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MEMORANDUM

SUBJECT: Endangered Species Act Considerations for the EPA's Approval of Revisions to North Dakota's WQS

Adopted by the North Dakota State Health Council on May 16, 2018
Submitted to the EPA for review with a letter received on August 8, 2018

FROM: Johanna Miller, Director
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SW Spence Acting for JM

TO: The File

This memorandum documents the U.S. Environmental Protection Agency Region 8's (EPA) determination that its decision to approve revisions to North Dakota's Water Quality Standards (WQS) adopted by the North Dakota State Health Council on March 31, 2017, pursuant to Clean Water Act (CWA) Section 303(c), subject in part to completion of Endangered Species Act (ESA) consultation with the U.S. Fish and Wildlife Service (the USFWS or the Service), is consistent with Section 7(d) of the ESA. This memorandum also discusses the bases for the EPA's conclusions that approval of certain revisions are not likely to adversely affect federally-listed endangered or threatened species or their designated critical habitat, and approval of other revisions is not subject to ESA consultation either because the EPA does not have discretion to alter its action based on listed species and/or designated critical habitat information or because the action does not affect listed species and/or designated critical habitat.

Section 7(a)(2) of the ESA requires federal agencies, in consultation with the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS) and/or the USFWS, to ensure that any action they authorize, fund or carry out is not likely to jeopardize the continued existence of federally-listed threatened or endangered species, or result in the destruction or adverse modification of designated critical habitat of such species. 16 U.S.C. § 1536(a)(2). Consistent with relevant implementing regulations, Section 7 requirements only apply to actions in which there is discretionary federal involvement or control. 50 C.F.R. § 402.03. Also, under the regulations, consultation is only required for actions that "may affect" listed species or critical habitat. 50 C.F.R. § 402.14. Consultation is not required where the action has no effect on such listed species or designated critical habitat.

I. BACKGROUND INFORMATION AND RATIONALE

The CWA § 303(c)(2), requires authorized Indian tribes[1] and states to submit new or revised WQS to the EPA for review. The EPA is required to review and approve, or disapprove, the submitted standards. Pursuant to CWA § 303(c)(3), if the EPA determines that any standard is not consistent with the applicable requirements of the Act, the Agency shall, not later than the ninetieth day after the date of submission, notify the state or authorized tribe and specify the changes to meet the requirements. If such changes are not adopted by the state or authorized tribe within ninety days after the date of notification, the EPA is to propose and promulgate such standard pursuant to CWA § 303(c)(4). The Region's goal has been, and will continue to be, to work closely with states and authorized tribes throughout the standards revision process so that submitted revisions can be approved by the EPA. Pursuant to the EPA's Alaska Rule (40 C.F.R. § 131.21(c)), new or revised state standards submitted to the EPA after May 30, 2000, are not effective for CWA purposes until approved by the EPA.

The adopted changes include:

- Revised aquatic life chronic and acute criteria for cadmium, and corrected aquatic life acute criterion for endrin consistent with the EPA's national criteria recommendations published pursuant to CWA § 304(a);
- Revised criteria for the protection of human health for 82 priority pollutants and five non-priority pollutants (barium, chlorophenoxy herbicide (2-4-D), methoxychlor, nitrates and pH) consistent with the EPA's national criteria recommendations published pursuant to CWA § 304(a);
- A compliance schedule authorizing provision consistent with the EPA's revisions to 40 CFR Part 131 in August 2015; and
- New narrative criteria for nutrients based on EPA's guidance for nutrient criteria development.

The adopted new and revised water quality criteria that are the subject of the action are scientifically defensible, well supported by the record and consistent with CWA requirements. A detailed rationale is included in the action letter.

The EPA's approval of North Dakota's WQS is, in part, subject to Section 7(a)(2) consultation requirements under the Endangered Species Act (ESA). Section 7(a)(2) of the ESA states that "each federal agency … shall …insure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined to be critical…" However, certain parts of the approval of the new or revised WQS will have no effect on listed or proposed, threatened, or endangered species, or are otherwise not subject to ESA consultation. For these actions, no consultation with the U.S. Fish and Wildlife Service is required.

