Background.

The USEPA and Army Corps of Engineers, having rescinded the 2015 Clean Water Rule defining waters of the United States (WOTUS) consistent with the best available, established science as well as long-standing definitions used by those agencies, is now proposing a rule that would remove many traditionally protected waters including headwater streams and many wetlands (including non-floodplain, geographically isolated, and potentially even some riparian or floodplain wetlands) from protection as WOTUS. This change would have implications for water quality nationwide including many of the waters SFS members study.

Purpose.

This overview provides 3 things:
1. A brief overview of major proposed changes upon which members can consider commenting;
2. Instructions for submitting a comment letter to EPA about this proposed rule via the Federal eRulemaking Portal;
3. A brief history of WOTUS rulemaking since 2014, if interested or for class use.

Why Submit a Personal Comment Letter?

Previously, SFS provided a letter for members to sign onto or form letters, so why send a personal letter and not a form letter? First, experience and advice shows that personalized comment letters carry more weight than form letters or multi-signatory letters. The latter are both considered, essentially, “one” letter. Second, a personal letter allows each person to add specific arguments, points that, in totality, provide greater argument than one narrow set of arguments. Third, procedural rules require that Agency consider and in many cases provide response to every unique comment made.

Of course, SFS as a society will be submitting a comment letter, as we have on every phase of WOTUS rulemaking since 2014. However, personal letters from as many members as possible is important. The SFS letter will only be considered one letter, regardless of how many members it represents.

Comment due date: April 15, 2019
Major Proposed Changes Upon Which to Consider Commenting:

Members are encouraged to voice their personal opinions on the rule in as simple or detailed a way as desired. The more detailed arguments you can make, the better – especially incorporating specific studies.

At a minimum:
- Please indicate whether your support or oppose the proposed rule (SFS will oppose the rule);
- Mention a general summary of why: e.g., SFS will argue that replacing the significant nexus standard of the 2015 Clean Water Rule based on EPA’s comprehensive scientific review (based on review of more than 1,200 studies from the peer-reviewed scientific literature, see EPA ORD Connectivity Report and below) with the narrow Scalia interpretation in the Rapanos decision is not based on sound science or the best available peer-reviewed information, and will, therefore, exclude from protection many of the streams and wetlands that directly affect the physical, chemical and biological quality of the nation’s primary jurisdictional waters making it impossible to achieve the objectives of the Clean Water Act.

In addition:
It would be very helpful for you to also provide comments on specific proposed changes. The following provides a summary of major elements from the proposed rule on which the agencies request comment that are likely important to SFS members. Members should feel free to incorporate specific comments on all or some of these requested comments using your own words and details.

Tributaries
- The agencies propose and solicit comment on excluding ephemeral streams (that only flow in direct response to precipitation) from protection as WOTUS. Moreover, they solicit comment on even excluding upstream perennial/intermittent streams that flow via an ephemeral channel to a downstream jurisdictional water. Lastly, the even solicit comment on only considering perennial streams as tributaries.
  - Implication: all ephemeral streams that only flow in response to precipitation regardless of the duration or frequency of that flow, would

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2 The actual proposed rule included some 95+ specific comment requests on the technical portion that are condensed here. Interested members should see the proposed rule (84 FR 4154) if interested in reading the rule with all the specific comment solicitations.
not be protected; It is possible that all intermittent streams would not be protected either.

- Recommend: Keep protections for all ephemeral, intermittent, and perennial streams. EPA’s own science, including the single most comprehensive, thoroughly peer reviewed scientific review of the topic ever written, concluded that “All tributary streams, including perennial, intermittent, and ephemeral streams, are physically, chemically, and biologically connected to downstream rivers via channels and associated alluvial deposits where water and other materials are concentrated, mixed, transformed, and transported.” (United States EPA 2015). The overwhelming evidence from that study and decades of research indicate that streams in a watershed stream network that bear channel features, regardless of flow, contribute water and sediment downstream, store and transform materials including pollutants, and provide habitat for a wide range of aquatic life. [Feel free to provide specific details or citations]

