

**THE USE OF THE TIERED AQUATIC USE (TALU)  
FRAMEWORK TO DESIGNATE BENEFICIAL LIFE USES  
FOR DRAINAGE DITCHES AND ALTERED WATERCOURSES**

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**Minnesota Pollution Control Agency**

## Table of Contents

<b>Executive Summary</b> .....	<b>1</b>
<b>I. Introduction</b> .....	<b>2</b>
A. Document Purpose .....	2
B. Introduction to TALU.....	3
<b>II. Federal and State Water Quality Regulatory Framework</b> .....	<b>4</b>
A. Minnesota Has Independent Legal Authority for State Water Quality Standards and the CWA Requires Their Development .....	4
1. Requirements in Implementing the CWA .....	6
2. The Clean Water Act Authorizes Use of TALU Through its Goal of Protecting the Biological Integrity of Waters .....	7
B. Federal and State Jurisdiction.....	8
1. Federal Jurisdiction Is Limited to “Waters of the United States” .....	8
2. State Jurisdiction.....	12
<b>III. Case Studies</b> .....	<b>15</b>
A. Ohio’s Water Quality Standards Incorporating TALU .....	15
B. Illinois’s Water Quality Standards.....	17
C. Case Study Conclusions.....	17
<b>IV. Perceived Conflict with Drainage Law in Minnesota</b> .....	<b>18</b>
A. History of Minnesota’s Drainage Laws and Governmental Roles.....	18
B. History of WQS Applied to Drainage Systems .....	20
C. Authority to Apply WQS to Drainage Ditches and Altered Watercourses in Minnesota .....	22
<b>V. Minnesota Has Authority to Apply TALU Standards to Drainage Ditches and Altered Watercourses</b> .....	<b>23</b>

## Executive Summary

The proposed adoption of Tiered Aquatic Life Use (TALU) designations to better protect aquatic life in Minnesota lakes and streams raises several questions about legal authority and the application of TALU designations to certain waterbodies such as drainage ditches and altered watercourses. This paper answers the following questions:

- What are TALU standards?
- What federal and state legal authority supports creating TALU standards?
- If adopted in Minnesota, what waterbodies can TALU standards cover?
- How do other states apply TALU?
- How do federal Clean Water Act (CWA) agricultural exemptions interact with state-adopted TALU standards?

The TALU framework establishes water quality standards (WQS) with tiers based on distinctions in aquatic life. TALU standards achieve the CWA goal of protecting the biological integrity of our nation's waters. By delineating tiers based on a waterbody's potential ability to support aquatic life, TALU standards offer a refined and practical approach to achieving water quality goals.

Both the CWA and Minnesota statutes authorize Minnesota to adopt WQS including TALU standards. The Minnesota Pollution Control Agency (MPCA) is responsible for implementing the Clean Water Act goal of protecting the quality of Minnesota's waters, including their chemical, physical, and biological integrity.

Minnesota's WQS apply to all waters within the scope of the Minnesota statutory definition of "waters of the State." Minnesota proposes to apply TALU designations to "waters of the State" to protect Class 2 aquatic life beneficial uses. Other states, such as Ohio, successfully incorporated TALU standards into their water quality standards by also applying TALU to all "waters of the State."

Minnesota's proposed TALU standards would apply to drainage ditches and altered watercourses because they fall within Minnesota's definition of "waters of the State." The CWA exempts some agricultural activities from CWA requirements. However, the CWA does not constrain a state's statutory authority to define "waters of the State" for that state's application of WQS. Minnesota has long applied a broad definition of "waters of the State" and expects those waters, including drainage ditches, to support aquatic life and recreation. The TALU framework will assign more specific aquatic life beneficial uses that best reflect the aquatic life each waterbody is capable of supporting.

## I. Introduction

### A. Document Purpose

Minnesota regularly reviews and revises its water quality standards (WQS) as required by the Clean Water Act (CWA)<sup>1</sup> and federal rules.<sup>2</sup> Minnesota proposes to revise its water quality standards to incorporate tiered aquatic life use (TALU) designations. A TALU framework improves the protection of aquatic life, such as fish and invertebrates (e.g., insects, crayfish, mussels), by grouping rivers and streams into “tiers.” These tiers are based on the types of fish and invertebrates expected in healthy rivers and streams of each tier. The incorporation of TALU tiers into WQS allows for more customized management of streams for the protection of fish and invertebrates.

This paper provides information on the legal authority to incorporate a TALU framework into state WQS, and explores how other states use TALU designations. The paper also discusses how the TALU framework applies to various waterbodies, such as drainage ditches and altered watercourses, and reviews the scope of the CWA as it relates to drainage ditches<sup>3</sup> and altered watercourses.<sup>4</sup> Finally, the paper considers the application of the TALU framework in Minnesota.

While adopting the TALU framework also has technical, cultural, and political implications, this paper does not explore those aspects.

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<sup>1</sup> 33 U.S.C. § 1251 et seq. (2011).

<sup>2</sup> 33 U.S.C. § 1313(c) (2011); 40 C.F.R. § 131.20 (2010).

<sup>3</sup> There are a number of definitions and interpretations of what constitutes a drainage ditch. Except when the term is used in the Minnesota context, this paper uses the term “drainage ditch” to mean any human-made or human-modified watercourse designed and used to move or remove water from one location to another. It includes not only artificially created watercourses but also otherwise natural watercourses that have been artificially manipulated or modified. When discussing Minnesota law, this paper uses terms as they are defined in Minnesota law. Minnesota drainage law defines a ditch as “an open channel to conduct the flow of water.” MINN. STAT. § 103E.005(8) (2014). “Drainage systems” is another term used both in an informal manner and in a legal context. Informally, drainage systems are generally comprised of structures on private property (e.g., swales, underground tile drainage systems) which move water into larger structures (e.g., public drainage ditches), and which ultimately discharge into lakes and streams. Minnesota drainage law supplies a specific legal definition for a drainage system which hinges on the creation of the drainage system by a legally established drainage authority: “‘Drainage system’ means a system of ditch or tile, or both, to drain property, including laterals, improvements, and improvements of outlets, established and constructed by a drainage authority. ‘Drainage system’ includes the improvement of a natural waterway used in the construction of a drainage system and any part of a flood control plan proposed by the United States or its agencies in the drainage system.” MINN. STAT. § 103E.005 (2014).

<sup>4</sup> Minnesota water law provides specific statutory definitions for the terms “altered natural watercourse,” “artificial watercourse,” and “natural watercourse.” Those definitions are: “‘Altered natural watercourse’ means a former natural watercourse that has been affected by artificial changes to straighten, deepen, narrow, or widen the original channel;” “‘Artificial watercourse’ means a watercourse artificially constructed by human beings where a natural watercourse was not previously located;” and “‘Natural watercourse’ means a natural channel that has definable beds and banks capable of conducting confined runoff from adjacent land.” MINN. STAT. § 103G.005 (2014).

## B. Introduction to TALU

The TALU framework is a method of classifying rivers and streams based on the fish and invertebrate assemblages expected to live in healthy rivers and streams.<sup>5</sup> The framework uses a tool authorized in Minnesota law called the index of biological integrity (IBI)<sup>6</sup> to measure the health of fish and invertebrate communities in streams. Biologists collect fish and invertebrates from a stream and count the number of each fish or invertebrate species. These counts are converted into an IBI score, which is then compared to reference IBI scores from streams of the same type with healthy fish and invertebrate assemblages.

A low IBI score indicates a compromised stream where the biological health, or biological integrity, of the stream is low.<sup>7</sup> A high IBI score indicates a healthy stream where the biological integrity of the stream is high.<sup>8</sup> An IBI score below Minnesota's aquatic life use threshold or biological criterion means that a stream is not meeting minimum state water quality standards. All waters of the state – including drainage ditches and altered watercourses – that support or may support fish and other aquatic life are assigned to beneficial use Class 2 unless otherwise designated.<sup>9</sup> Class 2 standards protect water quality to support the aquatic life in the water and for recreation uses.<sup>10</sup>

The aquatic life potential for streams, as expressed in IBI scores, form the basis for tiered Class 2 uses. The proposed TALU framework divides streams into categories, or tiers: Exceptional, General, and Modified uses.<sup>11</sup> Exceptional use streams are high quality waters with fish and invertebrate assemblages at or near undisturbed conditions.<sup>12</sup> General use streams are waters with the ability to support fish and invertebrate assemblages that meet minimum goals.<sup>13</sup> Modified use streams are waters with legally altered habitat that prevents fish and invertebrate assemblages from meeting minimum goals.<sup>14</sup> Each

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<sup>5</sup> See U.S. ENVTL. PROT. AGENCY, CASE STUDIES- SETTING ECOLOGICALLY-BASED WATER QUALITY GOALS OHIO'S TIERED AQUATIC LIFE USE DESIGNATIONS TURN 20 YEARS OLD (2013) [hereinafter EPA CASE STUDIES]; U.S. ENVTL. PROT. AGENCY, FRAMEWORK FOR IMPLEMENTATION OF TIERED AQUATIC LIFE USES IN CONNECTICUT (2007); BOUCHARD JR., R. WILLIAM, ET AL., *A NOVEL APPROACH FOR THE DEVELOPMENT OF TIERED USE BIOLOGICAL CRITERIA FOR RIVERS AND STREAMS IN AN ECOLOGICALLY DIVERSE LANDSCAPE*, 188 ENVIRONMENTAL MONITORING AND ASSESSMENT, 196 (FEB. 27, 2016).

<sup>6</sup> For over a decade, MINN. R. 7050.0150(6) (2013) has authorized the use of IBIs "In evaluating whether the narrative standards in subpart 3, which prohibit serious impairment of the normal fisheries and lower aquatic biota upon which they are dependent and the use thereof, material alteration of the species composition, material degradation of stream beds, and the prevention or hindrance of the propagation and migration of fish and other biota normally present, are being met, the commissioner will consider all readily available and reliable data and information for the following factors of use impairment..." MINN. R. 7050.0150(4)(L) (2013) defines IBI. ("'Index of biological integrity' or 'IBI' means an index developed by measuring attributes of an aquatic community that change in quantifiable and predictable ways in response to hum disturbance, representing the health of that community.")

