What we recommend for wetlands WQS

- Text from our WQS Handbook updated criteria chapter 3:

  In 2008, the EPA published a wetland-specific [HYPERLINK "https://www.epa.gov/nutrient-policy-data/criteria-development-guidance-wetlands"] to assist states and authorized tribes in developing numeric nutrient criteria for wetlands. Additionally, the EPA developed [HYPERLINK "https://www.epa.gov/wqs-tech/templates-developing-wetland-water-quality-standards"] including a [HYPERLINK "https://www.epa.gov/sites/production/files/2016-05/documents/wetland_templates_faqs_050516.pdf"] to simplify development of protective WQS for wetlands. States and authorized tribes may choose to develop different types of criteria for wetlands protection, including site-specific numeric or narrative criteria, as long as they are scientifically defensible and protective of the designated uses, and otherwise consistent with 40 CFR 131.11 and CWA section 303(c)(2)(B).
- Wetland WQS website with all of these tools: [HYPERLINK "https://www.epa.gov/wetlands/wetland-water-quality-standards"]

Accounting of State Wetland WQS

Summary: After searching WATA, polling the liaisons, and working with Jenn Brundage who worked on finalizing the narrative templates for wetlands mentioned above, the only states who have adopted new or revised wetlands WQS in the last 10 years appear to be Ohio and North Dakota (see more details below). Some other states have generic narrative criteria for wetlands, including statements about biological health, and many states also generally apply their general narratives and/or numeric toxics criteria to all surface waters including wetlands.

Region 1

- **New Hampshire** has wetlands criteria (we aren't sure when these were adopted, but not recently).

Env-Wq 1703.02 Wetlands Criteria.

(a) Subject to (b), below, wetlands shall be subject to the criteria listed in this part.

(b) Wherever the naturally-occurring conditions of the wetlands are different from the criteria listed in these rules, the naturally-occurring conditions shall be the applicable water quality criteria.

  - New Hampshire also applies this general narrative to all waters, including wetlands:

The surface waters shall support and maintain a balanced, integrated, and adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of similar natural habitats of a region.

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Differences from naturally occurring conditions shall be limited to non-detrimental differences in community structure and function. (Env-Wq 1703.19)

- None of the other Region 1 states have wetland-specific criteria.

Region 2

- **New Jersey**
  - "Wetlands" means those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation. The Department shall evaluate the parameters of hydrology, soils, and vegetation to determine the presence and extent of wetlands.
  - Wetlands are included in the State's definition of both "surface waters" and "Waters of the State" The State's General Policies" are applicable to all surface waters in the State, including wetlands. The State's General Policies" include the following narrative criteria: "Toxic substances in waters of the State shall not be at levels that are toxic to humans or the aquatic biota, or that bioaccumulate in the aquatic biota so as to render them unfit for human consumption."
  - The State's numeric criteria are applied to waters based on their classification. Since wetlands are not classified by the State, there is no default application of numeric criteria to wetlands.
- **New York**
  - There is no wetlands definition and no default application of narrative or numeric criteria to wetlands in NY.

Region 3

- **Delaware**

Although Delaware's definition of "Waters of the State" includes wetlands, Delaware's narrative criteria refers to it applying to "surface water." It's unclear therefore whether Delaware's narrative would apply to wetlands. But in any case, Delaware's narrative does not speak to the biological health of the stream. Delaware has no numeric biocriteria.

Definitions:

"Surface Water" means water occurring generally on the surface of the earth.

"Waters of the State" means: All surface waters of the State including but not limited to: Waters which are subject to the ebb and flow of the tide, including but not limited to estuaries, bays, and the Atlantic Ocean; All interstate waters, including interstate wetlands; All other waters of the State, such as lakes, rivers, streams (including intermittent and ephemeral streams), drainage ditches, tax ditches, creeks, mudflats, sandflats, wetlands, sloughs, or natural or impounded ponds; All impoundments of waters

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otherwise defined as waters of the State under this definition; Wetlands adjacent to waters (other than waters that are themselves wetlands) identified above; Waste and stormwater treatment systems, including but not limited to treatment ponds or lagoons designed to meet the requirements of the Clean Water Act (other than cooling ponds which otherwise meet the requirements of subsection (l) of this definition) are not waters of the State. Waters of exceptional recreational or ecological significance (ERES): Waters which are important, unique, or sensitive from a recreational and/or ecological perspective, but which may or may not have excellent water quality. Such waters shall normally have regional significance with respect to recreational use (fishing, swimming and boating), or have significant or widespread riverine, riparian, or wetland natural areas.