The EPA has a duty under CWA § 303(c) to complete its WQS action in a timely manner. In acting on the state's WQS today, the EPA is fulfilling its legal obligations under this provision of the CWA. In addition, there is a practical benefit to the environment associated with timely completion of this action. This will facilitate effluent limits for NPDES permitting, identification of impaired waters and timely development of TMDLs. The EPA has concluded that there is an overall benefit to the environment

[1] CWA § 518(e) specifically authorizes EPA to treat eligible Indian tribes in the same manner as states for purposes of CWA § 303. See also 40 C.F.R. § 131.8.

associated with timely approval, prior to completion of ESA consultation, of the WQS. By an email message sent to Kevin Shelley, Field Supervisor, USFWS North Dakota Field Office on August 31, 2018, the ESA § 7(a)(2) consultation process with the Service was initiated. In addition, a phone call was made to USFWS field biologist, Jessica Johnson, on January 24, 2018, to advise USFWS that the proposed WQS were being public-noticed and that the state was taking comments on the proposed rules until March 23, 2018. Should the consultation process with the Service identify information regarding impacts on listed species or designated critical habitat that supports amending the EPA's approval, the EPA will, as appropriate, revisit and amend its approval decision for these new or revised WQS.

The EPA's approval decision is consistent with ESA § 7(d) because it does not foreclose either the formulation by the Service, or the implementation by the EPA, of any alternatives that might be determined in the consultation to be needed to comply with Section 7(a)(2). By approving the standards "subject to the results of consultation under Section 7(a)(2)," the EPA has expressly retained the discretion to revise its approval decision if the consultation identifies deficiencies in the standards requiring remedial action by the EPA. The EPA retains the full range of options available under CWA § 303(c) for ensuring WQS are environmentally protective. The EPA can, for example, work with the state to ensure that the state revises its WQS as needed to ensure protection of listed species. In the unlikely event that the Service determines that disapproval of the state's WQS is necessary to avoid jeopardy to listed species or the adverse modification or destruction of designated critical habitat, the EPA retains the authority to revise its decision from an approval to a disapproval. After such a disapproval, the EPA must promptly promulgate superseding federal WQS if the state fails to revise its WQS within 90 days. See CWA §§ 303(c)(3) and (4). The EPA's approval action, therefore, is neither irreversible nor irretrievable. In addition, as described below, the EPA does not believe there will be impacts of concern to listed species or their designated critical habitat during the period prior to the conclusion of ESA consultation.

EPA Water Quality Criteria

To assist states in restoring and maintaining the ecological integrity of the nation's waters, the EPA publishes recommended criteria values pursuant to CWA § 304(a) (Criteria Table).[2] At present, the EPA's principal criteria focus is on protection of human health and aquatic life, and as a result, the EPA's recent publications list two sets of criteria: Ambient Water Quality Criteria for the Protection of Human Health and Ambient Water Quality Criteria for the Protection of Aquatic Life. The Criteria Table includes priority and non-priority toxic pollutants for which the EPA has sufficient information to support derivation of a CWA § 304(a) criterion recommendation. CWA § 303(c)(2)(B) requires that states/tribes adopt numeric criteria for all Section 307(a) toxics (the priority pollutants included in the EPA's Criteria Table) where the EPA has published criteria recommendations and the discharge or presence of Section 307(a) toxics can reasonably be expected to interfere with designated uses. The EPA recommends the adoption of criteria for non-priority pollutants and organoleptic (taste or odor) effects, but does not have the authority to require states/tribes to adopt these criteria. The EPA's WQS regulation requires states/tribes to adopt water quality criteria to protect the designated uses (40 C.F.R. § 131.11(a)(1)). For waters with multiple designated uses, criteria must protect the most sensitive use. States/tribes are encouraged to adopt both numeric and narrative criteria. The EPA's criteria recommendations reasonably predict ambient conditions which will present no unacceptable risk to humans or aquatic life.

[2] See https://www.epa.gov/wqc/national-recommended-water-quality-criteria

It is the state's adoption of EPA's aquatic life criteria that is relevant to the endangered and threatened species issue and the EPA's determination of consistency with Section 7(d) of the ESA addressed in this memorandum. Because there is no toxicological basis for expecting that endangered or threatened species are more sensitive to pollutants than are the surrogates normally used in toxicity tests underlying the derivation of the EPA's criteria recommendations, it is reasonable to assume that the aquatic life criteria, designed to be protective of a broad range of aquatic organisms, should be protective of endangered and threatened aquatic species as well.

