WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Wyoming Surface Water Quality Standards

Primary Topics/Issues

Triennial Review Stakeholder Group
March 11, 2021

Triennial Review Topics

- Classification System/Designated Uses
- Recreation Designated Uses and Water Quality Criteria
- “Human Health” Criteria
- Turbidity Criteria
- Implementation Policies

	Drinking Water	Game Fish	Non-Game Fish	Fish Consumption	Other Aquatic Life	Recreation	Wildlife	Agriculture	Industry	Scenic Value
1*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2AB	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2A	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
2B	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2C	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2D	No	When Present	When Present	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3A	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
3B	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
3C	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
3D	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
4A	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
4B	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
4C	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes

Classification System/Designated Uses

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Classification System/Designated Uses

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

	Drinking Water	Cold Water / Game Fish / Warm Water	Non-Game Fish	Fish Consumption	Other Aquatic Life	Primary Contact / Recreation / Secondary Contact	Wildlife	Agriculture	Industry	Scenic Value
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3C	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
3D	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
4A	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
4B	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
4C	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes

Classification System/Designated Uses

- Uses are bundled together

	Drinking Water	Cold Water Game Fish Warm Water	Non-Game Fish	Fish Consumption	Other Aquatic Life	Primary Contact Recreation Secondary Contact	Wildlife	Agriculture	Industry	Scenic Value
1*	Yes	CW Yes WW	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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3D	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
4A	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
4B	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
4C	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes

Classification System/Designated Uses Issues

- Complicated, cannot add or modify uses very easily

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Classification System/Designated Uses Issues

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

- Classifications assign uses, but also antidegradation protections

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Tier 3	1*	Yes	CW Yes WW	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	2AB	Yes	CW Yes WW	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Tier 2	2A	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
	2B	No	CW Yes WW	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	2C	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	4B	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
	4C	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes

Classification System/Designated Uses Issues

- No differences in uses between many of the classes, no differences in criteria

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Classification System/Designated Uses Issues

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

- No differences in uses between many of the classes, no differences in criteria

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4C	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes

Classification System/Designated Uses Issues

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

- Multiple aquatic life uses

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1*	Yes	CW Yes WW	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2AB	Yes	CW Yes WW	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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4A	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
4B	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
4C	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes

Classification System/Designated Uses Issues

- Differences in designated uses, no differences in water quality criteria

2B warm water	2C
Warm water game fish	
Nongame fish	Nongame fish
Aquatic life other than fish	Aquatic life other than fish

Classification System/Designated Uses Issues

- Difficult to add new designated uses to existing system, requires many new classes of waters
  - Updating Wyoming's temperature criteria requires adding aquatic life use tiers

CHANNEL CATFISH

LAKE TROUT
Light-colored spots on a dark background. Distinguished from brook trout by a deeply forked tail and absence of red or pink spots.

Classification System/Designated Uses Considerations

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

- How should Wyoming's designated uses be structured?

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Recreation Uses

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Recreation Uses

(xlv) "Primary contact recreation" means any recreational or other surface water use that could be expected to result in ingestion of the water or immersion (full body contact).

(xlviii) "Secondary contact recreation" means any recreational or other surface water use in which contact with water is either incidental or accidental and that would not be expected to result in ingestion of the water or immersion.

Recreation Uses

(xxi) "Full body contact water recreation" means any recreational or other surface water use in which there is contact with the water sufficient to pose a significant health hazard (i.e. water skiing, swimming).

Recreation Uses: Issues

- Primary contact recreation: any use expected to result in ingestion or immersion (full body contact)

- Full body contact: any use where contact is sufficient to pose a significant health hazard (i.e., water skiing, swimming)

Recreation Uses: Issues

- Primary contact recreation: any use expected to result in ingestion or immersion (full body contact)

- Full body contact: any use where contact is sufficient to pose a significant health hazard (i.e., water skiing, swimming)

Recreation Uses: Issues

- Secondary contact recreation: any use where contact is incidental or accidental and not expected to result in ingestion or immersion

Recreation Uses Considerations

- How should Wyoming's recreation uses be defined given the water quality criteria we have to protect the uses?




Recreation Criteria

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Recreation Criteria

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Section 27. *E. coli* Bacteria.

(a) Primary Contact Recreation. In all waters designated for primary contact recreation, during the summer recreation season (May 1 through September 30), concentrations of *E. coli* bacteria shall not exceed a geometric mean of 126 organisms per 100 milliliters during any consecutive 60-day period. Primary contact waters are identified in the *Wyoming Surface Water Classification List*.

(b) Secondary Contact Recreation. In all waters designated for secondary contact recreation and in waters designated for primary contact recreation during the winter recreation season (October 1 through April 30), concentrations of *E. coli* bacteria shall not exceed a geometric mean of 630 organisms per 100 milliliters during any consecutive 60-day period. Waters will be designated for secondary contact recreation through the reclassification and use attainability analysis process outlined in Sections 33 and 34 of these regulations. Secondary contact waters are identified in the *Wyoming Surface Water Classification List*.

(c) Single-sample Maximum Concentrations. During the summer recreation season, on all waters designated for primary contact recreation, the following single-sample maximum concentrations of *E. coli* bacteria shall apply:

(i) High use swimming areas - 235 organisms per 100 milliliters

(ii) Moderate full body contact - 298 organisms per 100 milliliters

(iii) Lightly used full body contact - 410 organisms per 100 milliliters

(iv) Infrequently used full body contact - 576 organisms per 100 milliliters

Single-sample maximum values may be used to post recreational use advisories in public recreation areas and to derive single-sample maximum effluent limitations on point source discharges. An exceedance of the single-sample maxima shall not be cause for listing a water body on the State 303(d) list or development of a TMDL or watershed plan. The appropriate recreational use category (i through iv, above) shall be determined by the administrator as needed, on a case by case basis. In making such a determination, the administrator may consider such site-specific circumstances as type and frequency of use, time of year, public access, proximity to populated areas and local interests.

- Primary Contact: 60-day geometric mean of *E. coli* not to exceed 126 organisms per 100 mL

Recreation Criteria

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

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Recreation Criteria

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- Single sample maxima for primary contact waters
  - Values determined by Administrator
  - Used to post recreational use advisories
  - Single sample for point sources

Recreation Criteria Issues

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Section 27. *E. coli* Bacteria.

