

Proposed Changes to the Construction General Permit (NDR10-0000)

Patrick Schuett
Division of Water Quality
(701) 328-5210
stormwater@nd.gov



NORTH DAKOTA
DEPARTMENT *of* HEALTH

March 11, 2015

What's covered?

1. Regulatory History
2. State Construction General Permit

Regulatory Background

How we got to where we are today.

Clean Water Act

- 1899 Rivers and Harbors Act
- 1948 Federal Water Pollution Control Act (FWPCA)

Cuyahoga River 1952



Cuyahoga River Fire Nov. 3, 1952. Courtesy of Cleveland Press Collection at Cleveland State University Library.

Clean Water Act

Section 101

Goal was to eliminate discharges of pollutants to navigable waters by 1985

Clean Water Act

Section 301(a)

Makes it unlawful for any person to discharge pollutants except in compliance with Sections: 302, 306, 307, 318, 402, and 404

Clean Water Act

Section 402

1. Established the National Pollution Discharge Elimination System (NPDES)
2. Allowed for delegation to individual States for waters within their jurisdictions.

Clean Water Act

- 1987 Amendment incorporated stormwater
- Phase I – established November 16, 1990
 - Effective December 17, 1990
 - Incorporated:
 1. Medium and large municipal separate storm sewer systems (MS4s)
 2. Industrial activity, including large construction activity (>5 acres)

Clean Water Act

- Phase II – December 8, 1999
 - Effective: February 7, 2000
 - Incorporated:
 1. Small MS4s
 2. Small construction activity (> 1 acre and < 5 acres)
 3. No exposure for industrial activity

ND Authority

- 1975 ND was granted primacy of NPDES
- Established NDCC § 61-28 and NDAC § 33-16

ND Authority

- **NDCC § 61-28-06(2)**

Makes it unlawful for a person to discharge wastes into waters of the state without applying for and receiving a permit issued by the Department.

ND Authority

- **NDCC § 61-28-08(4)**
 1. Establishes the penalty of:
Up to \$12,500 per day per violation

ND Authority

- **NDAC § 33-16-01**
Outlines NDPDES program and procedures
- **NDAC § 33-16-02.1**
Standards of Quality for Waters of the State
Established by Section 303 of the CWA

Definitions to keep in mind

“Waters of the State”

All waters within the jurisdiction of this state, including all streams, lakes, ponds, impounding reservoirs, marshes, watercourses, waterways, and all other bodies or accumulations of water on or under the surface of the earth, natural or artificial, public or private, situated wholly or partly within or bordering upon the state, except those private waters that do not combine or effect a junction with natural surface or underground waters just defined.

Definitions to keep in mind

“Wastes”

All substances which cause or tend to cause pollution of any waters of the state, including dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radiological materials, heat, wrecked or discarded equipment, rock, sand, and cellar dirt and industrial, municipal, and agricultural pollution discharged into any waters of the state.

Definitions to keep in mind

“Pollution”

Manmade or man-induced alteration of the physical, chemical, biological, or radiological integrity of any waters of the state.

Proposed Changes to the Construction General Permit (NDR10-0000)

Permit Coverage and Limitations (Part I)

Part I(A)

- 90 grace period to amend and implement SWPPP to meet the requirements of Part II.
 - Still required to have a SWPPP
 - Still required to have BMPs
 - Still required to perform inspections

Part I(D)

- Removing the requirement for the submittal of the SWPPP at the time of application for:
 1. Projects equal to or greater than 50 acres, and
 2. Projects which have a discharge point located within 2,000 ft, and flow to, an impaired body of water.
- Department may still request a copy of the SWPPP at time of application.
 - Department will notify

Stormwater Discharge Requirements (Part II)

Part II(A)

- Use of chemical treatment as an allowable non-stormwater discharge.
 - Must comply with the requirements provided in Appendix 1(A)(14)
 - Provide 60 days prior to use
 - Must be approved by the department

Part II(C)(1)(f)

- Site map requirements
 - Increasing number of required items from 7 to 19
- Items should have been included on site maps during the previous permit.
 - Provide clarifications on what state inspectors are looking for on a site map

Part II(C)(2)

- Narrative section
- Previous permit required a narrative portion in the SWPPP.
 - Brings the narrative portion of the SWPPP to the forefront instead of having it throughout the permit.
 - Sets out what needs to be included.