II. LISTED SPECIES AND DESIGNATED CRITICAL HABITAT

The table below provides the list of threatened and endangered species in North Dakota. The species list used to populate the table was obtained from the Service's Information for Planning and Consultation (IPAC) website[3] on August 15, 2018. Critical habitat has been designated in North Dakota for Dakota Skipper, Piping Plover, and Poweshiek Skipperling.

Common Name	Scientific Name	Status	Range-North Dakota
Aquatic			
Pallid Sturgeon	*Scaphirhynchus albus*	E	Missouri River and lower Yellowstone River between Ft. Peck Dam and Lake Sakakawea.
Aquatic-Dependent			
Least Tern	*Sterna antillarum*	E	Sparsely vegetated sandbars on the Missouri and Yellowstone Rivers.
Piping Plover	*Charadrius melodus*	T CH	Barren sand and gravel shores; Missouri and Yellowstone Rivers.
Red Knot	*Calidris canutus rufa*	T	Alkaline and freshwater lakes; Missouri River system.
Whooping Crane	*Grus americana*	E CH	Migrates through North Dakota in April to mid-May and September to early November; use primarily wetlands and cropland ponds for roosting, feeding or both.
Terrestrial			
Dakota Skipper	*Hesperia dacotae*	T CH	Moist bluestem prairie or upland prairie in north central North Dakota.

[3] https://ecos.fws.gov/ipac/

Common Name	Scientific Name	Status	Range-North Dakota
Gray Wolf	*Canis lupus*	E CH	Forested areas in north central and northeast North Dakota.
Northern Long-Eared Bat	*Myotis septentrionalis*	T	Forested habitat in the Turtle Mountains and the riparian corridors of the Little Missouri and Missouri Rivers.
Poweshiek Skipperling	*Oarisma poweshiek*	E CH	Tall grass prairie and prairie fens; Dakota Tallgrass Prairie Wildlife Management Area.
Western Prairie Fringed Orchid	*Platanthera praeclara*	T	High quality moist, tall grass prairie; most are found in Sheyenne National Grasslands in southeast corner of the state.

ENDANGERED (E) - Any species that is in danger of extinction throughout all or a significant portion of its range.

THREATENED (T) - Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

CRITICAL HABITAT, PROPOSED CRITICAL HABITAT (CH, PCH) - The specific areas (i) within the geographic area occupied by a species, at the time it is listed, on which are found those physical or biological features (I) essential to conserve the species and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographic area occupied by the species at the time it is listed upon determination that such areas are essential to conserve the species.

The actions evaluated in this memo subject to ESA consultation are the approval of North Dakota's revised aquatic life criteria for cadmium and endrin, new narrative criteria for nutrients, and addition of a provision protecting wetlands, isolated ponds, and class 4 lakes (not listed in Appendix II)[4] using criteria for class III streams with the exceptions for temperature, dissolved oxygen and other conditions not attributable to municipal, industrial, domestic and agricultural sources. Thus, the species that could be affected by the EPA's approval of the new or revised WQS are limited to aquatic and aquatic-dependent species.[5] For this reason, the following species are not affected by the actions discussed later in this memorandum.

The **terrestrial plant species,** Western Prairie Fringed Orchid (*Platanthera praeclara*) listed in North Dakota will not be affected by the EPA's WQS action because it occupies upland habitats, is not aquatic-dependent, and therefore is not exposed to the aquatic resource. This species is assigned a **NO EFFECT** determination and will not be addressed further in this memorandum.

[4] See July 31, 2018 version of NDDH Amendments Chapter 33-16-02.1 showing all revisions (submission file Amendments_to_33-16-02.1_NDDH_Strikeout_Version.pdf).