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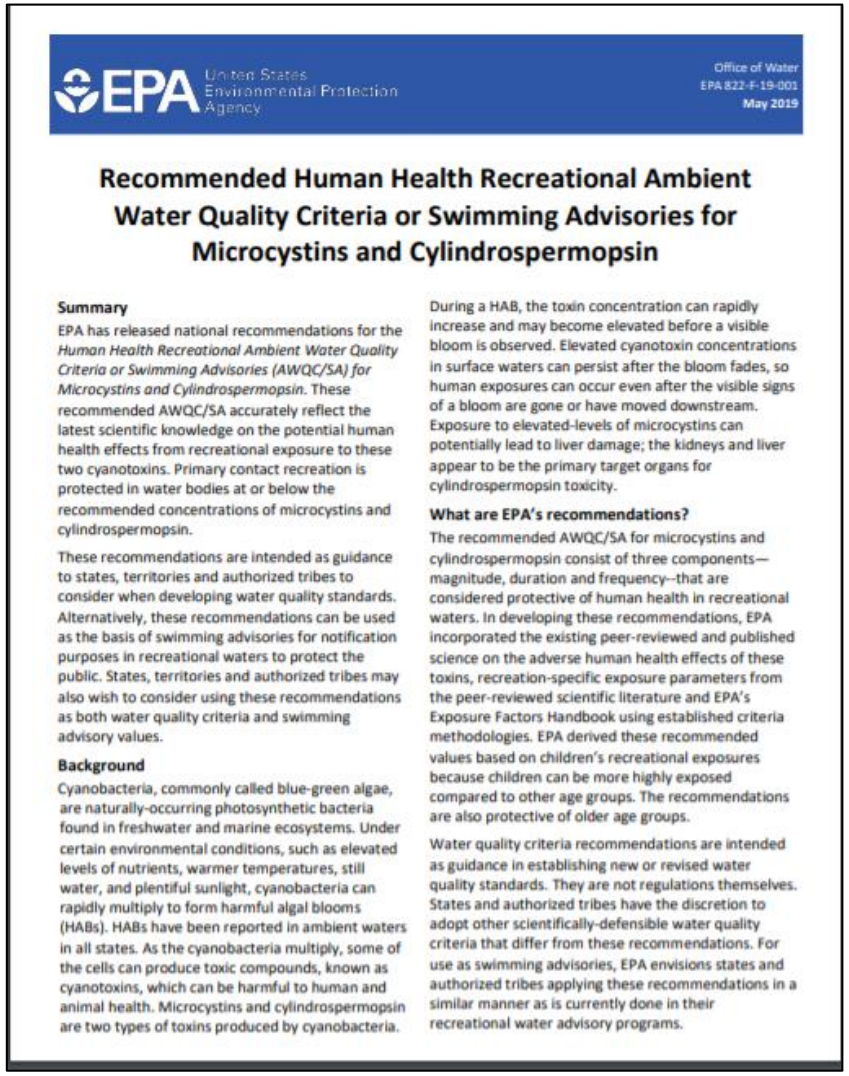
- "*E. coli* Bacteria," not "Recreation Criteria"
- No narrative criteria to protect for other pathogens, toxins, etc., that may not support recreational uses
- Do not specify a frequency
- Single sample maxima are not criteria

Recreation Criteria Issues

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY



EPA United States Environmental Protection Agency

Office of Water
EPA 822-F-19-001
May 2019

Recommended Human Health Recreational Ambient Water Quality Criteria or Swimming Advisories for Microcystins and Cylindrospermopsin

Summary

EPA has released national recommendations for the *Human Health Recreational Ambient Water Quality Criteria or Swimming Advisories (AWQC/SA) for Microcystins and Cylindrospermopsin*. These recommended AWQC/SA accurately reflect the latest scientific knowledge on the potential human health effects from recreational exposure to these two cyanotoxins. Primary contact recreation is protected in water bodies at or below the recommended concentrations of microcystins and cylindrospermopsin.

These recommendations are intended as guidance to states, territories and authorized tribes to consider when developing water quality standards. Alternatively, these recommendations can be used as the basis of swimming advisories for notification purposes in recreational waters to protect the public. States, territories and authorized tribes may also wish to consider using these recommendations as both water quality criteria and swimming advisory values.

Background

Cyanobacteria, commonly called blue-green algae, are naturally-occurring photosynthetic bacteria found in freshwater and marine ecosystems. Under certain environmental conditions, such as elevated levels of nutrients, warmer temperatures, still water, and plentiful sunlight, cyanobacteria can rapidly multiply to form harmful algal blooms (HABs). HABs have been reported in ambient waters in all states. As the cyanobacteria multiply, some of the cells can produce toxic compounds, known as cyanotoxins, which can be harmful to human and animal health. Microcystins and cylindrospermopsin are two types of toxins produced by cyanobacteria.

During a HAB, the toxin concentration can rapidly increase and may become elevated before a visible bloom is observed. Elevated cyanotoxin concentrations in surface waters can persist after the bloom fades, so human exposures can occur even after the visible signs of a bloom are gone or have moved downstream. Exposure to elevated-levels of microcystins can potentially lead to liver damage; the kidneys and liver appear to be the primary target organs for cylindrospermopsin toxicity.

What are EPA's recommendations?

The recommended AWQC/SA for microcystins and cylindrospermopsin consist of three components—magnitude, duration and frequency--that are considered protective of human health in recreational waters. In developing these recommendations, EPA incorporated the existing peer-reviewed and published science on the adverse human health effects of these toxins, recreation-specific exposure parameters from the peer-reviewed scientific literature and EPA's Exposure Factors Handbook using established criteria methodologies. EPA derived these recommended values based on children's recreational exposures because children can be more highly exposed compared to other age groups. The recommendations are also protective of older age groups.

Water quality criteria recommendations are intended as guidance in establishing new or revised water quality standards. They are not regulations themselves. States and authorized tribes have the discretion to adopt other scientifically-defensible water quality criteria that differ from these recommendations. For use as swimming advisories, EPA envisions states and authorized tribes applying these recommendations in a similar manner as is currently done in their recreational water advisory programs.

- 2019 Nationally Recommended Criteria for Cyanotoxins Microcystins and Cylindrospermopsin

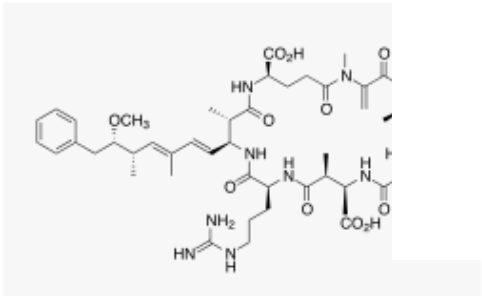
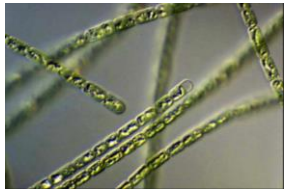
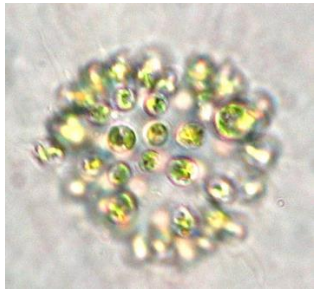


Table. Recommended magnitude for cyanotoxins.