<sup>7</sup> See EPA CASE STUDIES, *supra* note 5.

<sup>8</sup> *Ibid.*

<sup>9</sup> MINN. R. 7050.0140(3); MINN. R. 7050.0430 (2013).

<sup>10</sup> MINN. R. 7050.0140(3).

<sup>11</sup> MINN. POLLUTION CONTROL AGENCY, TIERED AQUATIC LIFE USE (TALU) FRAMEWORK (2015).

<sup>12</sup> *Ibid.*

<sup>13</sup> *Ibid.*

<sup>14</sup> *Ibid.*

tier has specific expectations and biological criteria for fish and invertebrates.<sup>15</sup> These tiers do not represent a wholesale change, but instead refine the expected uses.

## II. Federal and State Water Quality Regulatory Framework

Federal and state law work hand in hand to protect water quality in a scheme known as “cooperative federalism.” As the opening section of the CWA declares, “[i]t is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources . . . .”<sup>16</sup> The MPCA’s responsibilities under the CWA include setting WQS to meet the CWA goals for each Minnesota waterbody. MPCA works closely with the EPA to ensure that Minnesota complies with the CWA’s provisions to protect and enhance water quality. Furthermore, MPCA is charged with enforcing Minnesota’s state laws and rules that protect water quality, including administering state water quality permits.<sup>17</sup>

This section reviews the scope of both the CWA’s authority directing the restoration and maintenance of the chemical, physical, and biological integrity of waters and Minnesota’s independent legal authority to protect water quality. This section also analyzes the extent of the CWA’s federal coverage under recent court decisions and the EPA final rule on the definition of “waters of the United States.”

### A. Minnesota Has Independent Legal Authority for State Water Quality Standards and the CWA Requires Their Development

Minnesota has both federal and independent state authority to create WQS for its “waters of the State.” Minnesota was at the forefront of water protection in the 20th century, pioneering new policies to advance water quality and inspiring action at the federal level.<sup>18</sup> In 1963, the Minnesota legislature mandated the adoption of water quality standards for all public waters in the state.<sup>19</sup> Because Minnesota has a broadly inclusive definition of public waters, the water quality standards that were adopted affected many of the state’s watercourses.<sup>20</sup> Congress followed Minnesota’s lead two years later, led by Congressman Blatnik of Minnesota’s Eighth Congressional District. Congress amended the Federal Water Pollution Control Act of 1948 to require states to develop ambient WQS through a process closely mirroring the process that Minnesota used in adopting its WQS.<sup>21</sup> In 1967, the Minnesota legislature recognized the need for an agency to administer the growing number of pollution

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<sup>15</sup> *Ibid.*

<sup>16</sup> 33 U.S.C. § 1251(b) (2011).

<sup>17</sup> The Minnesota Supreme Court recognized the state’s power to enforce state discharge permits along with federal NPDES permits in *MPCA v. U.S. Steel Corp.*, noting that the CWA places “primary responsibility” for controlling and preventing water pollution with the states. *Minnesota Pollution Control Agency v. U.S. Steel Corp.*, 307 Minn. 374, 382–83 (Minn. 1976).

<sup>18</sup> See SHERRY A. ENZLER ET AL., *FINDING A PATH TO SUSTAINABLE WATER MANAGEMENT: WHERE WE’VE BEEN, WHERE WE NEED TO GO*, 39 WM. MITCHELL L. REV. 842, 890–92 (2013).

<sup>19</sup> *Id.* at 892.

<sup>20</sup> *Ibid.*

<sup>21</sup> *Id.* at 892–93.

control laws and created the Minnesota Pollution Control Agency (MPCA).<sup>22</sup> This move was particularly forward-thinking because the federal CWA was passed five years later in 1972.<sup>23</sup> Minnesota quickly incorporated the CWA's National Pollutant Discharge Elimination System (NPDES) permitting scheme into state statutes after receiving program authorization, and has done similarly with subsequent CWA amendments.<sup>24</sup>

The CWA applies to waters that fall within the definition of "waters of the United States," over which Congress can exert power as discussed below in part II.B. States can include more waters, but cannot include fewer waters, than the federal scope.<sup>25</sup> The CWA serves as a floor for protection of the nation's waters, but does not preempt states from imposing greater protections on other waterbodies.<sup>26</sup>

Under the CWA, each state is required to adopt WQS applicable to its "waters of the state."<sup>27</sup> The scope of coverage varies from state to state.<sup>28</sup> Minnesota defines its "waters of the state" broadly.<sup>29</sup> Minnesota law charges MPCA with the duty and power to, "establish and alter such reasonable pollution standards for *any waters of the state* in relation to the public use to which they are or may be put as it shall deem necessary . . ." <sup>30</sup>

Minnesota WQS are located in Minnesota Rules ch. 7050, Waters of the State.<sup>31</sup> The purpose of the standards is to "protect and maintain surface waters in a condition which allows for the maintenance of all existing beneficial uses."<sup>32</sup> The standards are exceeded in a particular water body when pollution levels cause the loss of beneficial uses for that water body.<sup>33</sup> The standards in chapter 7050 protect all waters of the State and apply to point and nonpoint sources of pollution and to the physical alteration of wetlands.<sup>34</sup> Rule 7050.0140 divides waters of the State into seven classifications based on the suitability of that water for specific beneficial uses.<sup>35</sup> Minn. Rules 7050.0221-7050.0227 contain narrative and numeric standards for each class and subclass of water body.<sup>36</sup> For the purposes

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<sup>22</sup> *Id.* at 893.

<sup>23</sup> *Id.* at 893–94.

<sup>24</sup> *Id.* at 894–95.

<sup>25</sup> *Ibid.*

<sup>26</sup> 33 U.S.C. § 1370.

<sup>27</sup> 40 C.F.R. § 131.10.

<sup>28</sup> See R. Steven Brown & Christopher Woodhouse, *The States' Definitions of "Waters of the State,"* ENVTL. COUNCIL OF THE STATES (2009).

<sup>29</sup> MINN. STAT. § 115.01(22) (2014) ("'Waters of the state' means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof.")

<sup>30</sup> MINN. STAT. § 115.03(c) (2014) (emphasis added).

<sup>31</sup> Additional standards that apply to the Lake Superior Basin only are in MINN. R. 7052 (2013).

<sup>32</sup> MINN. R. 7050.0150(1) (2013).

<sup>33</sup> *Ibid.*

<sup>34</sup> MINN. R. 7050.0110 (2013).

<sup>35</sup> MINN. R. 7050.0140 (2013) (noting that beneficial use classifications are: Class 1- domestic consumption; Class 2 - aquatic life and recreation; Class 3 - industrial consumption; Class 4 - agriculture and wildlife; Class 5 - aesthetic enjoyment and navigation; Class 6 - other uses and protection of border waters; Class 7- limited resource values waters).

<sup>36</sup> *E.g.*, MINN. R. 7050.0222(2) (2013) (explaining that Class 2A waters, protected for aquatic life and recreation, must meet both narrative and numeric standards). The narrative standard states "the quality of Class 2A surface

of TALU, the most important beneficial use classification is the Class 2 use protections for aquatic life and recreation.<sup>37</sup>

### 1. Requirements in Implementing the CWA

Under EPA regulations, WQS are a required part of state implementation of the CWA.<sup>38</sup> State WQS describe the goals and acceptable conditions for a state's water resources. The WQS adopted by states must include three elements:

1. **Designated beneficial uses that establish water quality goals.**<sup>39</sup> Each state program divides the waters of its state into classes. Each class is defined by designated beneficial uses, such as the protection of aquatic life and recreation. The designated beneficial uses must be protected and restored under a state program. Most surface waters in Minnesota are protected for aquatic life and recreation uses as part of a Class 2 beneficial use classification.<sup>40</sup>
2. **Chemical, physical, and biological water quality criteria that define the minimum conditions necessary to protect the designated beneficial uses.**<sup>41</sup> Water quality criteria identify the conditions needed to support the designated beneficial use, and are either narrative descriptions or numeric limits for specific pollutants or properties (e.g., benzene or pH).<sup>42</sup>
3. **Antidegradation requirements that protect high water quality.**<sup>43</sup> Antidegradation requirements ensure that existing uses are maintained and that high quality waters and waters of outstanding resource value are protected from degradation.

Together these three elements form the core of state WQS.

Though the EPA is responsible for implementing the CWA, the CWA requires states to develop and administer WQS.<sup>44</sup> Oversight of state programs and approval of state water quality standards resides with the EPA.<sup>45</sup>

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waters shall be such as to permit the propagation and maintenance of a healthy community of cold water sport or commercial fish and associated aquatic life, and their habitats. These waters shall be suitable for aquatic recreation of all kinds, including bathing, for which the waters may be usable. This class of surface waters is also protected as a source of drinking water." *Id.* This narrative is followed by a long list of numeric standards for a wide range of pollutants, including aluminum, chloride, cyanide, DDT, and mercury. *Id.*

<sup>37</sup> *Id.*

<sup>38</sup> 40 C.F.R. § 131.1 (2011).

<sup>39</sup> 40 C.F.R. § 131.10 (2011).

<sup>40</sup> MINN. R. 7050.0140(3) (2013) (establishing Class 2 waters); MINN. R. 7050.0430 (classifying waters as Class 2B unless otherwise listed); 7050.0470 (2013) (listing surface waters with other classifications).

<sup>41</sup> 40 C.F.R. § 131.11 (2011).

<sup>42</sup> The minimum conditions necessary to protect designated beneficial uses are referred to in federal law as "water quality criteria" and referred to in Minnesota law as "standards."

<sup>43</sup> 40 C.F.R. § 131.12 (2011).

<sup>44</sup> 40 C.F.R. § 131.4 (2011).