[5] Species are considered aquatic if at least one of their life stages is spent as a water-breathing organism (i.e., organisms whose respiratory oxygen is gained from that dissolved in the water column). Accordingly, organisms that have a water-breathing stage but later become air-breathers are treated as aquatic species. Species are considered aquatic-dependent if they are not water-breathing organisms, but if a meaningful amount of their diet includes aquatic organisms. A terrestrial species, on the other hand, is a species that will have only limited exposure to "waters of the United States." Definitions were obtained from *Draft Framework for Conducting Biological Evaluations of Aquatic Life Criteria* (EPA, 2006).

The **terrestrial invertebrates,** Dakota Skipper (*Hesperia dacotae)* and Poweshiek Skipperling (*Oarisma Poweshiek)* listed in North Dakota will not be affected by the EPA's WQS action because they occupy upland habitats, are not aquatic-dependent, and therefore are not exposed to the aquatic resource. These species are assigned a **NO EFFECT** determination and will not be addressed further in this memorandum.

The **terrestrial mammal species** listed in North Dakota include the gray wolf (*Canis lupus*) and Northern Long-eared Bat (*Myotis septentrionalis)*. These species will not be affected by the new or revised WQS as these species do not inhabit the aquatic system and would therefore not be exposed to any possible effects from these actions. The only possibility for exposure to the effects of these WQS changes would be alterations to the aquatic prey base that would be exploited by these mammals. The EPA has determined the new or revised WQS are protective of aquatic life. Because the new or revised WQS are not limiting to aquatic life, the prey base available to these species would be unchanged. These species are assigned a **NO EFFECT** determination and will not be addressed further in this memorandum.

Below we provide a brief summary of the occurrence, habitat needs, and critical habitat designations for the remaining listed aquatic and aquatic-dependent species. Information sources included USFWS online species reports, North Dakota Game and Fish Department, and the USFWS IPaC project planning tool.

Endangered Species

Pallid Sturgeon

In North Dakota, pallid sturgeons are most commonly found in the upper Missouri River upstream of Lake Sakakawea, and in the Yellowstone River near the confluence of the two rivers (North Dakota Game and Fish Department 2016b). Pallid sturgeons are generally found in stretches of river with 40 to 90 cubic feet per second velocity. Areas at the end of chutes or sandbars are commonly used, most likely for energy conservation and feeding. The range of depths used varies seasonally, with most fish being found shallow in the spring and deeper in the fall (North Dakota Game and Fish Department 2016b).

The pallid sturgeon experienced a dramatic decline throughout its range since the mid to late 1960s. It was listed as an endangered species throughout its range on September 6, 1990 (55 Fed. Reg. 36641). Nearly all of its habitat has been modified through river channelization and the construction of dams, dikes and levees. Dams are believed to block migration, fragment the population, and alter flow rates and temperature regimes required by the species. Channelization reduces habitat diversity characterized by side channels, chutes, sloughs, and floodplains (USFWS 2013c). These changes blocked the movements of the pallid sturgeon, destroyed or altered its spawning areas, reduced its food sources or its ability to obtain food, and altered water temperatures and other environmental conditions necessary for the fish's survival (USFWS 2018b).

Counties within North Dakota in which the pallid sturgeon is known to or is believed to occur include Burleigh, Dunn, Emmons, McKenzie, McLean, Mercer, Morton, Mountrail, Oliver, Sioux, and Williams. Critical habitat has not been designated for the pallid sturgeon due to insufficient data on the areas critical to its survival (USFWS 2018a).

Least Tern

In North Dakota, the least tern is found mainly on the Missouri River from Garrison Dam south of Lake Oahe, and on the Missouri and Yellowstone Rivers upstream of Lake Sakakawea. Approximately 100 pairs breed in North Dakota. They usually nest in small colonies (less than 20 nests) with nests spaced far apart (North Dakota Game and Fish Department 2016a).

Interior least terns feed on small fish species or fingerlings of larger species. On the Missouri River, prey species include emerald shiner, sand shiner, spotfin shiner, and bigmouth buffalo of appropriate size (Stucker 2012). In the Missouri River drainage, interior least terns have been documented foraging for fish in shallow water habitats less than seven miles from colony sites (Stucker 2012).

The interior population of the least tern was listed on May 28, 1985 (USFWS 1985). Its population has declined due to loss of habitat from dam construction and river channelization. As a result of channelization, irrigation, and dam construction along the Missouri River, the sandbar habitat has been drastically altered, and cold, deep water has changed the forage fish.