Narrative Criteria:

4.1 All surface waters of the State (except as detailed in Sections 7.0 and 8.0) shall meet the following minimum criteria: 4.1.1 Waters shall be free from substances that are attributable to wastes of industrial, municipal, agricultural or other human-induced origin. Examples include but are not limited to the following:

4.1.1.1 Floating debris, oil, grease, scum, foam, or other materials on the water surface that may create a nuisance condition, or that may in any way interfere with attainment and maintenance of designated uses of the water,

4.1.1.2 Settleable solids, sediments, sludge deposits, or suspended particles that may coat or cover submerged surfaces and create a nuisance condition, or that may in any way interfere with attainment and maintenance of designated uses of the water,

4.1.1.3 Any pollutants, including those of a thermal, toxic, corrosive, bacteriological, radiological, or other nature, that may interfere with attainment and maintenance of designated uses of the water, may impart undesirable odors, tastes, or colors to the water or to aquatic life found therein, may endanger public health, or may result in dominance of nuisance species.

- **District of Columbia**

DC's water quality standards appear to apply to wetlands, and it appears that wetlands with rooted vascular aquatic vegetation is supposed to be protected from "nutrient imbalances." The narrative indicates that surface waters are to be protected from stuff that would impair the biological community.

1103.1 In a wetland, the numerical and the narrative criteria shall be applied to the column of water above the wetland in accordance with the designated use.

1103.2 Wetlands with rooted vascular aquatic vegetation, except those specifically constructed or created as waste water treatment devices and except as provided in D.C. Official Code §§ 8-103.03(d) and 8-103.06(a)(3), shall be protected from significant adverse hydrologic modifications, excessive

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sedimentation, deposition of toxic substances in toxic amounts, nutrient imbalances, and other adverse anthropogenic impacts.

1104.1 The surface waters of the District shall be free from substances in amounts or combinations that do any one of the following:

(a) Settle to form objectionable deposits;

(b) Float as debris, scum, oil, or other matter to create a nuisance;

(c) Produce objectionable odor, color, taste, or turbidity;

(d) Cause injury to, are toxic to, or produce adverse physiological or behavioral changes in humans, plants, or animals;

(e) Produce undesirable or nuisance aquatic life or result in the dominance of nuisance species; or

(f) Impair the biological community that naturally occurs in the waters or depends upon the waters for its survival and propagation.

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- **Maryland**

Maryland has biological water quality criteria, but as that provision specifies "streams," pretty sure it would not apply to wetlands. By their definition of waters of the State, the general water quality criteria would apply to wetlands, but nothing specific to nutrients or biology.

B. General Water Quality Criteria. The waters of this State may not be polluted by:

(1) Substances attributable to sewage, industrial waste, or other waste that will settle to form sludge deposits that:

(a) Are unsightly, putrescent, or odorous, and create a nuisance, or

(b) Interfere directly or indirectly with designated uses;

(2) Any material, including floating debris, oil, grease, scum, sludge, and other floating materials attributable to sewage, industrial waste, or other waste in amounts sufficient to:

(a) Be unsightly;

(b) Produce taste or odor;

(c) Change the existing color to produce objectionable color for aesthetic purposes;

(d) Create a nuisance; or

(e) Interfere directly or indirectly with designated uses;

(3) High temperature or corrosive substances attributable to sewage, industrial waste, or other waste in concentrations or combinations which:

(a) Interfere directly or indirectly with designated uses, or

(b) Are harmful to human, animal, plant, or aquatic life;

(4) Acute toxicity from any discharge outside the mixing zone established under Regulation .05 of this chapter for the application of acute criteria for protection of aquatic life; and

(5) Toxic substances attributable to sewage, industrial wastes, or other wastes in concentrations outside designated mixing zones, which:

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(a) Interfere directly or indirectly with designated uses, or

(b) Are harmful to human, plant, or aquatic life.