Microcystins	Cylindrospermopsin
8 µg/L	15 µg/L





Recreation Criteria Considerations

- Should we retitle the section to “recreation?”
- Should we remove the *E. coli* single sample maxima?
- Should we include narrative criteria for recreation?
- Should we include cyanotoxins as part of the recreation criteria?



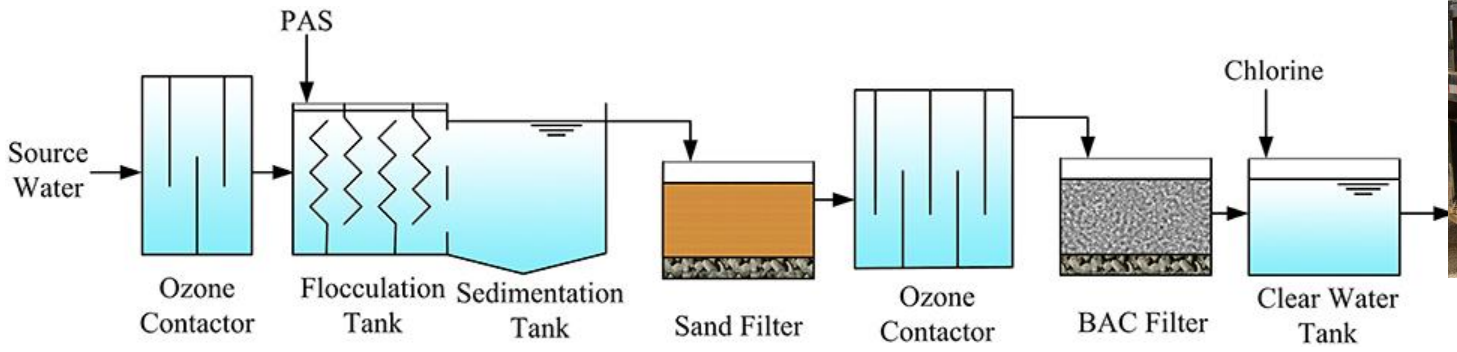

Human Health Criteria

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Drinking Water and Fish Consumption Uses

(d) Drinking water. The drinking water use involves maintaining a level of water quality that is suitable for potable water or intended to be suitable after receiving conventional drinking water treatment.

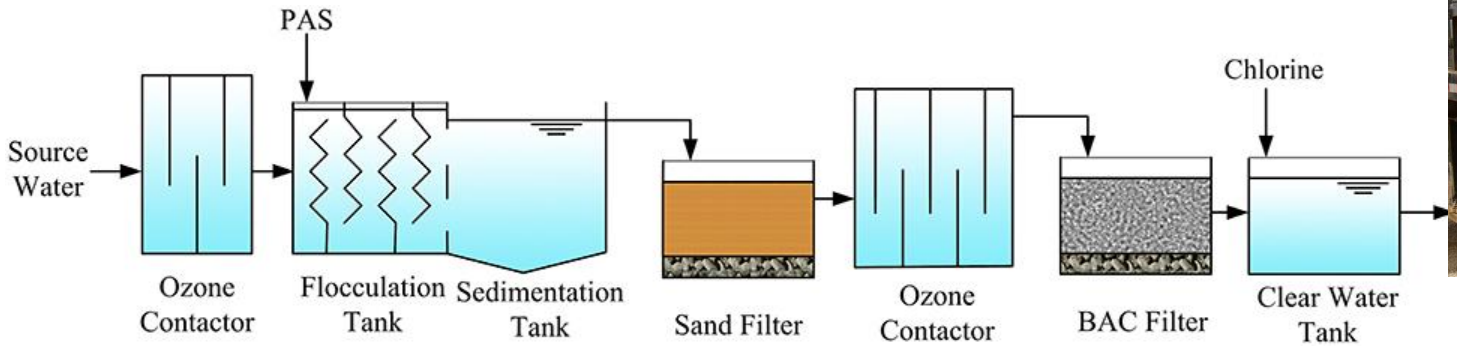
(i) Fish consumption. The fish consumption use involves maintaining a level of water quality that will prevent any unpalatable flavor and/or accumulation of harmful substances in fish tissue.



Human Health Criteria

Section 18. Human Health. In all Class 1, 2AB and 2A waters, the "Human Health Consumption of Fish and Drinking Water" values listed in Appendix B of these regulations shall not be exceeded. In all Class 2B, 2C and 2D waters, the "Human Health Consumption of Fish" (consumption of aquatic organisms) values shall not be exceeded.

In certain waters, the criteria listed in Appendix B of these regulations may not be appropriate due to unique physical or chemical conditions. In such cases, human health values may be established using the site-specific procedures outlined in the references listed in Appendix E or other scientifically defensible methods.



Human Health Criteria

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Appendix B

Water Quality Criteria[1]

(a) Priority Pollutants.

Priority Pollutant	Aquatic Life		Human Health Consumption of	
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Human Health Criteria

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Appendix B

Water Quality Criteria[1]

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Human Health Criteria

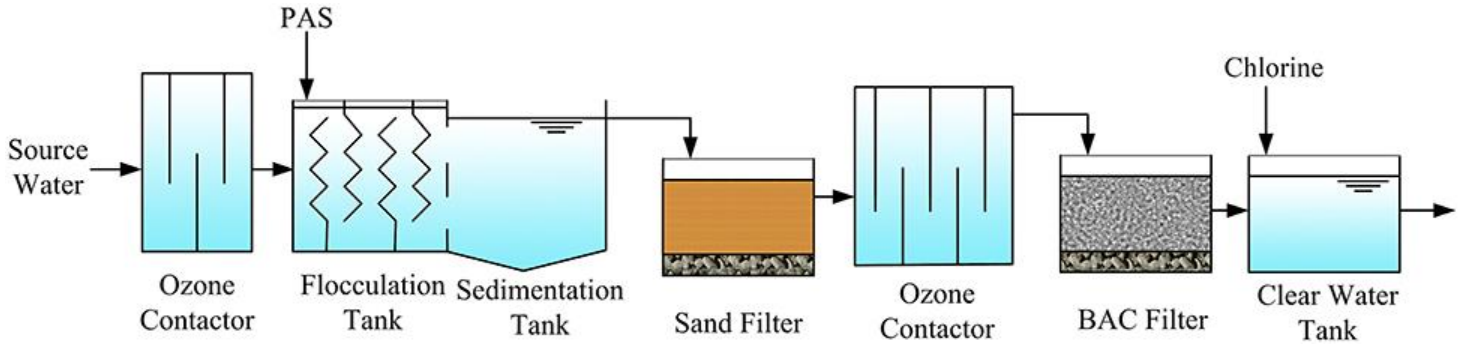
WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Human Consumption of Drinking Water and Fish Footnotes

[2]Except where otherwise indicated, these values are based on EPA Section 304(a) criteria recommendations assuming consumption of 2 liters of water and 17.5 grams of aquatic organisms per day.