Counties within North Dakota in which the least tern interior population is known to or is believed to occur include Burleigh, Dunn, Emmons, McKenzie, McLean, Mercer, Morton, Mountrail, Oliver, Sioux, and Williams. There is no critical habitat designated for interior least terns in North Dakota (USFWS 2018a).

Whooping Crane

Whooping cranes inhabit shallow wetlands that are characterized by cattails, bulrushes, and sedges. They can also be found in upland areas, especially during migration. North Dakota provides important stopover habitat as the few birds left in the wild migrate through in April to mid-May, and September to early November. During migration, whooping cranes use primarily wetlands and cropland ponds for roosting, feeding, or both. Whooping cranes feed mostly on frogs, fish, plant tubers, insects, crayfish, and waste grains during migration.

The historical breeding range of the whooping crane extended from Illinois, northeast through North Dakota, and up to the Northwest Territories. Whooping cranes formerly nested in North Dakota, but no nests have been recorded for more than 100 years. The last nesting record for North Dakota was in McHenry County in 1915. By the 1940s, there were an estimated 21 whooping cranes left in the world. Most were from a flock that wintered at the Aransas National Wildlife Refuge on the coast of Texas. It was later discovered that the birds were breeding in Wood Buffalo National Park in the Northwest Territories (USFWS 2013f). The decline in the whooping crane population was a consequence of hunting and specimen collection, human disturbance, and conversion of the primary nesting habitat to hay, pastureland, and grain production.

Whooping cranes were listed as threatened with extinction in 1967 (USFWS 1967). The final critical habitat rule for the whooping crane was published in the May 15, 1978 *Federal Register* and included designations in Colorado, Idaho, Kansas, New Mexico, Oklahoma, and Texas (USFWS 1978).

About 264 whooping cranes presently occur in the wild. Almost all of these birds are in the Aransas-Wood Buffalo flock. The Aransas-Wood Buffalo population migrates through North Dakota. During the

1999 fall migration, 15 sightings occurred in North Dakota from late August to mid-October. The spring migration occurs from late April to mid-June and fall departure dates occur as late as October. For the winter of 2016-2017, USFWS conducted a survey of whooping cranes in the Aransas-Wood Buffalo population; results indicated 431 whooping cranes inhabited the primary survey area (USFWS 2017). Whooping cranes can show up in all parts of North Dakota, although most sightings occur in the western two-thirds of the State.

North Dakota counties in which whooping crane are known to or is believed to occur include Adams, Barnes, Benson, Billings, Bottineau, Bowman, Burke, Burleigh, Cass, Cavalier, Dickey, Divide, Dunn, Eddy, Emmons, Foster, Golden Valley, Grand Forks, Grant, Griggs, Hettinger, Kidder, Lamoure, Logan, McHenry, McIntosh, McKenzie, McLean, Mercer, Morton, Mountrail, Nelson, Oliver, Pembina, Pierce, Ramsey, Ransom, Renville, Richland, Rolette, Sargent, Sheridan, Sioux, Slope, Stark, Steele, Stutsman, Towner, Traill, Walsh, Ward, Wells, and Williams. There is no whooping crane critical habitat designated in North Dakota (USFWS 2018a).

Threatened Species

Piping Plover

The breeding range of the piping plover extends throughout the northern Great Plains, the Great Lakes and the Atlantic Coast in the U.S. and Canada. North Dakota is the most important state in the U.S. Great Plains for nesting piping plovers (USFWS 2013d). The state's population of piping plovers was 496 breeding pairs in 1991 and 399 breeding pairs in 1996. More than three-fourths of piping plovers in North Dakota nest on prairie alkali lakes, while the remainder use the Missouri River. After severe flood events in 1996 and 1997, Lake Sakakawea remained well below normal levels for five years, exposing miles of gravel beach suitable for nesting plovers. The number of breeding pairs recorded on the lake dramatically increased during that time; 728 adults were recorded in 2004. It is likely that many plovers shifted breeding sites from the U.S. Alkali Lakes Core Area to Lake Sakakawea to take advantage of beach conditions.