(103) "Waters of this State" includes:

(a) Both surface and underground waters within the boundaries of this State subject to its jurisdiction, including that part of the Atlantic Ocean within the boundaries of this State, the Chesapeake Bay and its tributaries, and all ponds, lake, rivers, streams, tidal and nontidal wetlands, public ditches, tax ditches, and public drainage systems within this State, other those designed and used to collect, convey, or dispose of sanitary sewage;

26.08.02.03-4.03-4 Biological Water Quality Criteria
A. Quantitative assessments of biological communities in streams (biological criteria) may be used separately or in conjunction with the chemical and physical criteria promulgated in this chapter to assess whether water quality is consistent with the purposes and uses in Regulations .01 and .02 of this chapter.
B. The results of the quantitative assessments of biological communities shall be used for purposes of water quality assessment, including, but not limited to, those assessments required by §§303(d) and 305(b) of the federal Clean Water Act (33 U.S.C. §§1313(d) and 1315(b)).
C. These assessments shall use documented methods that have been subject to technical review, produce consistent and repeatable results, and are objectively interpretable.
D. In using biological criteria to determine whether aquatic life uses are being met, the Department shall allow for the uncertainty and natural variability in environmental monitoring results by using established quantitative and statistical methodologies to establish the appropriate level of uncertainty for these determinations.
E. The Department shall determine whether the application and interpretation of the assessment method are appropriate. In those instances where the Department determines the assessment method is not appropriate, it will provide its justification for that determination.

- **Pennsylvania**

Pennsylvania is complicated because they do have numeric biocriteria as it applies to its antidegradation program which applies to surface waters. PA's definition of surface waters does include "wetlands," but I don't know how the bioassessment protocols that PA uses would be modified to use in wetlands. But, in PA regulation "exceptional value wetlands" seems to note that wetlands in the floodplain of PA EV waters are considered exceptional value wetlands. I'm just not sure what to conclude about PA.

§ 105.17. Wetlands.

(1) *Exceptional value wetlands.* This category of wetlands deserves special protection. Exceptional value wetlands are wetlands that exhibit one or more of the following characteristics:

(iii) Wetlands that are located in or along the floodplain of the reach of a wild trout stream or waters listed as exceptional value under Chapter 93 (relating to water quality standards) and the floodplain of

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streams tributary thereto, or wetlands within the corridor of a watercourse or body of water that has been designated as a National wild or scenic river in accordance with the Wild and Scenic Rivers Act of 1968 (16 U.S.C.A. § § 1271—1287) or designated as wild or scenic under the Pennsylvania Scenic Rivers Act (32 P. S. § § 820.21—820.29).

Surface waters—Perennial and intermittent streams, rivers, lakes, reservoirs, ponds, wetlands, springs, natural seeps and estuaries, excluding water at facilities approved for wastewater treatment such as wastewater treatment impoundments, cooling water ponds and constructed wetlands used as part of a wastewater treatment process.

§ 93.2. Scope. (a) This chapter sets forth water quality standards for surface waters of this Commonwealth, including wetlands.

§ 93.6. General water quality criteria (a) Water may not contain substances attributable to point or nonpoint source discharges in concentration or amounts sufficient to be inimical or harmful to the water uses to be protected or to human, animal, plant or aquatic life. (b) In addition to other substances listed within or addressed by this chapter, specific substances to be controlled include, but are not limited to, floating materials, oil, grease, scum and substances that produce color, tastes, odors, turbidity or settle to form deposits.

- **Virginia**

Wetlands are protected by VA's general criteria, and it's narrative biocriteria (in the aquatic life designated use) applies to wetlands as well.

9VAC25-260-20. General Criteria.
A. State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life.

Specific substances to be controlled include, but are not limited to: floating debris, oil, scum, and other floating materials; toxic substances (including those which bioaccumulate); substances that produce color, tastes, turbidity, odors, or settle to form sludge deposits; and substances which nourish undesirable or nuisance aquatic plant life. Effluents which tend to raise the temperature of the receiving water will also be controlled. Conditions within mixing zones established according to [HYPERLINK "https://law.lis.virginia.gov/admincode/title9/agency25/chapter260/section20/"] B do not violate the provisions of this subsection.

General aquatic life designated use as described in 9VAC25-260-10.A
All state waters, including wetlands, are designated for the following uses: … the propagation and growth of a balanced, indigenous population of aquatic life, including game fish, which might reasonably be expected to inhabit them; wildlife; and the production of edible and marketable natural resources, e. g. fish and shellfish.