Human Consumption of Aquatic Organisms

[8]EPA Section 304(a) human health criteria recommendation assuming consumption of contaminated aquatic organisms at a rate of 17.5 grams per day.



Human Health Criteria

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

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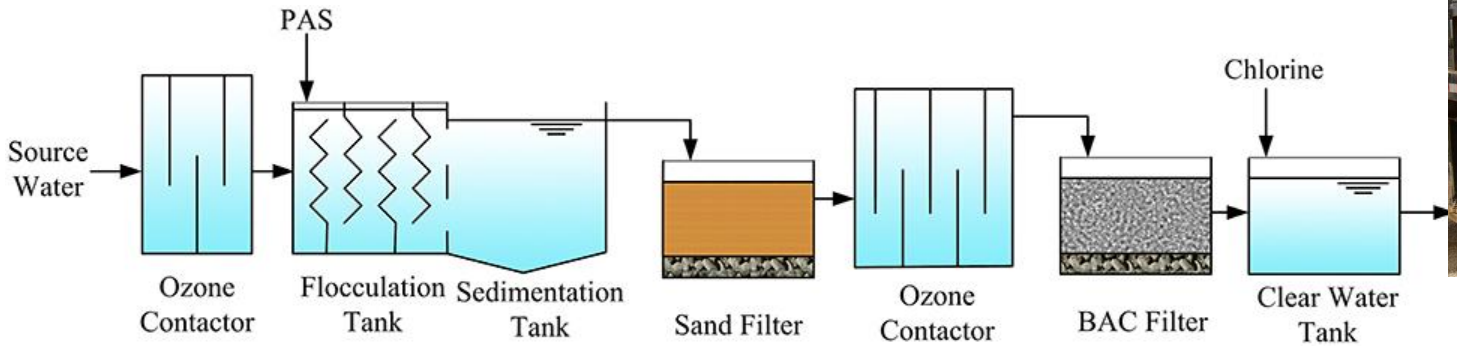
Human Health Criteria

Human Health Consumption of Drinking Water and Fish Footnotes

[3]Except for arsenic, the substance is classified as a carcinogen with the value based on an incremental risk of one additional instance of cancer in one million persons. Arsenic is classified as a carcinogen, however, the value is not based on an additional 1:1,000,000 cancer risk.

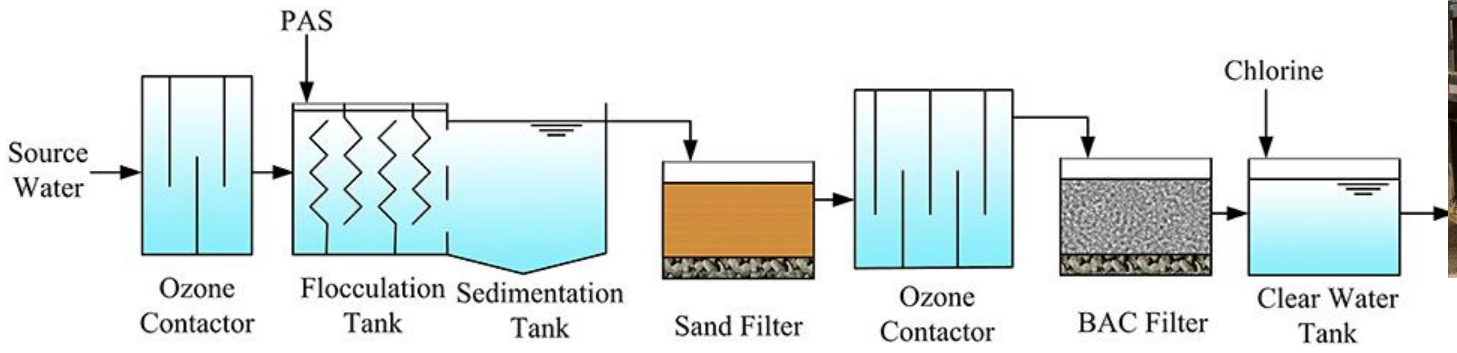
10^{-6} 1/1,000,000



Human Health Criteria

Human Health Consumption of Drinking Water and Fish Footnotes

[9]Criterion is based on an EPA drinking water standard (maximum contaminant level or MCL).



Human Health Criteria

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

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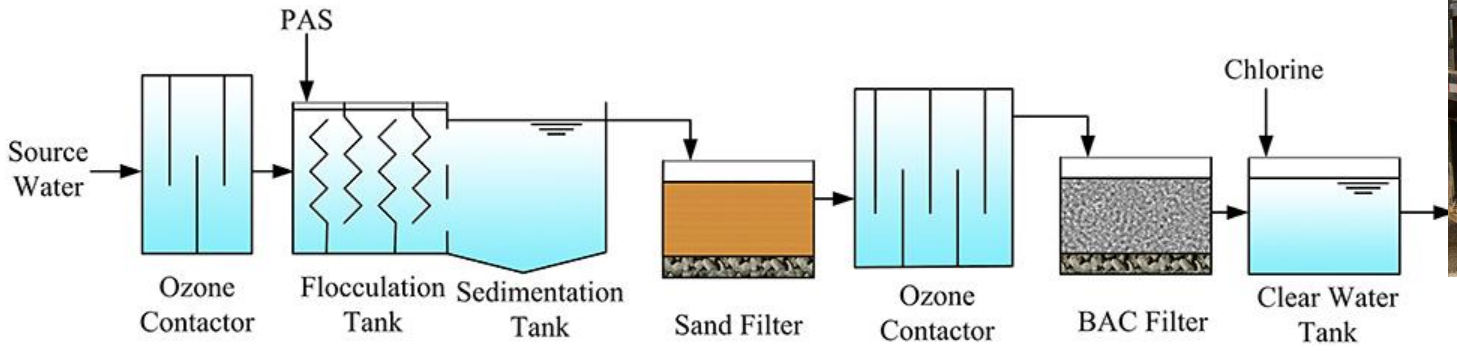
Human Health Criteria

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Human Health Consumption of Drinking Water and Fish Footnotes

(7)Criterion is based on organoleptic (taste and odor) effects and is more stringent than if based solely on toxic or carcinogenic effects.