The piping plover was listed as threatened in 1985 (North Dakota Game and Fish 2016c). The decline of the piping plover populations is primarily related to commercial, residential and recreational development in and surrounding breeding habitat and hydrologic modifications that disrupt the natural disturbance cycle. Channelization, dam construction, irrigation, and construction of reservoirs on the Missouri River has resulted in drastic alteration of the sandbar habitat for nesting. Current river flows do not mimic the natural river flows instrumental in forming sandbar habitat. High water releases during peak breeding season may flood nests, and too little water over long periods of time will allow the establishment of grasses and other vegetation, making habitat unsuitable for nesting. A wet cycle in North Dakota, beginning in 1993, has resulted in high water levels on alkali lakes and inundating breeding habitat (North Dakota Game and Fish 2016c).

In North Dakota, plovers using the remaining sandbars on the river are susceptible to predation, direct disturbance by people, and water fluctuations as a result of dam operations (USFWS 2013d). Intensifying oil and gas development in North Dakota overlaps with much of the breeding range of piping plovers and there is increasing risk of oilfield contamination to alkali lakes and Missouri River system (North Dakota Game and Fish 2016c). The number of pairs of piping plovers in North Dakota

has increased since listing but recovery plan goals have not been met (North Dakota Game and Fish 2016c).

North Dakota counties in which piping plovers are known to or is believed to occur include Benson, Burke, Burleigh, Divide, Dunn, Eddy, Emmons, Kidder, Logan, McHenry, McIntosh, McKenzie, McLean, Mercer, Morton, Mountrail, Oliver, Pierce, Renville, Sheridan, Sioux, Stutsman, Ward, and Williams (USFWS 2018a). Critical habitat for the piping plover was designated in the September 11, 2002, *Federal Register*, and included designations in the states of Minnesota, Montana, Nebraska, North Dakota and South Dakota. In North Dakota, critical habitat for piping plover is designated in Benson, Bowman, Burleigh, Divide, Dunn, Eddy, Emmons, Kidder, Logan, McHenry, McIntosh, McKenzie, McLean, Mercer, Morton, Mountrail, Oliver, Pierce, Renville, Sheridan, Sioux, Stutsman, Ward, Wells, and Williams counties (USFWS 2018a).

Rufa Red Knot

The rufa red knot's range includes 40 U.S. states, two U.S. territories, two British territories and three French overseas regions, as well as 24 other countries. The rufa red knot migrates through North Dakota in mid-May, and mid-September to October. Both alkaline and freshwater lakes have been used in North Dakota during migration. Red knots have been observed in the Missouri River system as well as sewage lagoons and large permanent freshwater wetlands (North Dakota Game and Fish 2016d). Migrating rufa red knots can complete nonstop flights of 1,500 miles or more, converging on critical stopover areas to rest and refuel along the way.

The rufa red knot was listed as a threatened species under the ESA on December 11, 2014 (USFWS 2014a). Rufa red knots may be particularly vulnerable to climate change, which is likely to affect the arctic tundra ecosystem where the knots breed, coastal habitats due to rising sea levels, food resources throughout the bird's range, and storm and weather patterns.

The rufa red knot's population has experienced a drop of more than 75 percent since the 1980s (Kieffer 2014). While their numbers appear to have stabilized in the past few years, they remain at low levels relative to earlier decades (USFWS 2018c). Expanding oil and gas development in North Dakota overlaps with the rufa red knot's migration range and there is increasing risk of oilfield contamination to alkali lakes and the Missouri River system (North Dakota Game and Fish 2016d). The estimate of the North American population of rufa red knots in 2012 was 42,000; the North Dakota migration estimate is less than 100 (North Dakota Game and Fish 2016d).

North Dakota counties in which the rufa red knot is known or believed to occur include Benson, Burke, Burleigh, Divide, Dunn, Eddy, Emmons, Kidder, Logan, McHenry, McIntosh, McKenzie, McLean, Mercer, Morton, Mountrail, Oliver, Pierce, Renville, Sheridan, Sioux, Stutsman, Ward, Wells, and Williams. There is no critical habitat designated for the rufa red knot in North Dakota (USFWS 2018a).