<sup>45</sup> 40 C.F.R. § 131.5 (2011).



## 2. The Clean Water Act Authorizes Use of TALU Through its Goal of Protecting the Biological Integrity of Waters

The CWA's objective is to "restore and maintain the chemical, physical, and *biological integrity* of the Nation's waters."<sup>46</sup> The CWA further provides that the goal of the act is developing water quality standards that provide protection for fish, shellfish, and wildlife, and that those standards are achieved wherever attainable.<sup>47</sup> The CWA goals and policies direct the restoration and maintenance of not only water chemistry but also the physical and biological integrity of our waters. The TALU framework helps to accomplish these goals and policies.

The EPA, as the CWA implementing agency, interprets the CWA objective to mean that WQS must be protective and restorative of the full spectrum of aquatic life that can be supported in a particular waterbody.<sup>48</sup> Aquatic life broadly includes algae, macro-invertebrates, and shellfish, as well as fish species.<sup>49</sup> EPA expressly authorizes creation of sub-categories of uses, including differentiating between aquatic life that a waterbody can support.<sup>50</sup> At least three states have formally adopted the TALU framework in developing aspects of their WQS.<sup>51</sup> States that adopt WQS using the TALU framework must submit the WQS to EPA for approval.<sup>52</sup>

Through its protection of biological integrity, the CWA authorizes states to use biological assessment for all three elements of WQS: designating aquatic life uses; establishing criteria to protect the designated uses; and protecting high water quality through antidegradation requirements. A TALU framework creates a structure of designated aquatic life uses, then defines classes and subclasses of water bodies in accordance with their ecological attributes.<sup>53</sup> TALU-based biological criteria, or "biocriteria," are numeric values or narrative descriptions established to protect aquatic life in waterbodies that are classified based on attainable biological condition.<sup>54</sup> Through these tools, the TALU framework ensures that states protect the biological integrity of waters and ensures that each stream has standards appropriate to its potential to support aquatic life.

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<sup>46</sup> 33 U.S.C. § 1251(a) (2011) (emphasis added).

<sup>47</sup> *Ibid.*

<sup>48</sup> 40 C.F.R. § 131.10(a); BIOLOGICAL CRITERIA: NATIONAL PROGRAM GUIDANCE FOR SURFACE WATERS, U.S. ENVTL. PROT. AGENCY (1990) at vii, 3; see U.S. ENVTL. PROT. AGENCY, NATIONAL RECOMMENDED WATER QUALITY CRITERIA (2014) ("Because 304(a) aquatic life criteria are national guidance, they are intended to be protective of the vast majority of the aquatic communities in the United States."); U.S. ENVTL. PROT. AGENCY, WATER QUALITY CRITERIA (2014), available at <http://water.epa.gov/scitech/swguidance/standards/criteria> ("Criteria are developed for the protection of *aquatic life* as well as for *human health*.").

<sup>49</sup> See U.S. ENVTL. PROT. AGENCY, WATER QUALITY STANDARDS HANDBOOK, Table 2-1 (2014).

<sup>50</sup> 40 C.F.R. § 131.10(c).

<sup>51</sup> FRAMEWORK AND IMPLEMENTATION RECOMMENDATIONS FOR TIERED AQUATIC LIFE USES: MINNESOTA RIVERS AND STREAMS, Midwest Biodiversity Institute (2011) at 13; U.S. ENVTL. PROT. AGENCY, DRAFT USE OF BIOLOGICAL INFORMATION TO BETTER DEFINE DESIGNATED AQUATIC LIFE USES IN STATE AND TRIBAL WATER QUALITY STANDARDS: TIERED AQUATIC LIFE USES, 15 (2005).

<sup>52</sup> 33 U.S.C. § 1313 (2011); 40 C.F.R. § 131 (2011).

<sup>53</sup> FRAMEWORK AND IMPLEMENTATION RECOMMENDATIONS FOR TIERED AQUATIC LIFE USES: MINNESOTA RIVERS AND STREAMS, Midwest Biodiversity Institute (2011) at xix.

<sup>54</sup> *Id.* at 1.

## B. Federal and State Jurisdiction

This section examines the differences in the authority between federal and state regulatory authority. While the Clean Water Act is limited to waters over which Congress has authority and legislation, states received power at their creation over all the waters within their jurisdiction. As shown below, this divergence is significant for the applicability of water quality standards.

### 1. Federal Jurisdiction Is Limited to “Waters of the United States”

Federal jurisdiction over waters is limited by the Commerce Clause of the U.S. Constitution, which provides that Congress shall have the power to regulate commerce among states.<sup>55</sup> The clause provides federal jurisdiction for waters that may affect interstate commerce, including navigation. Navigable waters, in turn, are defined in the CWA as “waters of the United States, including the territorial seas.”<sup>56</sup> The phrase “waters of the United States” is not further defined by law, leaving the term open to interpretation. Federal courts and EPA have both attempted to define the term.

#### a. Tests for Determining Whether a Waterbody Is Covered as a “Water of the United States”

On its face, the word “navigable” could be read to have its plain meaning—those waters that are navigable-in-fact, commonly called “traditional” navigable waters. The CWA gave “navigable” a different definition when it defined “navigable waters” as “waters of the United States.” The U.S. Supreme Court examined this in 1985, when it commented that by adopting this definition, the term “navigable” in the Act has only “limited import.”<sup>57</sup> The court found the term “waters of the United States” must include more than just waters that are navigable-in-fact. In 2006, the U.S. Supreme Court examined the issue again in *Rapanos*.<sup>58</sup> The *Rapanos* decision was a plurality decision, in which there is no majority opinion. Two tests for CWA jurisdiction resulted: Justice Kennedy’s “significant nexus” test and Justice Scalia’s plurality test.

Justice Kennedy’s significant nexus test states that a waterbody is covered under the CWA when it, “either alone or in combination with similarly situated lands in the region, significantly affect[s] the chemical, physical, and biological integrity of other covered waters more readily understood as ‘navigable.’”<sup>59</sup> In other words, the water must have a “significant nexus” with waters that are navigable-in-fact. Justice Scalia’s plurality test states a water<sup>60</sup> must be adjacent to a channel of a water of the United States and there must be a *continuous surface connection* to the adjacent water.<sup>61</sup> The dissent in *Rapanos* took the view that CWA jurisdiction should be found when a water feature meets *either* the significant nexus test or the plurality test. While the *Rapanos* case was a wetlands case, its applicability

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<sup>55</sup> U.S. CONST. Art. 1, § 8, cl. 3.

<sup>56</sup> 33 U.S.C. § 1362 (2011).

<sup>57</sup> *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 133 (1985).

<sup>58</sup> *Rapanos v. United States*, 547 U.S. 715 (2006).

<sup>59</sup> *Id.* at 755, 780 (Kennedy, J., concurring).

<sup>60</sup> The decision’s plurality clarified that the term “waters of the United States” includes, “only those relatively permanent, standing or continuously flowing bodies of water ‘forming geographic features’ that are described in ordinary parlance as ‘streams[,] . . . oceans, rivers, [and] lakes.’” *Id.* at 739 (plurality opinion).

<sup>61</sup> *Id.* at 742 (“[O]nly those wetlands with a continuous surface connection to bodies that are ‘waters of the United States’ in their own right, so that there is no clear demarcation between the two, are ‘adjacent’ to such waters and covered by the Act.”).

is not limited to just wetlands. The *Rapanos* tests can be applied to make determinations about CWA jurisdiction over virtually any type of water feature.<sup>62</sup>

The significant nexus test appears more inclusive, but each test includes at least one type of water or discharge the others do not. For example, the significant nexus test supported CWA jurisdiction over waterbodies without a continuous surface connection to “waters of the United States,” which the plurality test does not.<sup>63</sup> The plurality test covers small, continuous discharges into “waters of the United States,” even if they did not significantly impact the “waters of the United States.” The significant nexus test might not cover those discharges.<sup>64</sup>

Lower courts remain split on which test is the controlling test for finding jurisdiction. Some of the federal circuit courts have adopted the view that the significant nexus test is the only proper test, some have decided there is jurisdiction under either test, and some have remained silent.<sup>65</sup> No federal circuit court has used the plurality test without also allowing use of the significant nexus test, so the significant nexus test has become the most widely used part of the decision; at the same time, the plurality test is still relied upon in some areas and circumstances.<sup>66</sup> The Eighth Circuit, which includes Minnesota, decided that CWA jurisdiction exists if a water feature can meet either the significant nexus test or the plurality test.<sup>67</sup>

#### b. EPA’s “Waters of the United States” Rule

Because of uncertainty over the scope of “waters of the United States,”<sup>68</sup> the EPA attempted to clarify the definition in 2002. That definition change was found invalid and the definition reverted back to a 1973 rule.<sup>69</sup>

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<sup>62</sup> See, e.g., *Env’tl. Prot. Info. Ctr. v. Pac. Lumber Co.*, 469 F. Supp. 2d 803, 823 (N.D. Cal. 2007) (using the significant nexus test to analyze the jurisdictionality of a tributary of a navigable water).

<sup>63</sup> See, e.g., *N. California River Watch v. City of Healdsburg*, 496 F.3d 993, 1000 (9th Cir. 2007) (“There is accordingly a substantial nexus between the Basalt Pond and covered waters sufficient to confer jurisdiction under the Act pursuant to Justice Kennedy’s substantial nexus test. With respect to the physical effect on the River, there is an actual surface connection between Basalt Pond and the Russian River *when the River overflows the levee and the two bodies of water commingle*. There is also an underground hydraulic connection between the two bodies, so a change in the water level in one immediately affects the water level in the other.” (emphasis added) (citations omitted)); see also *Rapanos v. United States*, 547 U.S. 715, 782 (2006) (Kennedy, J., concurring) (explaining that when the government seeks to regulate wetlands adjacent to navigable-in-fact waters, it may rely on adjacency to establish jurisdiction, but when the government seeks to regulate waterbodies adjacent to nonnavigable tributaries, it must establish a significant nexus on a case-by-case basis).