Part II(C)(3)(e)

- Employee training
 - Provides clarification on:
 - Who needs to be trained
 - What they need to know

Part II(C)(3)(f)

- Concrete grindings and slurry
 - Describe how they will be managed on-site.
- Wastewater from concrete washout, cleanout, or wash out.
 - Collected in a leak-proof container or leak-proof pit.
 - Containers and pits must be appropriately designed and maintained so that it won't overflow.

Part II(C)(3)(g)

- Dewatering of un-contaminated stormwater, surface water, and groundwater.
 - Draw down from the surface, unless infeasible
 - Cleanest water typically found towards the surface

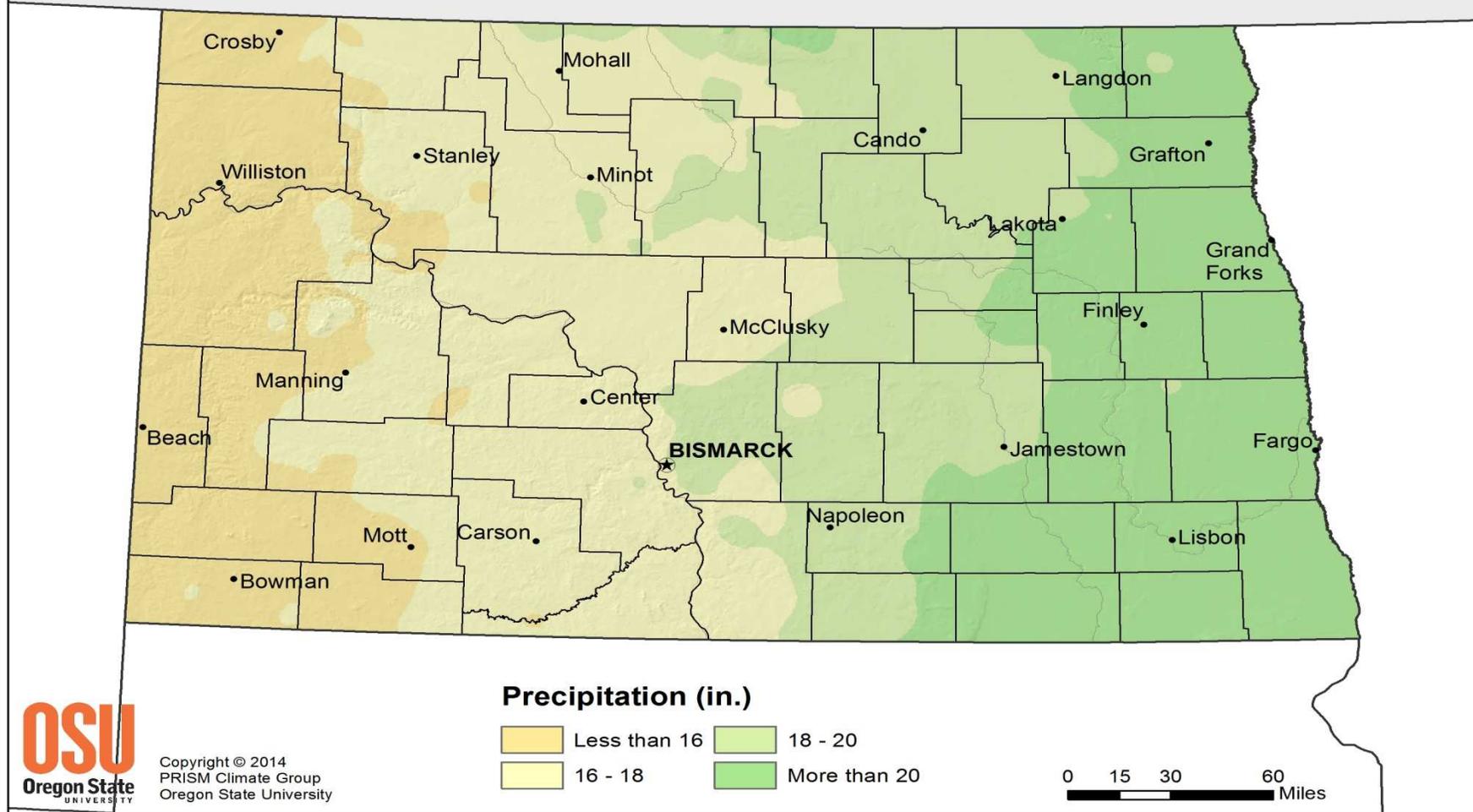
Part II(C)(4)(a)

- Selection of erosion and sediment controls.
- Need to consider:
 - Amount, frequency, intensity and duration of precipitation events.
 - Nature of the stormwater (run-on, runoff, changes due to construction).
 - Channelized flow
 - Soil types
 - Seasonal conditions

Part II(E)

- Final stabilization
- No change
 - Moved the definition of Final Stabilization into this section.
 - Areas with an annual rainfall less than 20 inches was missed in the previous permit.
 - Brings this condition to the forefront instead of being in the definitions section of the permit.