- The agencies propose and solicit comment on only protecting streams that are intermittent or perennial in a typical year. Also solicit whether there should be a specific duration for intermittent other than their “during certain times of the year” (e.g., 3 months)
  - Implication: Ecologically/water quality meaningful time scales are ignored. Waters must be perennial or intermittent in a “typical year”. So, a stream that is ephemeral most years and intermittent/perennial some years, would not be protected. This could threaten protection for even many intermittent and perennial streams. Requiring a certain duration also ignores scientifically meaningful connections and would require needlessly complex implementation.
  - Recommend: “Typical year” has no scientific basis for connections that are meaningful scientifically. Rather than an arbitrary temporal dimension, protect all tributaries including ephemeral and use long tested and scientifically accepted geomorphic characteristics of bed, bank and ordinary high-water marks; such characteristics are appropriate, scientifically defensible indicators of a channel that carries water sufficiently to contribute to downstream physical, chemical, and biological conditions on a timeframe that is scientifically relevant and not a temporal contrivance. Moreover, a specific duration of intermittency does not have a scientific basis, but only an arbitrarily temporal one.

- The agencies propose and solicit comment on no longer using geomorphic features of bed, bank, and ordinary high-water mark to define channels to protect.
  - Implication: Instead of clarifying or making determinations easier, excluding geomorphic features makes it harder and more arbitrary.
Recommend: Use long tested and scientifically accepted geomorphic features of bed, bank and ordinary high-water marks; such characteristics are appropriate, scientifically defensible indicators of a channel that carries water of a sufficiently permanent duration to contribute to downstream physical, chemical, and biological conditions on a timeframe that is scientifically relevant and not a temporal contrivance. Such features are not only more scientifically defensible than defining hydrology for every tributary, but also far more easily implemented.

Lakes and Ponds
- The agencies propose and solicit comment on whether a specific category of lakes and ponds is needed.
  - Implication: The agencies would need to identify lakes and ponds and further constrain which lakes and ponds are protected.
  - Recommend: Recognizing the network topology of watersheds and to limit complexity of implementation, keep lakes and ponds within the tributary definition.

  - The agencies propose and solicit comment on excluding lakes and ponds connected to downstream jurisdictional waters by less than intermittent flow in a typical year.
    - Implication: Lakes and ponds with shallow subsurface or less than annual intermittent flow would not be protected.
    - Recommend: Lakes and ponds, other than terminal waters, are implicitly connected to the watershed network and should be protected as tributaries. The presence of standing water and connection by channels with obvious channel features or sufficient evidence of connectivity for protection. Temporal durations are arbitrary temporal contrivances with no scientific basis relevant to importance. The presence of physical features of connection (e.g., bank, bed, and ordinary high water mark) is sufficient to demonstrate connection with water quality implications.

Wetlands
- The agencies propose to replace adjacent with abut.
  - Implication: The agencies would require a wetland abut (to touch at least one point or side of) rather than be adjacent to another jurisdictional water
  - Recommend: Keep the previous full definition of adjacent as also including “next to”, “to lie near”, and “close to”).

- The agencies proposed and solicit comment on “wetlands that do not abut or have a direct hydrologic surface connection to other waters of the United States in a typical year are not inseparably bound up with the waters of the United
States and are more appropriately regulated as land and water resources of the States and Tribes pursuant to their own authorities”.

- Implication: The agencies would exclude a wide range of adjacent non-floodplain, geographically isolated, and even potentially some riparian and floodplain wetlands with a variety of obvious water quality and ecological connections to jurisdictional waters.

- Recommend: The proposed terms lack a scientific basis. As detailed in the EPA Connectivity Report\(^1\), wetlands neighboring other waters of the United States but not necessarily abutting or having a direct hydrologic surface connection in a typical year (e.g., many floodplain wetlands), often exhibit functional connection to other WOTUS and merit protection. The temporal dimension of a typical year is an undefended, artificial and arbitrary temporal construct without scientific meaning or importance. Wetlands with less than annual surface connectivity have proven impacts on water quality for jurisdictional waters based on long settled science reviewed in the EPA Connectivity Report.

- The agencies propose and solicit comment on wetlands requiring a direct intermittent or perennial surface hydrologic connection in a typical year; they also solicit comments on an option to exclude wetlands separated by a physical barrier that even have a direct surface connection (e.g., riparian or floodplain wetlands behind a levee).

- Implication: The agencies would exclude a wide range of non-adjacent, geographically isolated, and even potentially some riparian and floodplain wetlands and other adjacent wetlands with subsurface or less than annual surface connections to other waters.