- **West Virginia**

WV's general criteria indicates that there should be no significant adverse impact to biological components of aquatic ecosystems, and that provision applies to wetlands as well.

§47-2-3. Conditions Not Allowable In State Waters.

3.1. Certain characteristics of sewage, industrial wastes, and other wastes cause pollution and are objectionable in all waters of the State. Therefore, the secretary does hereby proclaim that the following general conditions are not to be allowed in any of the waters of the State.

3.2. No sewage, industrial wastes or other wastes present in any of the waters of the State shall cause therein or materially contribute to any of the following conditions thereof:

3.2.a. Distinctly visible floating or settleable solids, suspended solids, scum, foam or oily slicks;

3.2.b. Deposits or sludge banks on the bottom;

3.2.c. Odors in the vicinity of the waters;

3.2.d. Taste or odor that would adversely affect the designated uses of the affected waters;

3.2.e. Materials in concentrations which are harmful, hazardous or toxic to man, animal or aquatic life;

3.2.f. Distinctly visible color;

3.2.g. Algae blooms or concentrations of bacteria which may impair or interfere with the designated uses of the affected waters;

3.2.h. Requiring an unreasonable degree of treatment for the production of potable water by modern water treatment processes as commonly employed; and

3.2.i. Any other condition, including radiological exposure, which adversely alters the integrity of the waters of the State, including wetlands; no significant adverse impact to the chemical, physical, hydrologic, or biological components of aquatic ecosystems shall be allowed.

Region 4

Big picture:

- R4 states haven't done anything formally, at least recently, with wetlands criteria, and it would be broad narrative content and not specific to nutrient criteria (excluding the TP criterion of the Everglades).
- As a general consideration, all the States were polled about 25 years ago about whether or not wetlands were considered 'waters of the state'. All 8 R4 states responded that wetlands were contained in that definition, either in regulation or statute. The extension of this is that wetlands are just like any other water of the state and would be covered by the water quality standards and would either have a designation if listed in the classifications or would have the default designation and associated criteria. So all wetlands have uses and criteria but it would be the generally applicable criteria unless there is something specific.
- **North Carolina:** Does have narrative criteria specific to wetlands. See separate attachment for relevant page of current regs (from .0231 section), along with the definition of "biological integrity" that is referenced in the definitions section at .0200.

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- **Tennesse:** In its "Criteria for the use of Fish and Aquatic Life", TN specifically mentions wetlands in the (numeric) pH criteria and in the general (narrative) "Biological Integrity" criteria (relevant pages in separate attachment)
- **Florida:** Has narrative standards for "Treatment and Receiving Wetlands" in a separate section of its Administrative Code (62-611.500) from the main Surface Water Quality Standards section (62-302) (parts of 62-611 that qualify as WQS in separate attachment)
- **Georgia:** Includes wetlands by name as a waters of the state, but no narrative criteria specific to wetlands.
- **Mississippi:** Includes wetlands in the definition of waters of the US. The definition is included in the statute not the regulation.

Region 5

- **Ohio** has narrative wetlands criteria at 3745-1-51 ([HYPERLINK "https://gcc01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fcodes.ohio.gov%2Foac%2F3745-1-51v1&data=02%7C01%7CFleisig.Erica%40epa.gov%7C6840e84b375b492e70c108d7f37eace0%7C88b378b367484867acf976aacbeca6a7%7C0%7C0%7C637245597694954144&sdata=vbCXMKTlVoQ98M3IoEaAZCHfCdbIwMG81LNetLA9BYc%3D&reserved=0"]) that mentions nutrients. They revised it a couple of years ago to include a provision relating to biological integrity, but it does not appear that they have specific biocriteria assigned for wetlands. What's included is more of a no adverse impacts type of provision that they use in assessing 404 impacts and what mitigation is required. At 3745-1-52, OH applies numeric *chemical* criteria associated with its warmwater aquatic life use designation for the purposes of determining wastewater discharge permit limits to wetlands ([HYPERLINK "https://gcc01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fcodes.ohio.gov%2Foac%2F3745-1-52&data=02%7C01%7CFleisig.Erica%40epa.gov%7C6840e84b375b492e70c108d7f37eace0%7C88b378b367484867acf976aacbeca6a7%7C0%7C0%7C637245597694954144&sdata=Zz9HRKC%2BxP5g1htKkI4kk4Ueo7ZUlqa9v70LsugQcSg%3D&reserved=0"]).