Average Annual Precipitation (1981-2010) North Dakota



Source: <http://www.prism.oregonstate.edu/gallery/view.php?state=ND>

Self Monitoring and Reporting (Part III)

Part III(A)(1)

- Inspections
 - Within 24 hours after any storm event 0.25 inches of rain per 24-hours.
 - During active construction
 - Inspections only during normal working hours
 - Rain gauge used must be representative of the site.
 - Be thoughtful of location, may use a rain gauge that indicates a 0.25 inch rain event, and it may not have rained at the site.
 - Inspection would still be required.

Part III(A)(2)

- Inspections not practical at specified times
- Rain event outside of normal working hours (weekends).
 - Inspection would need to be performed on the next working day
- Site access constraints
 - Document constraints
 - Perform inspection as soon as conditions allow

Part III(A)(4) & (5)

- Inspections and Maintenance Records
- Items were broken out to provide clarification that records for inspections and maintenance need to be retained.
 - Previous permit did require this.

Part III(B)

- Records location
- Specifies that electronic records are acceptable
 - Only if they can be accessed on-site
 - Department recommends not to use your personally owned device, use company devices.

Definitions (Part V)

Part V

- Added definitions
 - Bankfull
 - Indian Country
 - Infeasible
 - Immediately
 - Permanently Ceased
 - Steep Slopes
 - Temporarily Ceased

Part V Important Definitions

- Infeasible

Means not technologically possible or not economically practicable and achievable in light of best industry practices.

- Immediately

Means as soon as practicable, but no later than the end of the next work day, following the day when earth-disturbing activities have temporarily or permanently ceased.

Part V Important Definitions

- Permanently Ceased

Means clearing and excavation within any area of your construction site that will not include permanent structures has been completed.

- Temporarily Ceased

Means clearing, grading, and excavation within any area of the site that will not include permanent structures, will not resume (i.e., the land will be idle) for a period of 14 or more calendar days, but such activities will resume in the future.

Appendix 1

Appendix 1(A)(1)

- Sediment basins (if used)
 - If designed for 2-yr, 24-hr storm event
 - Must provide 1,800 cubic ft of sediment storage per acre drained to the basin
 - If not designed
 - Must provide 3,600 cubic ft of sediment storage per acre drained to the basin
- Draw down must be designed to draw from the surface.

Appendix 1(A)(3)

- Stabilization Requirements
 - All exposed soil areas must be stabilized.
 - Must be initiated immediately where activities have been completed or temporarily ceased on any portion of the site and will not resume for a period of exceeding 14 days
 - Must be completed as soon as practical, but no later than 14 days after initiation of stabilization.

Appendix 1(A)(3)

- Stabilization Requirements
 - Areas with a grade of 3:1 or steeper.
 - Stabilization must be completed as soon as practicable, but no later than 7 days after the initiation of stabilization.
- Removed no unbroken slope length of 75 feet for slopes with a grade of 3:1 or steeper (Appendix 1(7) in current permit).



Appendix 1(A)(4)