- Recommend: By allowing abutting waters without surface connections to be jurisdictional, the agencies clearly acknowledge the widely accepted and settled scientific conclusion that surface connections are unnecessary for wetlands to influence downstream or adjacent waters, yet ignore this for non-abutting wetlands. By also potentially requiring a direct surface connection and excluding connections such as levee overtopping, they would exclude some riparian or floodplain wetlands. Moreover, by excluding anything other than a 1-year floodplain, they exclude a large number of functionally important riparian and floodplain wetlands. Such decisions would be arbitrary and scientifically indefensible. The Agencies should revert to the 2015 WOTUS wetland definition or provide a proposed Rule that is logically consistent with settled science on this issue.

**Interstate Waters**

- The agencies propose and solicit comment on removing the term “interstate waters”, leaving only “navigable waters”
Implication: streams that cross state boundaries that are not navigable would be left vulnerable; also, states that choose more stringent protections may not be protected from upstream states not wishing to protect streams that flow into more protective states

Recommend: Leave “interstate waters” in.

Impoundments

• The agencies propose and solicit comment on whether impoundments (including of wetlands that become ponds) should be jurisdictional if they release water downstream less than intermittently.
  o Implication: impoundments that are clearly part of a network but that release water downstream via shallow subsurface or only during storms, even if they were previously intermittent, would not be protected.
  o Recommend: protect all impoundments regardless of flow status, by nature of being explicitly part of a network, the term “impoundment” inherently indicates such waters contribute water and pollutants downstream, frequently retaining and protecting downstream waters from pollutants like sediment and nutrients.

General

• The agencies propose and solicit comment on tools for identifying waters impacted by the rule (interstate, intermittent, ephemeral, etc.)
  o Implication: The agencies are unable to map affected waters.
  o Recommend: At a time when the availability of geographic tools is at its most advanced, it defies logic that the agencies are unable to map (using any of a variety of available tools and/or empirical models) those channels likely to be ephemeral, intermittent and perennial nationwide. The agencies don’t even mention many of the tools developed by their own scientists (e.g., NHD) as well as others. Moreover, the expressed inability to have even attempted such an effort means the EPA/ACOE have no idea of the potential impact of their rule.

• The agencies ignore the overwhelming science, including their own science.
  o Implication: The agencies proposed rules excluding ephemeral streams, riparian and floodplain wetlands, other adjacent, and many non-adjacent wetlands ignore scientific consensus including their own extensively peer-reviewed scientific reports. As a result, their decisions bear the mark of being technically arbitrary at best and intentionally counter to prevailing science at worst.
  o Recommend: Continue to use EPA’s own comprehensive research, including their own Connectivity Report ([United States EPA, 2015](https://www.epa.gov/wetlands/2015-rule-fact-sheets)), which provide unequivocal scientific arguments for the protection of those waters described as WOTUS in the 2015 Rule.
Factoids that may help with an introduction or impact statement:

- Headwaters comprise 79% of the total length of rivers in the US, drain more than 70% of land area (Colvin et al 2019)\(^3\), and supply clean water for 1/3 of the US population (US EPA 2009)\(^4\).
- Ephemeral streams may comprise 96% of stream systems (Meyer et al 2003)\(^5\).
- Wetlands located outside of floodplains (including vernal pools, prairie potholes, etc.) occupy 6.59 million hectares (Lane and D’Amico 2016)\(^6\). As a point of comparison, the state of Maine occupies 9.2 million hectares.
- On an annual basis, headwater streams provide $15.7 trillion USD and wetlands outside of floodplains/geographically isolated wetlands provide $673 billion USD in ecosystem services for conterminous US and Hawaii (Creed 2017)\(^7\).
- Commercial and recreational fisheries contributed over $208 billion in economic impact and 1.62 million jobs in 2015 (NMFS 2015)\(^8\). Headwaters have both direct and indirect impacts on the health of fisheries.
- Nationally, trout anglers spent $3.5 billion on their pursuits, supported over 100,000 jobs, and had a $10 billion economic impact, including $1.3 billion in federal and state tax revenues in 2006 (USFWS 2014)\(^9\) and 30.1 million freshwater anglers spent $29.9 billion on freshwater fishing trips in 2016 (USFWS 2016)\(^10\).