- **Minnesota** has a rule section on wetlands that include standards, but again related to mitigation like Ohio with a no adverse impact to biology statement:

  7050.0186 WETLAND STANDARDS AND MITIGATION.

  Subpart 1. Policy and wetland beneficial uses. It is the policy of the state to protect wetlands and prevent significant adverse impacts on wetland beneficial uses caused by chemical, physical, biological, or radiological changes. The quality of Wetlands shall be maintained to permit the propagation and maintenance of a healthy community of aquatic and terrestrial species indigenous to Wetlands, preserve wildlife habitat, and support biological diversity of the landscape. In addition, these waters shall be suitable for boating and other forms of aquatic recreation as specified in part 7050.0222, subpart 6; general industrial use as specified in part 7050.0223, subpart 5; irrigation, use by wildlife and livestock, erosion control, groundwater recharge, low flow augmentation, storm water retention, and stream sedimentation as specified in part 7050.0224, subpart 4; and aesthetic enjoyment as specified in part 7050.0225, subpart 2.

Subp. 1a. Definitions.

A. "Physical alteration" means the dredging, filling, draining, or permanent inundating of a wetland. Restoring a degraded wetland by reestablishing its hydrology is not a physical alteration.

B. "Wetlands" are those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Constructed Wetlands designed for wastewater treatment are not waters of the state. Wetlands must have the following attributes:

(1) a predominance of hydric soils;

(2) inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in a saturated soil condition; and

(3) under normal circumstances, support a prevalence of such vegetation.

§Subp. 1b. Wetland pollution prohibited. Wetland conditions shall be protected from chemical, physical, biological, or radiological changes to prevent significant adverse impacts to the designated beneficial uses listed in subpart 1. The antidegradation provisions in this chapter are applicable to Wetlands.

- Minnesota also classifies all wetlands as Class 2D waters.

Subp. 6. Class 2D waters; wetlands.

A. The quality of class 2D wetlands shall be such as to permit the propagation and maintenance of a healthy community of aquatic and terrestrial species indigenous to wetlands, and their habitats. Wetlands also add to the biological diversity of the landscape. These waters shall be suitable for boating and other forms of aquatic recreation for which the wetland may be usable. The standards for class 2B waters listed under subpart 4 shall apply to these waters except as listed below:

Substance, Characteristic, or Pollutant	Class 2D Standard
Oxygen, dissolved	If background is less than 5.0 mg/L as a daily minimum, maintain background
pH	Maintain background

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Temperature Maintain background

B. "Maintain background," as used in this subpart, means the concentration of the water quality substances, characteristics, or pollutants shall not deviate from the range of natural background concentrations or conditions such that there is a potential significant adverse impact to the designated uses.
C. Activities in wetlands which involve the normal farm practices of planting with annually seeded crops or the utilization of a crop rotation seeding of pasture grasses or legumes, including the recommended applications of fertilizer and pesticides, are excluded from the standards in this subpart and the wetland standards in parts **[HYPERLINK "https://gcc01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.revisor.mn.gov%2Frules%2F7050.0224&data=02%7C01%7CFleisig.Erica%40epa.gov%7Cc3d87db2cb544e585c5708d7f37eff9c%7C88b378b367484867acf976aacbeca6a7%7C0%7C0%7C637245599083892881&sdata=riiUsJkVDdsJ5EzEJEvsylMoiUqQm9jNIHNBZBp4UjQ%3D&reserved=0"]**, subpart 4; **[HYPERLINK "https://gcc01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.revisor.mn.gov%2Frules%2F7050.0225&data=02%7C01%7CFleisig.Erica%40epa.gov%7Cc3d87db2cb544e585c5708d7f37eff9c%7C88b378b367484867acf976aacbeca6a7%7C0%7C0%7C637245599083902876&sdata=39MbGI04L9vCGzJY9LmxT20oRfymnFkDDqamkMyzUDs%3D&reserved=0"]**, subpart 2; and **[HYPERLINK "https://gcc01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.revisor.mn.gov%2Frules%2F7050.0227&data=02%7C01%7CFleisig.Erica%40epa.gov%7Cc3d87db2cb544e585c5708d7f37eff9c%7C88b378b367484867acf976aacbeca6a7%7C0%7C0%7C637245599083902876&sdata=VfVC5lS4SAf6QNPEy%2FA4v%2FORmywu%2FamGUx9HXXTfyX0%3D&reserved=0"]**. All other activities in these wetlands must meet water quality standards.