<sup>64</sup> *United States v. Johnson*, 467 F.3d 56, 64 (1st Cir. 2006) (“[I]n cases where there is a small surface water connection to a stream or brook, the plurality’s jurisdictional test would be satisfied, but Justice Kennedy’s balancing of interests might militate against finding a significant nexus.”).

<sup>65</sup> See *United States v. Donovan*, 661 F.3d 174 (3d Cir. 2011); *Precon Dev. Corp. v. U.S. Army Corps of Engineers*, 633 F.3d 278 (4th Cir. 2011); *United States v. Cundiff*, 555 F.3d 200 (6th Cir. 2009); *United States v. Bailey*, 571 F.3d 791 (8th Cir. 2009); *United States v. Lucas*, 516 F.3d 316 (5th Cir. 2008); *United States v. Robinson*, 521 F.3d 1319 (11th Cir. 2008); *Northern California River Watch v. City of Healdsburg*, 496 F.3d 993 (9th Cir. 2007); *United States v. Johnson*, 467 F.3d 56 (1st Cir. 2006); *United States v. Gerke*, 464 F.3d 723 (7th Cir. 2006).

<sup>66</sup> *Id.*

<sup>67</sup> *United States v. Bailey*, 571 F.3d 791 (8th Cir. 2009).

<sup>68</sup> See generally *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 133 (1985) (“In adopting this definition of ‘navigable waters,’ Congress evidently intended to repudiate limits that had been placed on federal regulation by earlier water pollution control statutes and to exercise its powers under the Commerce Clause to

After the decision in *Rapanos*, uncertainty remained over what could be considered a “water of the United States” and thus regulated under the CWA.<sup>70</sup> In response to the confusion, on April 21, 2014, the EPA proposed a rule to clarify the definition.<sup>71</sup> EPA announced on May 27, 2015, that it would adopt a final rule.<sup>72</sup> The rule defines with more specificity which waterbodies are covered under the definition and which are not. It incorporates Justice Kennedy’s significant nexus test for determining the jurisdictional status of certain types of waters that require a case-by-case assessment of jurisdiction.<sup>73</sup> It also sets out a comprehensive list of definitions to clarify which waters can be considered “waters of the United States” without going through a case-by-case jurisdictional analysis.<sup>74</sup> The rule defines in regulation the terms “adjacent,” “neighboring,” “tributary,” and “significant nexus.”<sup>75</sup> A list of waters excluded from the definition of “waters of the United States,” over which the agencies have generally not asserted CWA jurisdiction, is also expressed in the rule.<sup>76</sup>

EPA makes clear in the preamble to the rule and supporting documentation that ditches meeting the definition of “tributary” are considered waters of the United States.<sup>77</sup> The rule’s technical support document notes that numerous courts of appeals have held ditches to be “tributaries,” even if they are human-made structures.<sup>78</sup> EPA relies on a peer-reviewed scientific report that describes the significance of smaller waterbodies, including ditches, on the chemical, physical, and biological integrity of waters that are navigable-in-fact.<sup>79</sup>

In combination with the list of excluded waters, the EPA definitions clarify how close physically or how closely hydrologically connected to traditional “navigable waters” a waterbody must be to receive coverage under the CWA. The rule defines “waters of the United States”<sup>80</sup> and explains that a significant nexus exists if a water, “either alone or in combination with other similarly situated waters in the region significantly affect[] the chemical, physical, or biological integrity of” a navigable, interstate, or territorial water.<sup>81</sup> In an effort to reduce administrative burdens, the rule also includes both

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regulate at least some waters that would not be deemed ‘navigable’ under the classical understanding of that term.” (citations omitted)).

<sup>69</sup> *Am. Petroleum Inst. v. Johnson*, 541 F. Supp. 2d 165 (D.D.C. 2008) (“EPA failed to offer a rational explanation for its new definition of “navigable waters,” rendering it arbitrary and capricious under the APA . . . Court concludes that EPA’s promulgation of the new definition of “navigable waters” violated the APA.”); 73 Fed. Reg. 71941-01.

<sup>70</sup> *E.g.*, Adrienne Froelich Sponberg, *US Struggles to Clear Up Confusion Left in the Wake of Rapanos*, AM. INST. BIOLOGICAL SCIENCES (2009).

<sup>71</sup> Definition of “Waters of the United States” Under the Clean Water Act, 79 Fed. Reg. 22,187 (proposed Apr. 21, 2014) (to be codified at 33 C.F.R. pt. 328).

<sup>72</sup> “Clean Water Rule Protects Streams and Wetlands Critical to Public Health, Communities, and Economy,” U.S. EPA, May 27, 2015, available at <http://yosemite.epa.gov/opa/admpress.nsf/0/62295CDDD6C6B45685257E52004FAC97>.

<sup>73</sup> 80 Fed. Reg. 37,058 (June 29, 2015).

<sup>74</sup> *Id.* at 37,104.

<sup>75</sup> *Id.* at 37,104-37,105.

<sup>76</sup> *Id.* at 37,105.

<sup>77</sup> *Id.* at 37,069; TECHNICAL SUPPORT DOCUMENT FOR THE CLEAN WATER RULE, U.S. EPA (May 27, 2015) at 257.

<sup>78</sup> TECHNICAL SUPPORT DOCUMENT FOR THE CLEAN WATER RULE, U.S. EPA (May 27, 2015) at 73.

<sup>79</sup> 80 Fed. Reg. 37,062.

<sup>80</sup> *See Id.* at 37,105 (defining neighboring based on distances from waters determined to be waters of the United States).

<sup>81</sup> 80 Fed. Reg. 37,106.

tributaries and adjacent waters in its definition of “waters of the United States.”<sup>82</sup> Together, adjacent waters and tributaries include waters located within the floodplain of a “water of the United States.” Certain waters are excluded, including ditches that were not originally tributaries and that have ephemeral or intermittent flow.<sup>83</sup> Also excluded are gullies, rills, and ephemeral features that are not within the definition of tributary.<sup>84</sup>

The “waters of the United States” rule authorizes federal CWA authority over traditional navigable waters, their tributaries, and their adjacent waters, even if they are human-made or altered. It adopts Justice Kennedy’s significant nexus test for finding jurisdiction over waters that may significantly affect those traditional navigable waters.<sup>85</sup> Waters not clearly within those categories or excluded require a case-by-case analysis to determine whether the relationship is significant.<sup>86</sup> In other words, a waterbody may fall within CWA federal jurisdiction if it has a close enough relationship with a “water of the United States” to justify a federal interest.

(Note: As of the date of this document, the “waters of the United States” rule is the subject of multiple legal challenges. Because of pending litigation, the Sixth Circuit Court of Appeals issued a nationwide stay on implementation.<sup>87</sup> In response to this stay, EPA and the U.S. Army Corp of Engineers are implementing the definitions as they were prior to August 27, 2015.<sup>88</sup>)

### c. Clean Water Act Exemptions

Section 404(f) of the CWA provides exemptions from permitting requirements in certain circumstances.<sup>89</sup> Permitting exemptions provided by Section 404(f) are narrow and limited in scope to: “normal” farming and agricultural practices that include minor drainage;<sup>90</sup> and the construction or maintenance of farm irrigation ditches or drainage ditches.<sup>91</sup> Under these exemptions, farmers can maintain existing drainage ditches, but they cannot construct new ditches or “improve” existing ditches without a permit.<sup>92</sup> To qualify as exempt from permitting requirements, the activities must be “part of an established, ongoing operation” and avoid conversion of wetlands to dry land.<sup>93</sup>

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<sup>82</sup> *Id.* at 37,080.

<sup>83</sup> *Id.* at 37,097.

<sup>84</sup> *Id.* at 37,098.

<sup>85</sup> *Id.* at 37,060.

<sup>86</sup> *Id.* at 37,086.

<sup>87</sup> *State of Ohio, et al. v. U.S. Army Corps of Eng’rs, et al.*, ORDER OF STAY (6th Cir. Oct. 9, 2015)

<sup>88</sup> MEMORANDUM REGARDING ADMINISTRATION OF CLEAN WATER PROGRAMS IN LIGHT OF THE STAY OF THE CLEAN WATER RULE; IMPROVING TRANSPARENCY AND STRENGTHENING COORDINATION, U.S.EPA, U.S.ACE, (Nov. 16, 2015).

<sup>89</sup> 33 U.S.C. § 1344(f) (2011).

<sup>90</sup> 33 U.S.C. § 1344(f)(1)(A) (2011).

<sup>91</sup> 33 U.S.C. § 1344(f)(1)(C) (2011).

<sup>92</sup> *Id.*; Benjamin H. Grumbles, *Section 404(f) of the Clean Water Act: Trench Warfare over Maintenance of Agricultural Drainage Ditches*, 17 WM. MITCHELL L. REV. 1021, 1025 (1991).

<sup>93</sup> Section 404(f) provides:

Non-prohibited discharge of dredged or fill material.

(1) Except as provided in paragraph (2) of this subsection, the discharge of dredged or fill material—

(A) *from normal farming, silviculture, and ranching activities such as plowing, seeding, cultivating, minor drainage*, harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices;

Beyond the permitted discharge of dredge and fill material under section 404, the CWA does not authorize any other contaminant to enter a water of the United States (including drainage ditches that meet the newly-revised definition). In addition, the CWA does not exempt a drainage ditch from meeting or achieving applicable water quality standards. Thus, whether the water is in a constructed drainage ditch or a natural watercourse, the quality of the water is within the jurisdiction of the CWA. Importantly, section 404 of the CWA, with the exception of the dredge or fill material specified, does not exempt the water being transported in a drainage ditch from any other water quality requirements of the Act.

Permits are not required for agricultural stormwater or irrigation return flow, as these are excluded from the definition of point sources that triggers the permit requirement.<sup>94</sup>

Even considering its exclusions and exemptions, the federal definition of “waters of the United States” includes certain drainage ditches and altered watercourses that have a significant nexus to traditional navigable waters. The requirement to demonstrate a nexus to interstate commerce ultimately limits federal coverage over some smaller tributaries. This requirement distinguishes federal jurisdiction from that of the states.