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Instructions for Submitting a Comment Letter.

Go to:
• https://www.regulations.gov/comment?D=EPA-HQ-OW-2018-0149-0003. There you will have the option to paste a comment letter or upload (preferred) a letter.

Please identify the following in your subject heading:
• Docket ID number: EPA-HQ-OW-2018-0149-0003
• Subject Heading: Revised Definition of Waters of the United States
• Federal Register date and reference: February 14, 2019 84 FR 4154

Do:
• Remember to include your name and credentials;
• Make specific, clear, concise, scientific arguments;
• Provide citations or supporting information (include appendices if you’d like – see link below for instructions);
• Use the term arbitrary in describing decisions not based on science
• Submit comment by the deadline (April 15, 2019)

Don’t:
• Use profanity;
• Make ad hominem attacks;
• Miss the comment deadline (April 15, 2019)

Consider:
• A carbon copy to your legislators:
  o It is always a good idea to send a carbon copy to your legislators (find your senators email address here: https://www.senate.gov/senators/contact; Find your representatives email address here: https://www.house.gov/.
  Sadly, these are forms and you’ll need to paste your letters into the comment section – sorry, it is somewhat a pain to contact representatives electronically...we can’t find a full list of direct email addresses to use from a email program)

Additional tips for submitting comment letters:
https://www.regulations.gov/docs/Tips_For_Submitting_Effective_Comments.pdf
**A Brief History on WOTUS Rulemaking:**

It may be helpful to briefly review a partial timeline of WOTUS rulemaking and some relevant legal/policy events related to WOTUS (next page). The Clean Water Rule (CWR) was proposed by the affected “Agencies” (USEPA and US Army Corps of Engineers) in April, 2014. The purpose of this Rule was to clarify what exactly are Waters of the United States (WOTUS) covered by the Clean Water Act (CWA). The term WOTUS appears several times in the CWA, but was never defined. This led to a series of lawsuits that clarified some dimensions of what are WOTUS, but also led to a lot of vague concepts (e.g., waters with a significant nexus are WOTUS) that were impractical/onerous in implementation. The Agencies finalized their 2014 proposed rule in June 2015 as the 2015 CWR.

Many lawsuits were filed. The 2015 CWR was stayed in 13 states by a US district court in August 2015 the day before it was to go into effect and then stayed nationwide in October 2015 by a Federal appeals court. It was only in effect in 37 states for 6 weeks. The election happened and on February 2017, the President signed an executive order to first repeal the 2015 CWR (Phase I) and to replace it (Phase II) with language more akin to Justice Scalia’s interpretation of WOTUS from the court case that set much of this in motion. In July 2017, the agencies proposed Phase I – repealing the 2015 Rule and recodifying the regulatory language that existed prior to that (i.e., to go “back to the way things were”). Public comments closed on that proposed repeal rule in September, 2017.

In the interim, the Supreme Court was hearing arguments that the Court of Appeals had no authority to stay the rule nationwide and there was concern that if the plaintiffs won, the 2015 CWR would go back into effect. So, last November, the Agencies proposed to amend the 2015 CWR to add an applicable date for some time in 2020 – ostensibly extending the date the CWR would be applicable until after they could get through the process of repealing it. That rule was finalized in February of 2018 and extended the applicable date of the CWR until February 6, 2020.
A brief partial timeline of WOTUS rulemaking (brown) and some relevant legal/other policy events