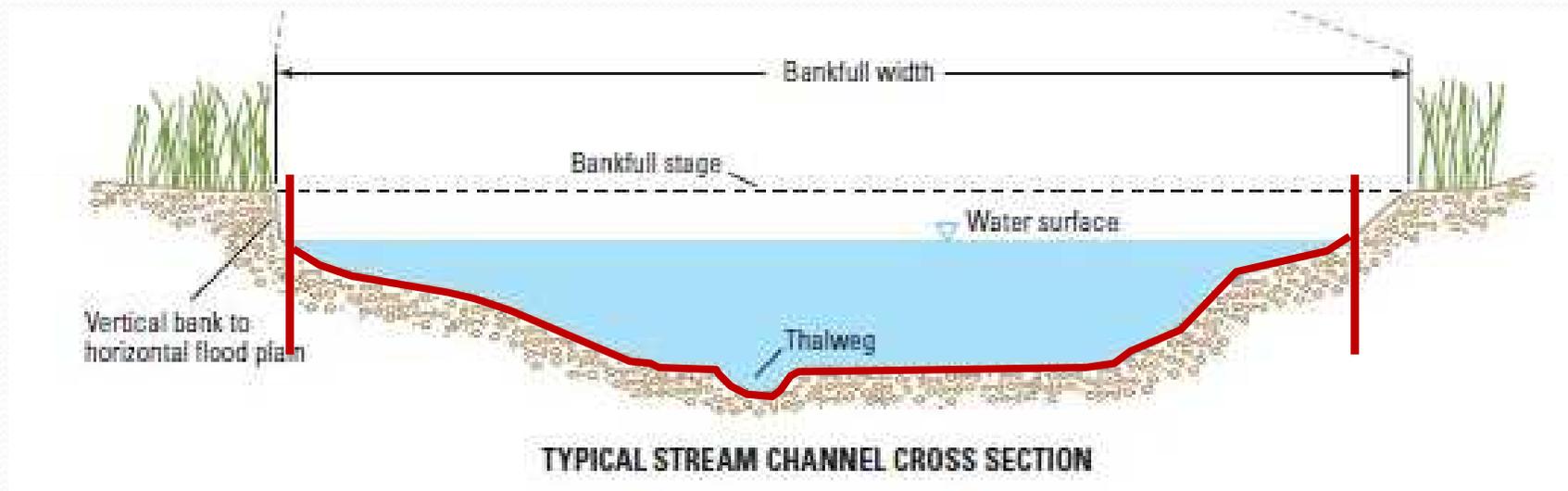
- Temporary stockpiles
 - Stabilized within 14 calendar days

Appendix 1(A)(5)

- Normal Wetted Perimeters
 - Stabilized at least 200 ln ft from property edge, or point of discharge to any surface water.
 - Remaining portion must be stabilized within 14 days for any portions which construction activities have temporarily or permanently ceased.

Appendix 1(A)(5)

- Normal Wetted Perimeter



Source: Lawlor, Sean M., United States Geological Survey, in cooperation with Montana Department of Transportation and the U.S. Department of Agriculture-Forest Service, Lolo National Forest. *Determination of Channel-Morphology Characteristics, Bankfull Discharge, and Various Design-Peak Discharges in Western Montana*. Avail. On-line at: <http://www.usgs.gov/>. 2004.

Appendix 1(A)(6)

- Stream diversions or any temporary or permanent drainage ditch or trench with continuous flow
 - Must be stabilized prior to connection with any surface water.
 - Stabilized to bankfull height.

Appendix 1(A)(7)

- Working in or around surface waters
 - Floating silt curtain does not satisfy down slope and side slope boundary requirements
 - Unless work is on or below the elevation of the surface water.
 - Sediment and erosion controls must be used above the anticipated level of the surface water.

Appendix 1(A)(12)

- Vegetated buffers
 - Removed minimum 25 ft width requirement
 - Minimum of 1 foot of buffer per 5 feet of disturbed area draining to the buffer.
 - Same ratio as previous permit



Photo Courtesy of the NDDOT

Appendix 1(A)(13)

- Natural Buffers
 - Minimum 50 foot natural buffer or equivalent erosion control and sediment controls if project is within 50 ft of a surface water and flows to the surface water.
 - Minimum 100 foot natural buffer if within 100 ft of an impaired surface water.

Appendix 1(A)(14)

- Chemical treatment for sediment removal
 - Permit allows for chemical treatment
 - Must provided department with information listed in sub-paragraphs i to viii 60 days prior to use.
 - Department must approve the use.
 - Discharge of the chemically treated stormwater may not cause a water quality violation and must conform to the dewatering or basin draining requirements.

Appendix 1(A)(15)

- Steep slopes
 - Minimize disturbing steep slopes (grade of 15% or greater)

Appendix 1(B)(1)(a), (b) & (d)

- Control device Maintenance (silt fence, fiber rolls, etc.)
 - Collected sediment removed as it approaches $\frac{1}{2}$ of the above ground capacity of the control.
 - Repairs made prior to the next anticipated rainfall event or within 24 hours of discovery
 - Whichever is sooner
 - Includes flattening (ran over, eaten by critters, etc.)
 - Inlet protection maintenance required when sediment accumulates, the filter becomes clogged, and/or performance is compromised.

Appendix 1(B)(3)

- Track out
 - Tracked out sediment must be onto paved surfaces removed by the end of the work day, shift, or if applicable, within a shorter period of time specified by local authorities or the department.

Appendix 1(C)(2)

- Wash water containments
 - Cleaned out before it reaches 80% of storage capacity
 - Includes solids and liquids

Appendix 1(C)(3)

- Transferring BMPs from surface waters
 - Clean BMPs used in surface waters immediately prior to transportation to prevent the transfer of ANS (aquatic nuisance species).



Questions?