- **Wisconsin** has wetland WQS at NR 103 ([HYPERLINK "https://gcc01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdocs.legis.wisconsin.gov%2Fcode%2Fadmin_code%2Fnr%2F100%2F103&data=02%7C01%7CFleisig.Erica%40epa.gov%7C6840e84b375b492e70c108d7f37eace0%7C88b378b367484867acf976aacbeca6a7%7C0%7C0%7C637245597694964138&sdata=6BWcbEHRjp0ucATfEG%2Ff%2BxkxRnUott%2FTfu%2FQENTZ%2FYQ%3D&reserved=0"]). Like OH and MN above, the narrative criteria laid out in the WQS do not make mention of nutrients or biocriteria:

(2) The following criteria shall be used to assure the maintenance or enhancement of the functional values identified in sub. (1):

(a) Liquids, fill or other solids or gas may not be present in amounts which may cause significant adverse impacts to wetlands;

(b) Floating or submerged debris, oil or other material may not be present in amounts which may interfere with public rights or interest or which may cause significant adverse impacts to wetlands;

(c) Materials producing color, odor, taste or unsightliness may not be present in amounts which may cause significant adverse impacts to wetlands;

(d) Concentrations or combinations of substances which are toxic or harmful to human, animal or plant life may not be present in amounts which individually or cumulatively may cause significant adverse impacts to wetlands;

(e) Hydrological conditions necessary to support the biological and physical characteristics naturally present in wetlands shall be protected to prevent significant adverse impacts on:

1. Water currents, erosion or sedimentation patterns;
2. Water temperature variations;
3. The chemical, nutrient and dissolved oxygen regime of the wetland;
4. The movement of aquatic fauna;
5. The pH of the wetland; and
6. Water levels or elevations.

(f) Existing habitats and the populations of wetland animals and vegetation shall be maintained by:

1. Protecting food supplies for fish and wildlife,
2. Protecting reproductive and nursery areas, and
3. Preventing conditions conducive to the establishment or proliferation of nuisance organisms.

- **Michigan** includes wetlands explicitly as surface waters of the state but the Region could not find other references to standards for wetlands.
- There are no references to wetlands in **Indiana**'s WQS.
- No reference to wetlands in **Illinois** WQS except for dissolved oxygen:

Section 302.206 Dissolved Oxygen General use waters must maintain dissolved oxygen concentrations at or above the values contained in subsections (a), (b) and (c) of this Section. a) General use waters at all locations must maintain sufficient dissolved oxygen concentrations to prevent offensive conditions as required in Section 302.203 of this Part. Quiescent and isolated sectors of General Use waters including but not limited to wetlands, sloughs, backwaters and waters below the thermocline in lakes and reservoirs must be maintained at sufficient dissolved

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oxygen concentrations to support their natural ecological functions and resident aquatic communities.

Region 6

- No R6 states have wetlands criteria that we could find. NM gave a presentation in 2016 indicating some interest in pursuing development of wetlands WQS, but they have not done anything more on this front since then.

Region 7

- **Nebraska** (adopted in 1993, approved pre-Alaska Rule, but each time that NE updates its numeric criteria they apply the updated numeric criteria to surface waters and wetlands, and we approve as applicable to both): [HYPERLINK "http://deq.ne.gov/RuleAndR.nsf/Pages/117-TOC/%24FILE/wqs07.pdf"]
    - Search "bio"
    - Search "algal," and "nitrogen" for criteria related to nutrients

Region 8

- **Colorado and Montana**: No narrative wetland criteria
- **North Dakota**: [Holly] ND recently adopted (Dec 2018) numeric standards for wetlands:

At 33.1-16-02.1-09 3(f) "Wetlands, including isolated ponds, class 4 lakes not listed in appendix II, sloughs and marshes. The physical and chemical criteria shall be those for class III streams, with exceptions for temperature, dissolved oxygen as listed in g. 6, and other conditions not attributable to municipal, industrial, domestic or agricultural sources."