(11) Criterion is based on Safe Drinking Water Act secondary standards and is intended to prevent undesirable cosmetic or aesthetic effects. Value represents the dissolved amount of each substance rather than the total amount. Criterion only applies where drinking water is an actual use.

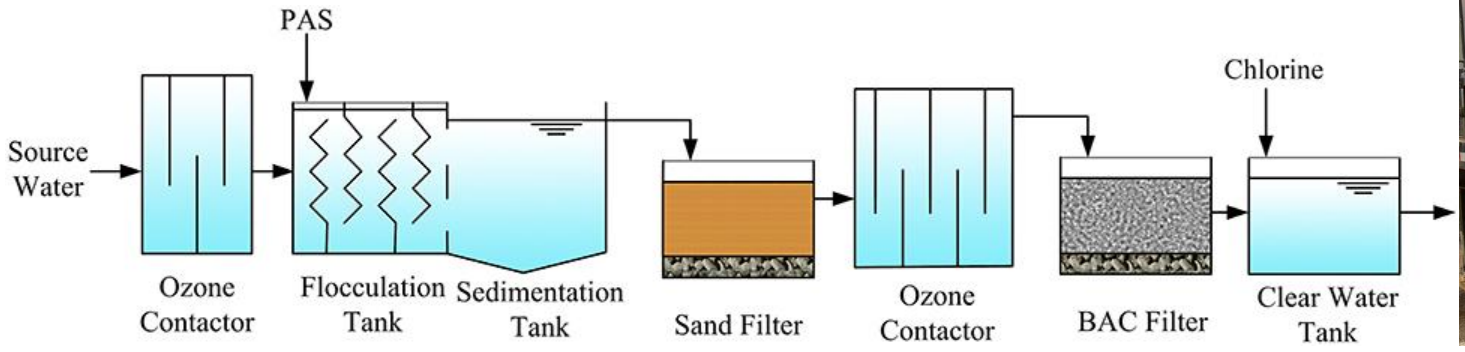


Human Health Criteria

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Human Health Consumption of Drinking Water and Fish

- EPA Clean Water Act Section 304(a) water quality criteria recommendations
- Safe Drinking Water Act Maximum Contaminant Levels
- Safe Drinking Water Act Secondary Standards (Undesirable cosmetic or aesthetic effects)
- Organoleptic (taste and odor)

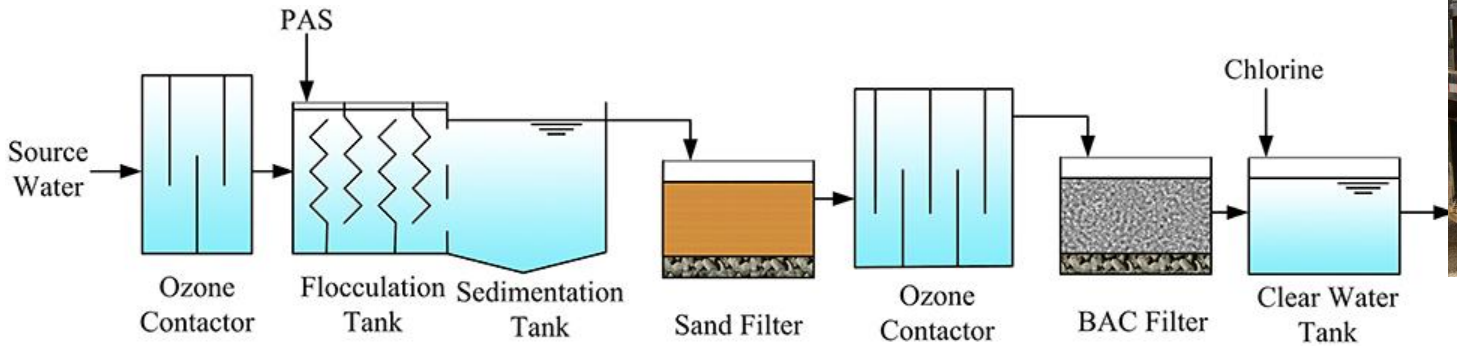


Human Health Criteria Issues

Section 18. Human Health. In all Class 1, 2AB and 2A waters, the "Human Health Consumption of Fish and ~~Drinking~~ Water" values listed in Appendix B of these regulations shall not be exceeded. In all Class 2B, 2C and 2D waters, the "Human Health Consumption of Fish" (consumption of aquatic organisms) values shall not be exceeded.

In certain waters, the criteria listed in Appendix B of these regulations may not be appropriate due to unique physical or chemical conditions. In such cases, human health values may be established using the site-specific procedures outlined in the references listed in Appendix E or other scientifically defensible methods.

- Title does not specify the designated uses



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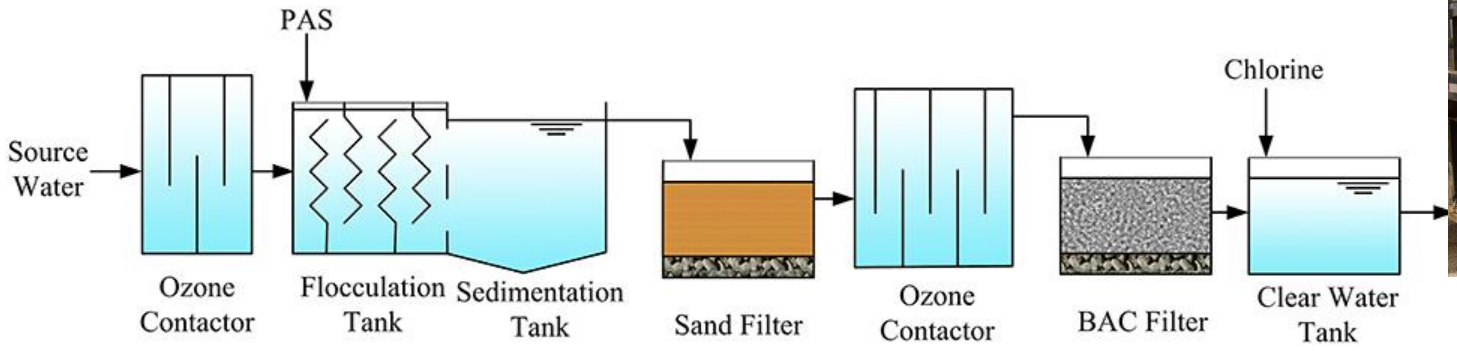
- "Fish Consumption" Is Inaccurate



Human Health Criteria Issues

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

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- Combining with aquatic life can be confusing