Biological Evaluation

It is important to understand that for its CWA § 303(c) action the Region has taken a conservative approach in its initial identification of new/revised WQS revisions that may be appropriate for ESA consultation. However, it is possible that certain new/revised standards will have no effect on listed species. Accordingly, it is possible that during the ESA consultation process, additional revisions will be

identified as not subject to ESA consultation requirements. The EPA's biological evaluation will evaluate in greater detail the revisions to WQS that may affect listed species or their critical habitats.

III. THE EPA ACTIONS NOT SUBJECT TO ESA CONSULTATION

The EPA has concluded that its approval of the WQS revisions listed in the table below is not subject to consultation under Section 7 of the ESA. The basis for the EPA's conclusion is summarized and discussed below.

Description	EPA Action	Reason(s) Not Subject to ESA Consultation*					
		1	2	3	4	5	6
Human Health Criteria	Approval		X				
Compliance Schedule Authorizing Provision	Approval			X			
Non-Substantive Revisions	Approval					X	
Provisions EPA is Not Acting	No Action						X
*Reason Codes: 1) Disapproval Action, 2) EPA Lacks Discretion, 3) Requires Additional Rule Change or Site-Specific Action That Requires ESA Consultation, 4) No Occurrence of Listed or Candidate Species, 5) Non-Substantive Revisions, and 6) EPA is Not Acting.							

Reason #1 – Disapproval Action
There are no revisions that fit this category.

Reason #2 - Actions Where EPA Lacks Discretion
This category of revisions generally includes those new or revised WQS that do not pertain to protection of aquatic or aquatic-dependent species (e.g., human health, agriculture) or where the EPA otherwise lacks discretion (e.g., antidegradation). Pursuant to 50 C.F.R. § 402.03, which limits Section 7 consultation requirements to actions over which "there is discretionary Federal involvement or control," the EPA's action on such revisions is not subject to consultation under Section 7 of the ESA.

Regarding the EPA's approval of North Dakota's new and revised human health criteria, the EPA lacks discretion because these are provisions that directly relate to protection of human health. This category of revisions generally includes all revisions to designated uses that are directly related to protection of human health (e.g., water supply), all numeric criteria for the protection of human health, including those assuming human consumption of water and/or those assuming human ingestion of aquatic organisms, and any revisions to recreation uses or to the numeric criteria for the protection of recreation uses. Since the revisions in this category relate solely to the protection of human health uses, they are not material to the level of protection needed to ensure protection of listed or proposed, endangered or threatened species. Rather, the state has an independent duty to adopt WQS that would protect such species. Accordingly, in determining whether to approve or disapprove the revisions in this category under the CWA, the EPA's discretion is limited to determining whether the revisions ensure protection of human health. Because consideration of effects on listed or proposed, endangered or threatened species is not within the EPA's discretion, the EPA's action on the revisions in this category is not subject to the requirements of Section 7(a)(2) of the ESA. The EPA will continue to consider effects to listed species in the context of its review of WQS adopted to protect aquatic life. EPA approval of human-health based WQS does not relieve the state of its responsibility to protect other uses (e.g., aquatic life), particularly where available information is sufficient to allow derivation of protective criteria.

Reason #3 - Actions That Require Additional Rule Change or Site-Specific Action that Triggers ESA Consultation

This category of revisions generally includes provisions that will require a future rule change for there to be a revision to the WQS that apply to a specific waterbody (e.g., authorizing provision for the adoption of site-specific standards, WQS variance policies, new aquatic life use designations that have not been assigned to specific water bodies). It is not possible to determine potential effects of the future implementation of these provisions to listed species at this time since: it is not clear where the new or revised WQS will be applied; the potential occurrence of listed species or their designated critical habitats is unknown; and in some situations, how the WQS will change is still to be determined (i.e., the magnitude, frequency and duration of site-specific standards, interim limits associated with WQS variances). For these reasons, the EPA has determined that its action on these provisions will have **NO EFFECT** on listed species or their designated critical habitat. When the state or tribe implements the provisions in this category by adopting new or revised WQS for specific waterbodies, the EPA will determine at that time if ESA consultation is required for the future EPA action.