## 2. State Jurisdiction

Where federal law is restricted to waters with a nexus to interstate activity, state interests have no such restriction. States, including Minnesota, have sought to protect public health, recreation, and aquatic life by exercising control over a broader scope of waters.

### a. Minnesota’s Waters of the State

When Minnesota was granted statehood in 1858, it obtained title to all waters and beds underlying those waters that were commercially navigable at the time of Minnesota’s entry to the Union.<sup>95</sup> In 1897, Minnesota adopted its state definition of “waters of the State” for purposes of state

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- (B) *for the purpose of maintenance, including emergency reconstruction* of recently damaged parts, of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, and bridge abutments or approaches, and transportation structures;
  - (C) *for the purpose of construction or maintenance of farm or stock ponds or irrigation ditches, or the maintenance of drainage ditches;*
  - (D) for the purpose of construction of temporary sedimentation basins on a construction site which does not include placement of fill material into the navigable waters;
  - (E) for the purpose of construction or maintenance of farm roads or forest roads, or temporary roads for moving mining equipment, where such roads are constructed and maintained, in accordance with best management practices, to assure that flow and circulation patterns and chemical and biological characteristics of the navigable waters are not impaired, that the reach of the navigable waters is not reduced, and that any adverse effect on the aquatic environment will be otherwise minimized;
  - (F) resulting from any activity with respect to which a State has an approved program under section 1288(b)(4) of this title which meets the requirements of subparagraphs (B) and (C) of such section, *is not prohibited by or otherwise subject to regulation under this section or section 1311(a) or 1342* of this title (except for effluent standards or prohibitions under section 1317 of this title).

33 U.S.C. § 1344(f) (2011) (emphasis added); see also Larry R. Bianucci & Rew R. Goodenow, *The Impact of Section 404 of the Clean Water Act on Agricultural Land Use*, 10 UCLA J. ENVTL. L. & POL’Y 41, 52–54 (1991).

<sup>94</sup> 33 U.S.C. § 1362 (2011).

<sup>95</sup> Daniel Ball, 77 U.S. 557 (1870). *E.g.*, *Martin v. Waddell*, 41 U.S. 367, 410 (1842).

regulatory authority and public use.<sup>96</sup> The current statutory definition of “waters of the State” determines whether a water body is subject to pollution control and other forms of regulation, and it encompasses nearly every waterbody type in the state:

*‘Waters of the state’ means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof.*<sup>97</sup>

Since the early days of statehood, Minnesota has considered a waterbody regulated if it is used “for the ordinary purposes of life,” including recreation, domestic, and agricultural use.<sup>98</sup> Minnesota’s definition of “waters of the State” represents a much broader scope of regulation than the federal test’s focus on commercial navigation,<sup>99</sup> demonstrating how Minnesota views its abundant water bodies as a fundamental public good.<sup>100</sup>

#### **b. Minnesota Authority to Adopt WQS for Waters of the State**

Minnesota has the authority, independent from federal law, to regulate any body of water included in its definition of “waters of the State.”<sup>101</sup> In assigning powers and duties to MPCA, the legislature authorized MPCA to protect “any of the waters of the state.”<sup>102</sup> State law does not have the exemptions for upland ditches contained in the EPA’s rule, and instead expressly includes drainage systems as a water of the state.<sup>103</sup> It follows that Minnesota has authority to regulate drainage ditches,<sup>104</sup> even if they may be exempt under federal law.<sup>105</sup> The Clean Water Act does not limit state

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<sup>96</sup> MINN. DEPT. NAT. RES., HISTORY OF WATER PROTECTION (2015).

<sup>97</sup> 1963 MINN. LAWS ch. 874, sec. 2 (codified at MINN. STAT. § 115.01(22) (2014)).

<sup>98</sup> Nelson v. De Long, 213 Minn. 425, 431, 7 N.W. 2d 342, 346 (Minn. 1942).

<sup>99</sup> PPL Montana, LLC v. Montana, 132 S. Ct. 1215, 1233 (2012) (“Navigability must be assessed as of the time of statehood, and it concerns the river’s usefulness for “trade and travel”) (internal citation omitted).

<sup>100</sup> Lamprey v. Metcalf, 53 N.W. 1139, 1143 (Minn. 1893) (noting that many of the state’s lakes cannot or will not be used for commercial navigation, but are used by the public for many purposes, including recreation, domestic, and agricultural, and that handing over all these lakes to private ownership, “under any old or narrow test of navigability, would be a great wrong upon the public for all time, the extent of which cannot, perhaps, be now even anticipated”).

<sup>101</sup> MINN. STAT. §§ 115.03, 115.01(22) (2014).

<sup>102</sup> MINN. STAT. § 115.03(a) (2014).

<sup>103</sup> See MINN. STAT. § 115.01(22) (2014).

<sup>104</sup> *Id.* For examples of other cases that apply state water quality standards to drainage ditches, see Matter of McGowan, 533 So.2d 999, 1003 (La. Ct. App. 1988) (“Unless specifically excepted by permit, the Louisiana Water Quality Standards apply to intermittent streams which may be dry during dry weather conditions, and to man-made water courses such as ditches or canals created specifically for drainage or water conveyance. Louisiana Water Quality Standards §§ V and VIII.”); State v. Jones, 101 So.3d 1083, 1104 (La. App. 3 Cir. Nov. 7, 2012) (“Based on the fact that PDC initially obtained permits, an indication that the discharge was into the waters of the State, and the finding in McGowan that drainage ditches are waters of the State, the State proved beyond a reasonable doubt that PDC discharged into the waters of the State from the North Mamou and East Side Subdivisions without a valid permit.”); Morgan v. Natural Res. & Env’tl. Prot. Cabinet, 6 S.W.3d 833, 839–42 (Ky. Ct. App. 1999) (“The drainage ditch does carry water during periods of rainfall and thereafter and intermittently constitutes a body of water with defined channels which . . . makes the discharge into this

authority to enforce standards more broadly: it specifically allows states to “adopt or enforce (A) *any standard or limitation* respecting discharges of pollutants, or (B) *any requirement* respecting control or abatement of pollution.”<sup>106</sup> Therefore, even if certain drainage ditches are exempt from regulation under federal standards, Minnesota can assign WQS.

Minnesota drainage law, codified in chapter 103G, defines a subset of public waters relevant for drainage work. The chapter differentiates between “waters of the state” and “public waters,” which require additional analysis to identify.<sup>107</sup> Categorization as a public water can trigger additional restrictions on drainage, use, and modification.<sup>108</sup> Thus, despite apparent similarity in terms, “public waters” and “waters of the state” address different categories of waterbodies. None of MPCA’s duties or regulations for water quality standards are limited to the subset making up “public waters.”

The only restriction on adoption of WQS is a federal prohibition against removing existing uses.<sup>109</sup> Any use that existed on or after November 28, 1975, cannot be removed under the Clean Water Act.<sup>110</sup> EPA regulations require existing uses to be maintained even if they are not included in WQS.<sup>111</sup>

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drainage ditch a discharge into ‘waters of the Commonwealth’ for purposes of the water quality program. . . . We believe this issue was thoroughly analyzed by both the hearing officer and the trial court. Further, the case law analyzed by the court was pertinent to the issue, and thoughtfully reviewed. We find no error in the trial court’s resolution of the matter. We are mindful of KRS Chapter 224’s broad prohibition against water pollution, or the threat thereof, and believe the interpretation of both the statute and the regulations in this case serves the purpose of the water quality standards set out in KRS Chapter 224: ‘to safeguard from pollution the uncontaminated waters of the Commonwealth; to prevent the creation of any new pollution of the waters of the Commonwealth; and to abate any existing pollution.’”).

<sup>105</sup> See Spannaus v. Hoffman, 543 F.2d 1198, 1208 (Ct. App. Minn. 1976) (“[This language] prevents the Amendments from pre-empting the states from adopting higher pollution control standards than those established under the Amendments.”); In re Cities of Annandale, 731 N.W. 2d 502, 510 (Minn. 2007) (“Water quality standards, which are promulgated by the states, generally establish the desired condition of a body of water. The CWA requires states to establish water quality standards sufficient to ‘protect the public health or welfare, enhance the quality of water and serve the purposes of this chapter.’ A state’s water quality standards must be established ‘taking into consideration [each body of water’s] use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also taking into consideration their use and value for navigation.’ Water quality standards are ‘aimed at translating the broad goals of the CWA into waterbody-specific objectives.’” (internal citations omitted)).

<sup>106</sup> 33 U.S.C. § 1370 (2012); See *supra* Part II.A.

<sup>107</sup> MINN. STAT. § 103G.005 subd. 15.

<sup>108</sup> MINN. STAT. §§ 103G.205, 103G.211, 103G.215.

<sup>109</sup> 40 C.F.R. § 131.10(g).

<sup>110</sup> *Ibid.*; 40 C.F.R. § 131.3(e).

<sup>111</sup> 40 C.F.R. § 131.3(e). Where higher uses are being attained than current designations require, those uses must be incorporated into the designation. 40 C.F.R. § 131.10(i).



### III. Case Studies

Minnesota is not the first state to propose adding the TALU framework to its WQS. Three states have already transitioned from a single aquatic life use system to a tiered aquatic life use system in their WQS. Ohio's TALU approach is most similar to the approach Minnesota is proposing to adopt. Ohio adopted its TALU framework in 1978 and revised its approach in 1990.<sup>112</sup> While Illinois does not have a TALU framework in its WQS,<sup>113</sup> like Minnesota, Illinois defines waters of the state broadly to include drainage ditches.