Human Health Criteria Issues

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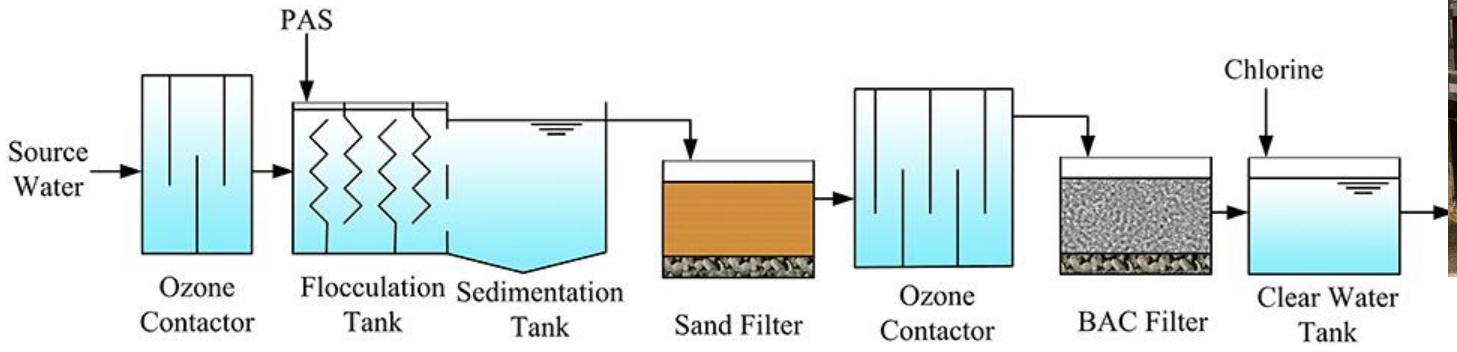
- Do not include a narrative criteria



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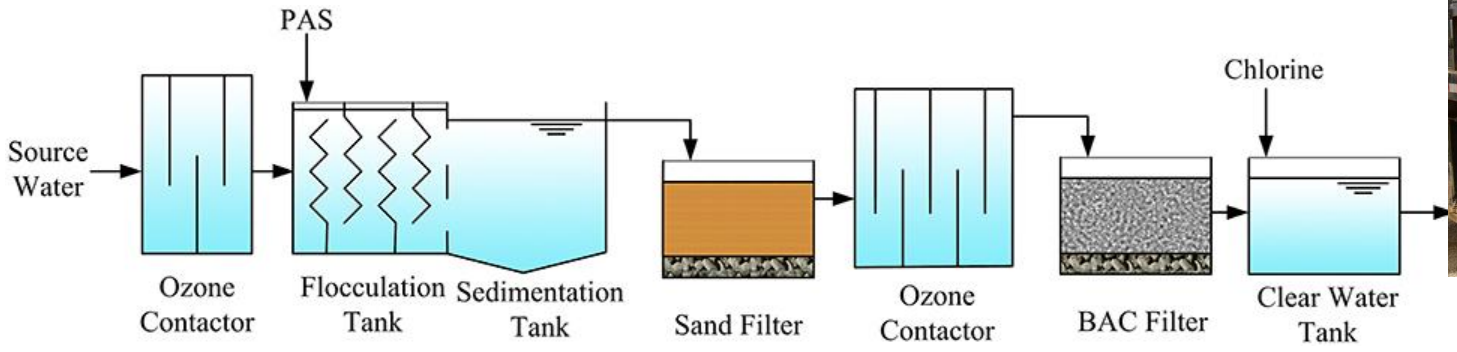
- Do not specify a duration or frequency



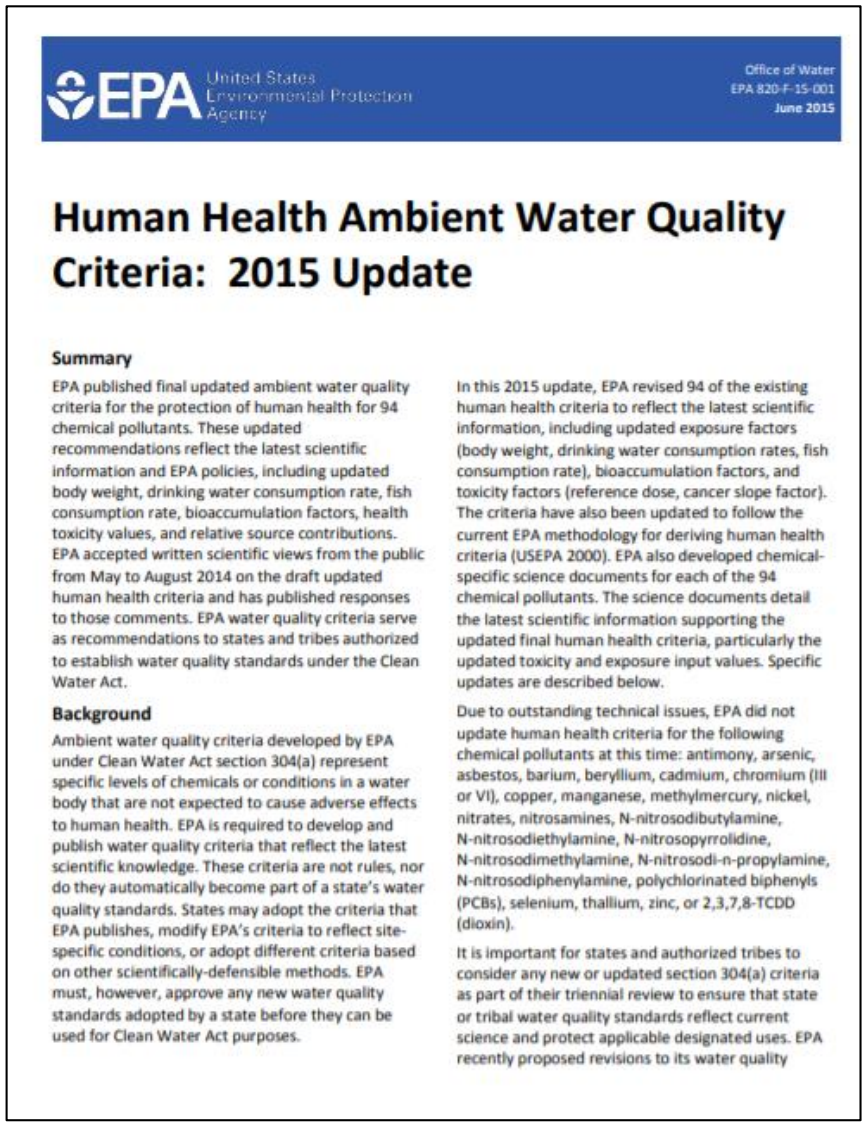
“Human Health” Criteria Issues

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

- EPA recommended criteria are intended to minimize risks to human health through the ingestion of drinking water and aquatic organisms over a 70-year period (i.e., lifetime)

Human Health Criteria Issues

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY



EPA United States Environmental Protection Agency

Office of Water
EPA 820-F-15-001
June 2015

Human Health Ambient Water Quality Criteria: 2015 Update

Summary

EPA published final updated ambient water quality criteria for the protection of human health for 94 chemical pollutants. These updated recommendations reflect the latest scientific information and EPA policies, including updated body weight, drinking water consumption rate, fish consumption rate, bioaccumulation factors, health toxicity values, and relative source contributions. EPA accepted written scientific views from the public from May to August 2014 on the draft updated human health criteria and has published responses to those comments. EPA water quality criteria serve as recommendations to states and tribes authorized to establish water quality standards under the Clean Water Act.