North Dakota's current compliance schedule authorizing provision (CSAP) in the North Dakota Pollutant Discharge Elimination System Permit regulations at N.D. Administrative Code 33-16-01-15 provides general authorization for compliance schedules in connection with permitting and certification actions on a case-by-case basis. In August 2015, the EPA revised the WQS regulation (40 C.F.R. Part 131). The EPA's final rule requires that if states intend to authorize the use of compliance schedules for water quality-based effluent limits in National Pollutant Discharge Elimination System (NPDES) permits, the state must adopt a permit compliance schedule authorizing provision and submit it to the EPA for review and action under Clean Water Act § 303. In order to comply with this new requirement, North Dakota added § 33-16-02.1-05 to its WQS regulations to specifically incorporate by reference the compliance schedule authorizing provision in N.D. Administrative Code 33-16-01-15. Consistent with the federal regulation at 40 C.F.R. § 131.15, North Dakota has submitted its provision incorporating by reference the CSAP to EPA for review and approval. Neither the CSAP revisions, nor EPA's approval of the revisions, establishes any actual compliance schedule for any facility or in connection with any action, nor do they identify particular facilities/actions (or particular receiving waters of discharges), if any, that may be subject to compliance schedules. Such compliance schedules can only be granted through a separate State NPDES permit action. It is only when a specific compliance schedule is granted in an NPDES permit for a specific discharge that it is known what facility and water body are involved, what standards and pollutants are at issue, and what are the terms of the compliance schedule in order to have a potential effect on listed species. Therefore, EPA's approval of North Dakota's CSAP has no effect on listed species or designated critical habitat.

Reason #4 – No Occurrence of Listed or Candidate Species

There are no revisions that fit this category.

Reason #5 - Non-Substantive Revisions

Non-substantive revisions to WQS (e.g., introductory paragraphs that are informational but do not alter the intended level of protection) have no potential to affect listed or candidate species. Therefore, the EPA action on such revisions is not subject to consultation under Section 7 of the ESA. The list of non-substantive provisions the EPA is approving is included in the action letter.

Reason #6 - EPA is Not Acting

This category includes new or revised WQS where the EPA is not taking an action pursuant to CWA § 303(c) at this time. The list of provisions the EPA is not acting on are included in the action letter.

IV. REVISIONS APPROVED SUBJECT TO ESA CONSULTATION

By an email dated August 31, 2018, the ESA § 7(a)(2) informal consultation process with the Service was initiated for the revisions to North Dakota's WQS. The EPA intends to approve the following revisions subject to completion of the ESA consultation.

Revised acute aquatic life criteria for endrin and cadmium, a new narrative "free from" criterion for nutrients, and addition of a provision protecting wetlands, isolated ponds, class 4 lakes (not listed in Appendix II), and sloughs and marshes, using the physical and chemical criteria for class III streams with the exceptions for temperature, dissolved oxygen and other conditions not attributable to municipal, industrial, domestic and agricultural sources, are consistent with the EPA's national criteria recommendations published pursuant to CWA § 304(a).

The state's adoption of the EPA's recommended aquatic life criteria is consistent with the requirements of the CWA and the EPA's implementing regulation at 40 C.F.R. Part 131. The effect of EPA approving North Dakota's new narrative nutrient criteria is to make these criteria "the applicable water quality standards for purpose of the [CWA]" 40 C.F.R. § 131.21(c). The revised narrative criteria further clarify the state's desired level of protection to support aquatic life designated uses and detail their plans to assess attainment of the narrative standards. As discussed in Section I of this memo, there are strong reasons to consider water quality criteria that are consistent with CWA requirements to be protective of endangered and threatened aquatic species. The EPA's approval is expected to provide beneficial effects to the aquatic ecosystem, including listed aquatic and aquatic-dependent species and their habitat. Accordingly, the EPA has determined its approval of North Dakota's new aquatic life criteria for cadmium, revised acute aquatic life criterion for endrin, and new narrative criteria for nutrients, is **NOT LIKELY TO ADVERSELY AFFECT** listed species or their habitat.

V. CONCLUSION

For all of the reasons discussed in this memorandum, the EPA believes its approval of certain new or revised elements of North Dakota's WQS subject to the outcome of ESA § 7(a)(2) consultation is consistent with Section 7(d) of the ESA. As described above, EPA also believes that its approval of other elements of North Dakota's WQS is not subject to ESA § 7(a)(2) requirements.

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