing nothing.

- Someone will benefit from the proposed improvements.
- In general, what is proposed is “reasonable.”

**2.12 REFERENCES**

1. AASHTO, *Highway Drainage Guidelines*, Chapter 5, “The Legal Aspects of Highway Drainage,” Technical Committee on Hydrology and Hydraulics, 2005.
2. [Federal Emergency Management Agency](#), “National Flood Insurance Program and Related Regulations.”