- April 21, 2014 – Agencies (EPA and Army Corps) propose Clean Water Rule (CWR): Definition of “Waters of the United States” (SFS Comments)
- May, 2015 – Senate considered bill overriding 2015 CWR (SFS Comments); bill not passed
- June 25, 2015 – Final CWR (August 28, 2015 effective date)
- August 27, 2015 – US District Court for ND stops application in 13 states (ND, AK, AZ, AR, CO, ID, MO, MT, NE, NV, SD, WY)
- October 9, 2015 – US Court of Appeals 6th District stays CWR nationwide
- February 28, 2017 – Presidential executive order to repeal (Phase I) and replace (Phase II) 2015 CWR (SFS Signs on to Amicus Curiae brief to 6th district)
- July 27, 2017 – Agencies propose rule removing 2015 CWR and recodifying language that existed before (i.e., back to the way things were) (Phase I) (SFS Comments)
- November 22, 2017 – Agencies propose a 2020 applicability date for 2015 CWR (delaying CWR until they can remove it. (SFS Comments)
- January 22, 2018 – Supreme Court rule 6th circuit Court did not have jurisdiction to review challenges
- February 6, 2018 – Final rule changing applicability date of 2015 CWR to February 6, 2020
- February 28, 2018 – 6th district court vacates nationwide stay on 2015 CWR
- June 8, 2018 – US District Court for GA stops application in 11 more states (GA, AL, FL, IN, KS, NC, SC, UT, WV, WI, and KY)
- July 12, 2018 – Supplemental notice of public rulemaking to clarify July 27, 2017 proposed rule repealing CWR and recodifying preexisting language. (SFS no need to comment – July 27, 2017 comments still apply)
- August 16, 2018 – 6th district court invalidates February 6, 2018 rule delaying applicability of 2015 CWR; rule now in effect in 24 states and not in another 24 states where it is stayed pending lawsuits.
- September, 2018 – Court decisions block 2015 CWR implementation in IA, TX, MS, and LA as well.
- November 26, 2018 – Washington District Court vacates 2015 CWR stay nationwide
- December 4, 2018 – South Carolina District Court stated it already vacated 2015 CWR stay nationwide (US government appealed Feb 2019)
- February 14, 2017 – Proposed rule Revised Definition of Waters of the United States (Phase II) (SFS to Comment)

Turns out that changing the applicable date was prudent for the current Agencies, because the Supreme Court, indeed, ruled in January of 2018 that the 6th Circuit Court did not have jurisdiction and the 6th Circuit did eventually remove its nationwide stay, but only after the applicable date has been extended; as you can imagine, that applicable date rule is also being challenged in court.

The agency received 680,000 comments on the July 2017 proposed rule to repeal and recodify the 2015 CWR and they still have not finalized that rule. When an agency feels it has left out important, relevant information or, often, when it wants to get into record arguments it would like to later make in court, it will publish a Supplemental notice. The Agencies did that on July 12, 2018 and the comment period for that Supplemental notice ended on August 13, 2018. That supplemental notice read very much like legal
arguments and provided specific arguments on many of the major comments the Agencies received. The current Administration’s 2017 proposed rule, to which this Supplemental notice applies, repeals the 2015 CWR entirely and replaces it with the regulatory language that existed before the 2015 CWR was passed.

This would mean that Waters of the US would be defined using the 1986/1988 regulatory definitions:

40 CFR 230.3(s) The term waters of the United States means:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

2. All interstate waters including interstate wetlands;

3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
   1. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
   2. (From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
   3. Which are used or could be used for industrial purposes by industries in interstate commerce;

4. All impoundments of waters otherwise defined as waters of the United States under this definition;

5. Tributaries of waters identified in paragraphs (s)(1) through (4) of this section;

6. The territorial sea;

7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (s)(1) through (6) of this section; waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area’s status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.
Also, the Agencies would go back to using the 2008 guidance on how the Agencies interpret Clean Water Act jurisdiction following the 2006 Rapanos v US case that set a lot of this in motion.

Again, what the proposed 2017 Rule means is that the EPA and Army Corps would go back to interpreting WOTUS the way they used to and the way they have been doing in the interim while all this works out in the courts. That is the end of Phase I.

Even though the Phase I repeal rule has not been completed, on February 14, 2019 the Agencies implemented Phase II and proposed a completely new revision of what defines Waters of the United States – which is the current proposed rule. Here, they are proposing a new Definition of WOTUS consistent with Justice Scalia’s narrow decision in \textit{Rapanos}, an important case. This proposed rule is a much more conservative definition than the 2015 CWR and even more conservative than pre-2015 WOTUS determination guidance used by the Agencies. Among other things, it would remove ephemeral streams, some intermittent streams, many riparian and floodplain wetlands, and most all isolated wetlands from jurisdiction (and therefore protection) under the CWA.

Some potentially useful links:

EPA website on WOTUS Rulemaking: https://www.epa.gov/wotus-rule

ABA website on WOTUS Rulemaking and lawsuits: https://www.americanbar.org/groups/environment_energy_resources/resources/wotus/