#### A. Ohio's Water Quality Standards Incorporating TALU

Over the past three decades, Ohio has become a leading state in implementing TALU in its water quality standards. Ohio has incorporated the TALU framework into all of its WQS, which apply to all waters falling under its definition of "waters of the State."<sup>114</sup> Ohio law required the Ohio Environmental Protection Agency (OEPA) director to adopt WQS,<sup>115</sup> including WQS for the protection of fish and aquatic life.<sup>116</sup> TALU was adopted in Ohio Admin. Code 3745-1, pursuant to the Ohio Administrative Procedure Act.<sup>117</sup> The TALU framework includes exceptional warmwater, warmwater, limited warmwater, modified warmwater, seasonal salmonid, coldwater, trout, and native coldwater uses.<sup>118</sup>

Ohio law gave the OEPA the responsibility for ensuring that TALU standards are met.<sup>119</sup> To carry out this responsibility OEPA issues NPDES permits for wastewater discharges and reviews plans for stream and ditch modifications under its CWA section 401/404 program to ensure that its WQS are met.<sup>120</sup> OEPA can reject any stream or ditch modification plan that does not achieve or protect its WQS.<sup>121</sup> At this time there are no reported cases of plans for drainage ditches being rejected for failure to meet water quality standards.

Ohio applies a TALU framework to drainage ditches.<sup>122</sup> Ohio's TALU framework applies to drainage ditches through its state definition of "waters of the State," which includes:

*[A]ll streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and other bodies or accumulations of water, surface and underground, natural or artificial, regardless of the depth of the strata in which underground water is located, that are situated wholly or partly within, or border upon, this state, or are within its jurisdiction, except those private waters that do*

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<sup>112</sup> See EPA CASE STUDIES, *supra* note 5.

<sup>113</sup> ILL. ADMIN CODE TIT. 35, § 303.201 (2015).

<sup>114</sup> See OHIO ADMIN. CODE 3745-1 (2014) (outlining Ohio's water quality standards, including state TALU requirements).

<sup>115</sup> *Ibid.*

<sup>116</sup> OHIO REV. CODE ANN. § 6111.041 (West 2014).

<sup>117</sup> OHIO ADMIN. CODE 3745-1 (2010).

<sup>118</sup> *Id.* at 3745-1-07 (2010).

<sup>119</sup> OHIO REV. CODE ANN. § 6111.041 (West 2014).

<sup>120</sup> OHIO REV. CODE ANN. § 6111.

<sup>121</sup> OHIO REV. CODE ANN. § 6101.13

<sup>122</sup> OHIO ADMIN. CODE 3745-1 07(B)(1)(d) for modified warmwater habitat; OHIO ADMIN. CODE 3745-1-07(B)(1)(G)(II) for limited resource water.

*not combine or effect a junction with natural surface or underground waters.*<sup>123</sup>

Like Minnesota, Ohio explicitly includes “drainage systems” in the statutory definition of “waters of the State,” and no exemption from state water quality standards exists for water in drainage systems. Importantly, the definition includes natural and artificially created waterbodies just as Minnesota’s does. Ohio’s Class C primary contact recreation waters designation specifically contemplates and covers historically channelized watercourses.<sup>124</sup> Ditches are assigned aquatic life use designations.<sup>125</sup>

Ohio’s TALU and bioassessment approaches have been upheld by the courts. Ohio’s bioassessment and TALU approaches were reviewed and upheld by the Ohio Supreme Court in *Northeast Ohio Regional Sewer District v. Shank*.<sup>126</sup> In *Shank*, the use of biological data to determine and designate a use to a particular stretch of a river’s WQS was questioned. The Ohio Supreme Court upheld the Warm Water Habitat (WWH) use designation, even though the river was not then in attainment, based on the biological data that indicated that the use could be attained in the river. *Shank* was the first clear decision that TALU designations were valid where biological data indicated that the water could support a higher use than it currently met. The *Shank* decision has not been challenged in any reported case in Ohio. Several subsequent Ohio cases have also upheld the application of TALU WQS.<sup>127</sup>

EPA Region 5 has reviewed and approved Ohio’s TALU framework in its WQS.<sup>128</sup> In review of Ohio’s TALU program, EPA Region 5 found it “fostered an effective and balanced approach to protecting, restoring, and enhancing the quality of Ohio streams and rivers.”<sup>129</sup> EPA Region 5 also recognized that one of the key benefits to Ohio’s TALU program is that the TALU framework provides appropriate and effective levels of protection for Ohio streams and rivers and sets reasonably attainable goals for the majority of Ohio’s streams and rivers.<sup>130</sup> Furthermore, Ohio’s TALU framework also recognizes that the CWA goal may not be feasibly attainable in the short-term in certain streams, and to deal with this obstacle it provides, “a reasonable and scientifically sound methodology for identifying waters where CWA goals are not immediately attainable.”<sup>131</sup>

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<sup>123</sup> OHIO REV. CODE ANN. § 6111.01(H) (West 2014).

<sup>124</sup> OHIO ADMIN. CODE 3745-1-07 (B)(4)(b)(iii) (2010).

<sup>125</sup> See OHIO ADMIN. CODE 3745-1-08 Table 8-1 (2014).

<sup>126</sup> 567 N.E.2d 993 (Ohio 1991).

<sup>127</sup> *E.g., Columbus & Franklin Cty. Metro. Park Dist. v. Shank*, 600 N.E.2d 1042, n.12 (Ohio 1992) (“Exceptional warmwater habitats were defined in Ohio Adm. Code 3645-1-07(A)(3) as follows: ‘Exceptional warmwater’—these are waters capable of supporting exceptional or unusual populations of warmwater fish and associated vertebrate and invertebrate organisms and plants on an annual basis.”).

<sup>128</sup> “Case Studies- Setting Ecologically-Based Water Quality Goals Ohio’s Tiered Aquatic Life Use Designations Turn 20 Years Old,” last visited May 7, 2015, U.S. EPA, available at <http://water.epa.gov/scitech/swguidance/standards/criteria/aqlife/biocriteria/aquaticlifeohio.cfm>.

<sup>129</sup> U.S. ENVTL. PROT. AGENCY, MBI TECHNICAL REPORT: ASSESSMENT OF THE BIOLOGICAL ASSEMBLAGE CONDITION OF SMALL HEADWATER STREAMS IN OHIO SUBJECT TO THE PROPOSED GENERAL USE PROVISIONS OF OHIO’S WATER QUALITY STANDARDS (2011).

<sup>130</sup> *Id.*

<sup>131</sup> *Id.*

## B. Illinois's Water Quality Standards

Illinois applies its WQS to waters of the state including drainage ditches. Though Illinois has not adopted a TALU framework, the potential benefits of the TALU system are particularly highlighted as applied to drainage ditches because drainage ditches are also within the scope of Illinois's definition of "waters of the State."<sup>132</sup> Since Illinois does not have a tiered approach, drainage ditches are held to the same general aquatic life standard as other waterbodies. There are no statutory provisions exempting water in drainage ditches from Illinois water quality standards.

The default designation in Illinois is general use unless otherwise classified, similar to Minnesota's approach. These general use standards provide no exception for waterbodies like some drainage ditches or other accumulations of water that are unable to attain the general use standards.<sup>133</sup> Unlike Ohio's TALU WQS, Illinois's WQS are the same for all waters, regardless of the variable levels of aquatic life or habitat that exist amongst features like ditches, lakes, rivers, and streams. Under a TALU approach, all "waters of the State" have WQS that are appropriately tiered to the aquatic life and habitat present in those waterbodies.

The Appellate Court of Illinois considered in *People v. A.J. Davinroy Contractors*<sup>134</sup> whether the discharge of raw sewage water into a drainage ditch violated the Illinois Environmental Protection Act's water pollution prevention measures, which prohibit discharges of pollutants to "waters of the State" without an NPDES permit.<sup>135</sup> The pollution to the drainage ditch was found to be pollution to the waters of the state of Illinois.<sup>136</sup> The court held that there was no exception granted by law to this discharge based on historic use and that the lack of alternative way to transport wastewater was not a defense.<sup>137</sup>

This case provides another example of a state regulating water quality pursuant to the CWA by using its own definition of "waters of the State." *Davinroy* demonstrates that states are free to regulate water quality pursuant to the CWA by using state law which may be more stringent than the federal law. The application of TALU standards to drainage ditches throughout the state of Minnesota is consistent with this principle.

## C. Case Study Conclusions

Both Ohio and Illinois treat drainage ditches as "waters of the State," which are subject to WQS, and neither state creates a distinction between drainage ditches—whether artificially created or human altered—and other water bodies for purposes of coverage under state WQS. While both states categorize drainage ditches and altered watercourses as waterbodies falling within the scope of their WQS regulations, Ohio and Illinois treat ditches and altered watercourses differently under their

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<sup>132</sup> Illinois defines "waters of the State" as, "all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon the State of Illinois . . ." *Id.* at § 301.440.

<sup>133</sup> *Id.*

<sup>134</sup> 249 Ill.App.3d 788 (App. Ct. Ill. 1993).

<sup>135</sup> *Id.* at 789, 792–93 ("In summary, the State proved that Davinroy had discharged raw sewage, a contaminant, into Goose Lake Ditch . . . and that the sewage had caused unacceptable levels of pollution in the ditch past Davinroy's work sites that were not in existence in the ditch upstream of the work site.").

<sup>136</sup> *Id.* at 792.

<sup>137</sup> *Id.* at 794.

respective WQS schemes. Ohio's TALU approach allows the state to set appropriately tiered WQS based on the waterbody's ability to support aquatic life or habitat. Unlike Ohio, Illinois does not provide different WQS for ditches than for other waterbodies with different capacities for supporting aquatic life. Similar to Ohio's approach, the State of Minnesota, consistent with the CWA, and pursuant to the state definition of "waters of the State," has the right to regulate those drainage ditches that may be excluded under the federal standards under a TALU approach.