Background

Ambient water quality criteria developed by EPA under Clean Water Act section 304(a) represent specific levels of chemicals or conditions in a water body that are not expected to cause adverse effects to human health. EPA is required to develop and publish water quality criteria that reflect the latest scientific knowledge. These criteria are not rules, nor do they automatically become part of a state's water quality standards. States may adopt the criteria that EPA publishes, modify EPA's criteria to reflect site-specific conditions, or adopt different criteria based on other scientifically-defensible methods. EPA must, however, approve any new water quality standards adopted by a state before they can be used for Clean Water Act purposes.

In this 2015 update, EPA revised 94 of the existing human health criteria to reflect the latest scientific information, including updated exposure factors (body weight, drinking water consumption rates, fish consumption rate), bioaccumulation factors, and toxicity factors (reference dose, cancer slope factor). The criteria have also been updated to follow the current EPA methodology for deriving human health criteria (USEPA 2000). EPA also developed chemical-specific science documents for each of the 94 chemical pollutants. The science documents detail the latest scientific information supporting the updated final human health criteria, particularly the updated toxicity and exposure input values. Specific updates are described below.

Due to outstanding technical issues, EPA did not update human health criteria for the following chemical pollutants at this time: antimony, arsenic, asbestos, barium, beryllium, cadmium, chromium (III or VI), copper, manganese, methylmercury, nickel, nitrates, nitrosamines, N-nitrosodibutylamine, N-nitrosodiethylamine, N-nitrosopyrrolidine, N-nitrosodimethylamine, N-nitrosodi-n-propylamine, N-nitrosodiphenylamine, polychlorinated biphenyls (PCBs), selenium, thallium, zinc, or 2,3,7,8-TCDD (dioxin).

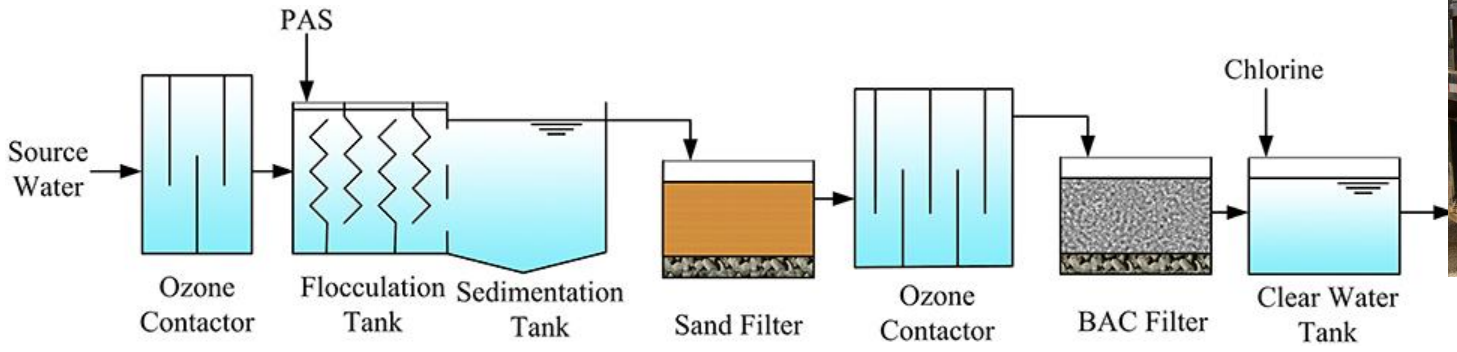
It is important for states and authorized tribes to consider any new or updated section 304(a) criteria as part of their triennial review to ensure that state or tribal water quality standards reflect current science and protect applicable designated uses. EPA recently proposed revisions to its water quality

- In 2015, EPA released updated recommendations for 94 pollutants
  - Updated fish consumption rate
    - 17.5 grams per day to 22 grams per day
  - Updated drinking water consumption rate
    - 2.0 liters per day to 2.4 liters per day
  - Updated body weight
    - 70 kg to 80 kg

Drinking Water and Fish Consumption Uses

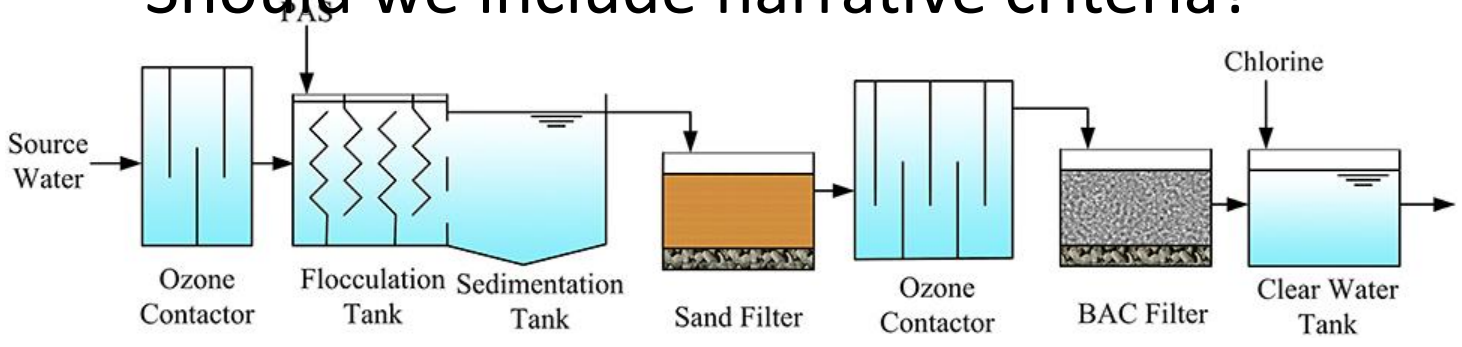
- Should we update the drinking water and fish consumption designated use definitions/descriptions?

- Should we update our drinking water and fish consumption nomenclature? Public water supply? Consumption of aquatic organisms?