- **South Dakota**: [Holly] In SD, language for protection of wetlands is as follows:

74:51:01:11. Protection of wetlands as waters of the state. Wetlands are waters of the state and are allowed protection under the provisions of this chapter. The discharge of pollutants from any source, including indiscriminate use of fill material, may not cause destruction or impairment of wetlands except where authorized under § 402 or § 404 of the Federal Water Pollution Control Act as amended to February 4, 1987, or under 40 C.F.R. Parts 257 and 258, Solid Waste Disposal Facility Criteria; Final Rule, as amended to July 1, 1996. The provisions of §§ 74:51:01:06 to 74:51:01:10, inclusive, 74:51:01:12, 74:51:01:34 to 74:51:01:39, inclusive, 74:51:01:52, and 74:51:01:63 to 74:51:01:65, inclusive, apply to all wetlands. In addition, the department shall evaluate wetlands to determine the applicability of such wetlands to the toxic pollutant standards provided in § 74:51:01:55 and Appendix B at the end of this chapter.

- South Dakota's WQS do not identify criteria specific to wetlands; they are surface WQS applicable to all "waters of the state" which are applicable to wetlands. The state surface WQS are narrative and numeric in that they include criteria for conductivity, nitrogen, pH, TDS,

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hydrocarbons and grease. Wetlands are designated the beneficial uses of fish and wildlife propagation, recreation and stock watering ("Class 9" waters).

- **Utah**: [George] Utah has at times applied a generic narrative criterion (see pasted below) to wetlands. Their narrative criterion is generic (applying to all waters of the state – not specific to wetlands) and UDWQ said it has been applied to some previous wetlands problem areas. There is no wetland-specific nor nutrient-specific narrative. There is some UDWQ interest in adding a narrative criterion specifically applicable to wetlands – no sign of any real traction on that though.

R317-2-7 (excerpt)

7.2 Narrative Standards

It shall be unlawful, and a violation of these rules, for any person to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste; or cause conditions which produce undesirable aquatic life or which produce objectionable tastes in edible aquatic organisms; or result in concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by bioassay or other tests performed in accordance with standard procedures; or determined by biological assessments in Subsection R317-2-7.3.

- **Wyoming**: [Maggie] I don't think WY WQS really have what you're looking for or something that would be a narrative criterion for wetlands. They explicitly apply the same criteria that apply to waters to the adjacent wetlands. They also have a "protection of wetlands" statement. It's kinda weird in that it has one foot in 404 and maybe a toe (?) in 402. It's never come up for me:

Section 12. Protection of Wetlands. Point or nonpoint sources of pollution shall not cause the destruction, damage, or impairment of naturally occurring wetlands except when mitigated through an authorized wetlands mitigation process. When approving mitigation, the department may consider both the ecological functions and the wetland value of the disturbed wetland. This section does not apply to wetlands created by point or nonpoint sources, nor are such wetlands required to be maintained through continuation of such discharges. Similarly, any manmade wetlands or enhancements which have been credited in the state wetland banking program are not required to be maintained until the credit is used for mitigation purposes. These areas will, however, be protected from discharges of wastes, toxic substances or chemical pollutants as are any other waters of the state.

Region 9

- Most Regional boards in **California** include wetlands in their definition of surface waters and they get WQS by default. They are named in the basin plan tables as unique waterbodies with uses.
    - The Los Angeles Regional Board has specific objectives for wetland habitat and hydrology.

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- Nothing in **Arizona** or **Hawaii**.

Region 10

- **Washington** has a general statement about wetlands in their WQS:
  The primary means for protecting water quality in wetlands is through implementing the antidegradation procedures described in Part III of this chapter. (i) In addition to designated uses, wetlands may have existing beneficial uses that are to be protected that include ground water exchange, shoreline stabilization, and stormwater attenuation. (ii) Water quality in wetlands is maintained and protected by maintaining the hydrologic conditions, hydrophytic vegetation, and substrate characteristics necessary to support existing and designated uses. (iii) Wetlands must be delineated using the Washington State Wetlands Identification and Delineation Manual, in accordance with WAC 173-22-035.
- Nothing in **Alaska, Oregon** or **Idaho**'s WQS.

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