#### IV. Perceived Conflict with Drainage Law in Minnesota

Drainage law has a long history in Minnesota, dating back to the 19th century and regularly revised since then.<sup>138</sup> This history has often led to conflict with environmental interests due to differing purposes between the two. Where the intent of drainage is often to remove water from the landscape, environmental regulation is designed to restore the ecological function of the landscape.<sup>139</sup> Minnesota's drainage law does not address the relationship to the state's WQS, making only passing references to water quality considerations. This conflict has led to differing views on the application of WQS to drainage systems in Minnesota.

This section addresses the history of Minnesota laws that deal with agricultural drainage systems and past application of WQS to drainage ditches. This section also analyzes when WQS can be assigned to drainage ditches and altered watercourses.

##### A. History of Minnesota's Drainage Laws and Governmental Roles

In 1883, the Minnesota legislature laid the foundation for drainage law by authorizing county commissioners to construct public drainage ditches in the name of public health, welfare, and convenience.<sup>140</sup> In 1955, the state legislature enacted the Minnesota Watershed Act (MWA), allowing for the creation of watershed districts to address the negative consequences of drainage, among other things.<sup>141</sup> The MWA updated the drainage project approval process to be more thorough and comprehensive. The law was later updated to require county drainage authorities to consider conservation practices when developing drainage projects.<sup>142</sup> Further restrictions were placed on drainage of wetlands in 1991 with the passage of the Wetland Conservation Act.<sup>143</sup>

Minnesota's drainage laws have the primary purpose of removing excess water from land to allow agricultural activities.<sup>144</sup> Modern agriculture in Minnesota is substantially aided by these artificial drainage systems.<sup>145</sup> Minnesota's drainage law has an important role in the protection of Minnesota's

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<sup>138</sup> MINN. ASSOC. OF WATERSHED DISTS., INC., UNDERSTANDING MINNESOTA PUBLIC DRAINAGE LAW 2 (2002).

<sup>139</sup> *In re Improvement of Murray Cnty. Ditch No. 34*, 615 N.W. 2d 40, 45 (Minn. 2000) (citing *Town of Vivian v. Town of Dunbar*, 162 Minn. 491, 492 (Minn. 1925)); 33 U.S.C. § 1251(a)(2).

<sup>140</sup> Mark J. Hanson, *Damming Agricultural Drainage: The Effect of Wetland Preservation and Federal Regulation on Agricultural Drainage in Minnesota*, 13 WM. MITCHELL L. REV. 135, 144-47 (1987).

<sup>141</sup> MINN. BD. OF WATER & SOIL RES., ONE WATERSHED, ONE PLAN: AN EVOLUTION OF WATER PLANNING IN MINNESOTA 2 (2014).

<sup>142</sup> Tom Lutgen, MINN. DEPT. OF NATURAL RES., Minnesota Public Drainage Manual 2.4 (September 1991).

<sup>143</sup> 1991 MINN. LAWS ch. 354.

<sup>144</sup> *In re Improvement of Murray Cnty. Ditch No. 34*, 615 N.W. 2d 40, 45 (Minn. 2000) (citing *Town of Vivian v. Town of Dunbar*, 162 Minn. 491, 492 (Minn. 1925)).

<sup>145</sup> *Id.*

water resources due to the prevalence of agricultural drainage networks in the state. A large area of Minnesota crop land includes a network of drain tiles that remove water from the soil profile in crop fields and discharge into surface drainage ditches or other conveyances.<sup>146</sup> The current system of drainage has a significant impact on the state's water quality.<sup>147</sup> Under Minnesota drainage law, the drainage authority must now consider alternative measures to protect or improve water quality.<sup>148</sup> Additionally, the law restricts drainage and other actions affecting public waters that are regulated by the Department of Natural Resources.<sup>149</sup>

Agencies at all levels of government play a role in the development and approval of drainage systems in the state. At the federal level, any drainage project that discharges dredged or fill into waters of the United States requires a CWA §404 permit;<sup>150</sup> other discharges into waters of the United States require an NPDES permit.<sup>151</sup>

At the state level, the Minnesota Board of Water and Soil Resources (BWSR), Department of Natural Resources (DNR), and MPCA all play a role in drainage projects. BWSR partners with local organizations and private landowners to implement soil and water conservation programs, among other functions.<sup>152</sup> The DNR has the primary responsibility for managing public waters, including state-designated wetlands.<sup>153</sup> Any project that affects public waters, including drainage projects, must obtain a public waters work permit from the DNR.<sup>154</sup> Furthermore, as the state agency charged with enforcing and maintaining WQS, MPCA is involved in permitting for projects that may adversely affect a water body's compliance with standards.<sup>155</sup>

Local governmental bodies involved in drainage projects include soil and water conservation districts, counties, watershed districts, and joint drainage authorities. Soil and water conservation districts were created by statute to work with BWSR to implement best management practices and improve the conservation aspects of various water management projects.<sup>156</sup> When a drainage system is located within one county, the county board of commissioners has authority over the project.<sup>157</sup> These

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<sup>146</sup> Gerald Von Korff & Tim Sime, *Water Project and Drainage Law in Minnesota*, Minnesota CLE, Foreword 3 (2010).

<sup>147</sup> Dave Wall, NITROGEN IN MINNESOTA SURFACE WATERS, Minnesota Pollution Control Agency, at 5-9 (2013).

<sup>148</sup> MINN. STAT. § 103E.015(2)(v) (2014).

<sup>149</sup> MINN. STAT. § 103E.011 (2014).

<sup>150</sup> 33 U.S.C. § 1344 (2012).

<sup>151</sup> 33 U.S.C. § 1342 (2012).

<sup>152</sup> See *About the Board of Water and Soil Resources*, MINN. BD. OF WATER & SOIL RES. (last visited Mar. 6, 2015), <http://www.bwsr.state.mn.us/aboutbwsr/index.html>.

<sup>153</sup> ENVTL. LAW INST., STATE WETLAND PROTECTION: STATUS, TRENDS & MODEL APPROACHES, APPENDIX: STATE PROFILES: MINNESOTA 3-4 (2008). Minnesota Statute defines "public waters" very broadly, and the definition includes, but is not limited to, water bodies that are considered "navigable." Public waters include "natural and altered watercourses with a total drainage area greater than two square miles," designated trout streams, "meandered lakes," and "public waters wetlands." See MINN. STAT. § 103G.005(15) (2014).

<sup>154</sup> MINN. STAT. § 103G.245.

<sup>155</sup> See MINN. POLLUTION CONTROL AGENCY, WETLANDS IN MINNESOTA (2013). The CWA also requires that any federal permit or license authorizing discharge into the navigable waters must be certified by the state permitting agency (MPCA). 33 U.S.C. § 1341; see MINN. BD. OF WATER & SOIL RES., WETLANDS REGULATION IN MINNESOTA (2003).

<sup>156</sup> MINN. STAT. § 103C.331 (2014).

<sup>157</sup> MINN. STAT. §§ 103E.011, 103E.005 subd. 9.

are the most common systems in Minnesota.<sup>158</sup> When a drainage system crosses county lines, a joint county drainage authority has authority over the system, comprised of representatives from each county in which the system is located.<sup>159</sup> Watershed districts generally define their boundaries based on the watershed in which the district resides.<sup>160</sup> Because of this, jurisdictional authority over drainage projects is often transferred from the county to the watershed district.<sup>161</sup> Watershed districts perform a variety of functions, including monitoring water quality and groundwater levels, managing drainage systems, and providing for wildlife and recreation opportunities.<sup>162</sup>

The lengthy history of drainage law and variety of government entities has created an intricate structure of oversight and regulation. State WQS and the CWA add another layer of complexity to address state and federal water quality goals.

## B. History of WQS Applied to Drainage Systems

Although state drainage law does not address WQS, many of these surface drainage ditches fall within the definition of “waters of the state” and state water quality standards have long applied to drainage ditches. When the Minnesota legislature first authorized the adoption of water quality standards in 1963, the standards were to apply to “waters of the state.”<sup>163</sup> The definition of “waters of the state” at the time included drainage systems.<sup>164</sup> Since then, Minnesota has taken a number of actions to apply WQS to drainage ditches and altered natural watercourses.

### 1. Assessed and Impaired Waters

Drainage ditches and altered watercourses have been assessed by MPCA as waters of the state using the existing WQS. As noted in Table 1, some drainage ditches have been included on the state’s 303(d) Impaired Waters list. The listing process requires assessment of the water applying the state’s WQS, public notice and comment with the opportunity to challenge a listing, and review and approval by the EPA.<sup>165</sup> While some ditches have been listed as impaired, other ditches across the state have been found to support Class 2B aquatic life standards.<sup>166</sup>

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<sup>158</sup> MINN. ASSOC. OF WATERSHED DISTS., INC., UNDERSTANDING MINNESOTA PUBLIC DRAINAGE LAW 4 (2002).

<sup>159</sup> Minn. Stat. § 103E.235.

<sup>160</sup> MINN. STAT. § 103D.205.

<sup>161</sup> MINN. STAT. § 103D.701; see MINN. ASSOC. OF WATERSHED DISTS., INC., UNDERSTANDING MINNESOTA PUBLIC DRAINAGE LAW 4 (2002).

<sup>162</sup> *What Do Watershed Districts Do?*, MINN. ASSOC. OF WATERSHED DISTS., INC. (last visited Mar. 6, 2015), <http://www.mnwatershed.org/> (follow “What is a Watershed District” link on left, then follow “What Do Watershed Districts Do?” link in center of page).

<sup>163</sup> 1963 MINN. LAWS. Ch. 874, sec. 6.

<sup>164</sup> *Id.* at sec. 2.

<sup>165</sup> See 33 U.S.C. § 1313(d); 40 C.F.R. § 130.7.

<sup>166</sup> See, e.g., MINNESOTA RIVER BASIN ASSESSMENT OF STREAM WATER QUALITY, MPCA, Apr. 2014, available at <http://www.pca.state.mn.us/index.php/view-document.html?gid=15228> (listing County Ditch 34, AUID 07020003-526, and County Ditch 12, AUID 07020004-552, as class 2 waters fully supporting aquatic life use).

**Table 1.** Ditches and altered watercourses listed as impaired for aquatic life.<sup>167</sup>

Reach name	Year listed	Basin <sup>168</sup>	River ID#	Impairment(s)
County Ditch 6	2002	UMiss	07010202-521	Macroinvertebrates & fish
Crooked Lake Ditch	2006	UMiss	07010202-552	Macroinvertebrates
Getchell Creek (County Ditch 2)	2006	UMiss	07010202-562	Macroinvertebrates
Unnamed ditch	2012	UMiss	07010202-666	Macroinvertebrates & fish
Jewitts Creek (County Ditch 19, 18, 17)	2002	UMiss	07010204-585	Macroinvertebrates & fish
County Ditch 17	2006	UMiss	07010206-557	Macroinvertebrates
Unnamed ditch	2006	UMiss	07010206-594	Macroinvertebrates
Judicial Ditch 10 (Wood Lake Creek)	2006	MnR	07020004-546	Fish
Judicial Ditch 8	2004	MnR	07020005-546	Fish
County Ditch 15	2012	MnR	07020005-690	Fish
Judicial Ditch 1	2006	MnR	07020010-548	Fish
County Ditch 6	2012	MnR	07020011-522	Macroinvertebrates
County Ditch 12	2012	MnR	07020011-558	Macroinvertebrates & fish
County Ditch 19	2012	MnR	07020011-608	Macroinvertebrates & fish
County Ditch 15-2	2012	MnR	07020011-609	Macroinvertebrates & fish
Mud Creek (County Ditch 10)	2002	StC	07030004-566	Macroinvertebrates & fish
Mud Creek (County Ditch 10)	2002	StC	07030004-567	Fish
Unnamed ditch	2012	StC	07030005-723	Fish

## 2. Alterations of Public Waters

Drainage law requires permits for certain alterations to public waters.<sup>169</sup> As discussed above in section II.B.2, “public waters” are a subset of “waters of the state.” The legal alteration of a public water can change the ability of the waterbody to support aquatic life. Physical modification to a waterway or changes in flow could change the potential for the system to meet the WQS goals for aquatic life. As a result, public waters that were subject to ditching or other action may not be capable of meeting the Class 2B aquatic life standard.

Minnesota provides a method called a Use Attainability Analysis to reclassify waters that are not capable of meeting the Class 2B water quality standards.<sup>170</sup> These waters are reclassified as “limited resource value waters” without the same protections as Class 2 waters.<sup>171</sup> Each reclassification must be codified in rule.<sup>172</sup>

<sup>167</sup> Minnesota Final 2012 Impaired Waters List, May 31, 2013.

<sup>168</sup> “UMiss” is Upper Mississippi Basin; “MnR” is Minnesota River Basin; “StC” is St. Croix Basin

<sup>169</sup> MINN. STAT. § 103G.245.

<sup>170</sup> MINN. R. 7050.0140 subp. 8.

<sup>171</sup> *Ibid.*

<sup>172</sup> MINN. R. 7050.0430, 7050.0470.

### C. Authority to Apply WQS to Drainage Ditches and Altered Watercourses in Minnesota

As discussed above in part II.A, Minnesota has independent authority to set WQS and did so before the adoption of the Clean Water Act. As shown in II.B.2, Minnesota defines “waters of the state” broadly to include drainage systems and applies its WQS to waters of the state regardless of whether the waterbody is natural or artificial.

Standards to protect aquatic life (like those proposed in the TALU framework) can apply to drainage ditches because they are considered “waters of the State” – and in fact such standards already apply, as discussed in section IV.B. Minnesota applies its existing WQS to waters of the state without limitation. Existing rules apply the standards “to all waters of the state, both surface and underground.”<sup>173</sup> Use classifications apply to “all surface waters”<sup>174</sup> and each use is assigned to any “waters of the state” capable of supporting the use.<sup>175</sup> The state assessment of water quality standards is based on “pollution of the waters of the state” to the extent that attainable uses are not met.<sup>176</sup> Even where a watercourse is “significantly altered by human activity and the effect is essentially irreversible,” certain water quality standards apply.<sup>177</sup> Existing aquatic life protections presume that every waterbody can support aquatic life unless otherwise demonstrated.<sup>178</sup>

It is possible to meet both sets of requirements in drainage ditches and altered watercourses. Minnesota law requires that wherever possible, a law must be interpreted to avoid direct conflict with other statutes.<sup>179</sup> Though drainage law addresses different requirements from WQS, there is no direct conflict between the two chapters of law, and drainage law acknowledges the need to address multiple purposes – including water quality – before undertaking drainage work.<sup>180</sup> Where two laws are found to be irreconcilable, the later law controls.<sup>181</sup> Drainage law has a long history predating the environmental controls in the Clean Water Act and associated amendments. The broad definition of “waters of the state” and broad applicability of WQS encompass many drainage ditches that are publicly owned. Many of these drainage ditches are subject to the state’s general aquatic life standards, despite lacking the physical characteristics to support such a degree of aquatic life.

The TALU framework will provide a set of goals that better reflects the ability of altered waters and ditches in the state to support some level of aquatic life. Currently, waters that will not support the full Class 2B aquatic life uses are either listed as impaired or reclassified as “limited use” (i.e., Class 7

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<sup>173</sup> MINN. R. 7050.0110.

<sup>174</sup> *Ibid.*

<sup>175</sup> MINN. R. 7050.0140.

<sup>176</sup> MINN. R. 7050.0150.

<sup>177</sup> MINN. R. 7050.0140 subp. 8(A).

<sup>178</sup> MINN. R. 7050.0430.

<sup>179</sup> Minn. Stat. § 645.26 subd. 1 (2014); see *Erickson v. Sunset Memorial Park Ass’n*, 259 Minn. 532 (1961) (“A statute is to be construed, where reasonably possible, so as to avoid irreconcilable difference and conflict with another statute.”); see also *Atchison, Topeka, & Santa Fe Railway Co. v. Buell*, 480 U.S. 557, 566–67 (1986) (“[A]bsent an intolerable conflict between the two statutes, we are unwilling to read the RLA as repealing any part of the FELA.”).

<sup>180</sup> MINN. STAT. § 103E.015 subd. 6.

<sup>181</sup> MINN. STAT. § 645.26 subd. 4; see *Barton v. Moore*, 558 N.W.2d 746 (Minn. 1997) (“The rules of statutory construction provide that when provisions enacted at different sessions of the legislature are irreconcilable, those provisions enacted at a later session are controlling over earlier provisions.”); see also cases cited *supra* note 179.



water) waters indicating no aquatic life support in the waterbody.<sup>182</sup> Creating a “modified” TALU aquatic life tier allows a more accurate representation of the ability of these waters to support aquatic life. Waters currently in Class 7 may never be able to fully support a healthy aquatic community, but some might support a limited aquatic community. Many drainage ditches support, or can support, aquatic life between the limited Class 7 use and the CWA minimum goals. There is currently, however, no protective option for these waters. Waterbodies already achieving the aquatic life standards, as some altered watercourses do today, will be protected to the same degree they are now.<sup>183</sup>

In adopting the TALU framework, the state standards can more accurately reflect the circumstances of legally altered waterways to support aquatic ecosystems. The TALU framework does not require reversal of past legal alterations. Instead, it accounts for the habitat changes resulting from those legal alterations by applying the appropriate tier of aquatic life use. Rather than placing ditches and altered watercourses on the state’s impaired waters list indefinitely because full aquatic life is not currently achievable, the framework identifies the highest achievable use. Any restoration targets will then reflect achievable goals.

## V. Minnesota Has Authority to Apply TALU Standards to Drainage Ditches and Altered Watercourses

Like the application of TALU to all other waters falling within Minnesota’s definition of “waters of the State,” the application of TALU to drainage ditches will assign biological standards for drainage ditches at levels appropriate for the waterbody’s capability to support aquatic life. The CWA authorizes the use of a TALU framework in the development of state WQS to protect the biological integrity of water.<sup>184</sup> While there are some limited exceptions in the CWA for drainage ditches, these exceptions do not apply for purposes of state WQS.

Minnesota’s TALU framework will provide appropriately adjusted water quality standards for the purpose of protecting and maintaining the biological integrity of both Minnesota’s “waters of the State” and the “waters of the United States.”<sup>185</sup> TALU standards offer a practical approach to regulating water quality by offering different tiers of water quality standards based on a waterbody’s ability to support aquatic life.<sup>186</sup> TALU standards will be applied to all waters falling under the definition of “waters of the State.”<sup>187</sup> Minnesota has both independent legal authority and authority under the CWA to create TALU designations, and other states, such as Ohio, have already implemented TALU standards successfully.<sup>188</sup> Similar to those TALU standards in Ohio, the TALU system proposed in Minnesota will be applied to all waters encompassed in Minnesota’s definition of “waters of the State.”<sup>189</sup>

Though agricultural exemptions exist in the CWA, those exemptions do not prevent Minnesota from applying WQS to waters of the state.<sup>190</sup> Minnesota has both independent authority and authority

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<sup>182</sup> See MINN. R. 7050.0140.

<sup>183</sup> The Clean Water Act does not allow removal of existing uses. See 40 C.F.R. § 131.10(g).

<sup>184</sup> 40 C.F.R. § 131.10(c).

<sup>185</sup> See *supra* Part I.B and II.A–B.

<sup>186</sup> See *supra* Part I.B.

<sup>187</sup> See *supra* Part II.B.

<sup>188</sup> See *supra* Part II.A. and III.A–C.

<sup>189</sup> See *supra* Part II.B., and III.A.

<sup>190</sup> See *supra* Part II.A-B, and IV.A–C.

from the CWA to apply standards to all waters within the definition of “waters of the State,” including waters such as drainage ditches and altered watercourses.<sup>191</sup> As the agency responsible for protecting water quality, the MPCA has the legal authority to implement TALU designations for its WQS.<sup>192</sup>

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<sup>191</sup> See *supra* Part II.A-B and IV.A-C.

<sup>192</sup> See *supra* Part II.A-B.