“Human Health” Criteria

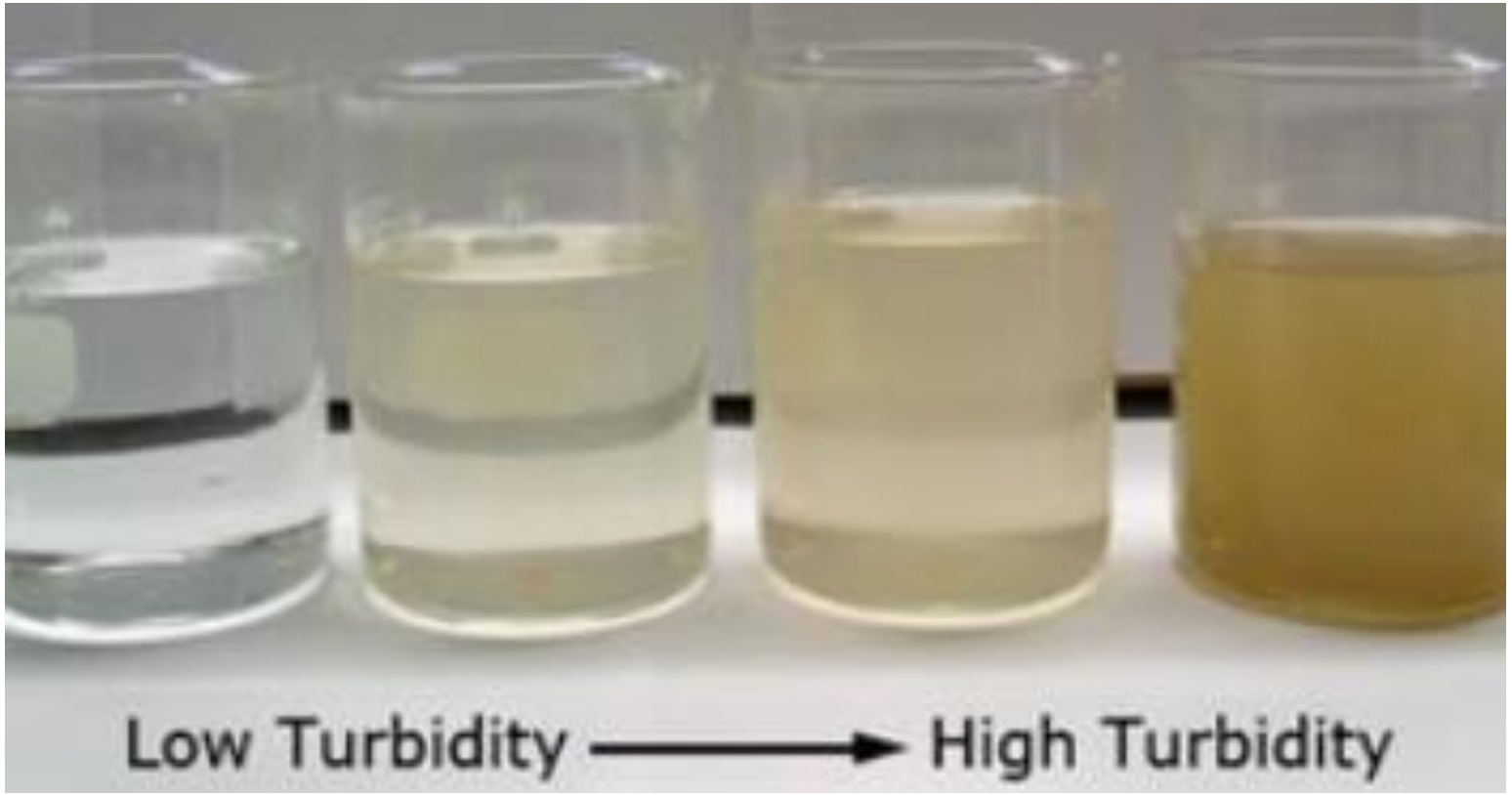
- Should we update the title of the criteria to match the designated uses?
- Should we include a duration and frequency for the criteria?
- Should we update criteria based on EPA’s 2015 recommendations?
- Should we retain the drinking water criteria approach, using most stringent of lifetime exposure health risk, drinking water MCLs, organoleptic, or secondary drinking water MCLs?
- Should we retain our existing cancer risk?
- Should we include narrative criteria?



Turbidity Criteria

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Turbidity Criteria



Drinking Water and Fisheries Uses

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

(d) Drinking water. The drinking water use involves maintaining a level of water quality that is suitable for potable water or intended to be suitable after receiving conventional drinking water treatment.

(b) Fisheries. The fisheries use includes water quality, habitat conditions, spawning and nursery areas, and food sources necessary to sustain populations of cold water game fish, warm water game fish and nongame fish. This use does not include the protection of aquatic invasive species or other fish which may be considered "undesirable" by the Wyoming Game and Fish Department or the U.S. Fish and Wildlife Service within their appropriate jurisdictions.

Turbidity Criteria

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Section 23. Turbidity.

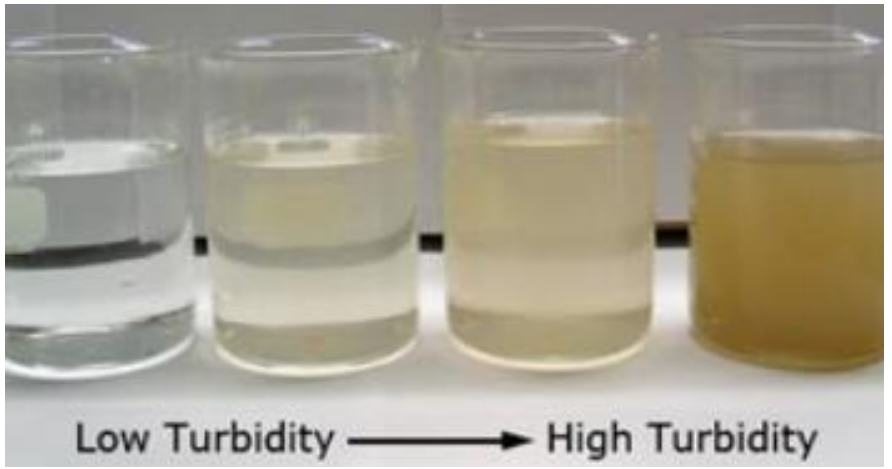
(a) In all cold water fisheries and/or drinking water supplies (Classes 1, 2AB, 2A and 2B), the discharge of substances attributable to or influenced by the activities of man shall not be present in quantities which would result in a turbidity increase of more than ten (10) nephelometric turbidity units (NTUs).

(b) In all warm water or nongame fisheries (Classes 1, 2AB, 2B and 2C), the discharge of substances attributable to or influenced by the activities of man shall not be present in quantities which would result in a turbidity increase of more than 15 NTUs.

(c) An exception to paragraphs (a) and (b) of this section shall apply to:

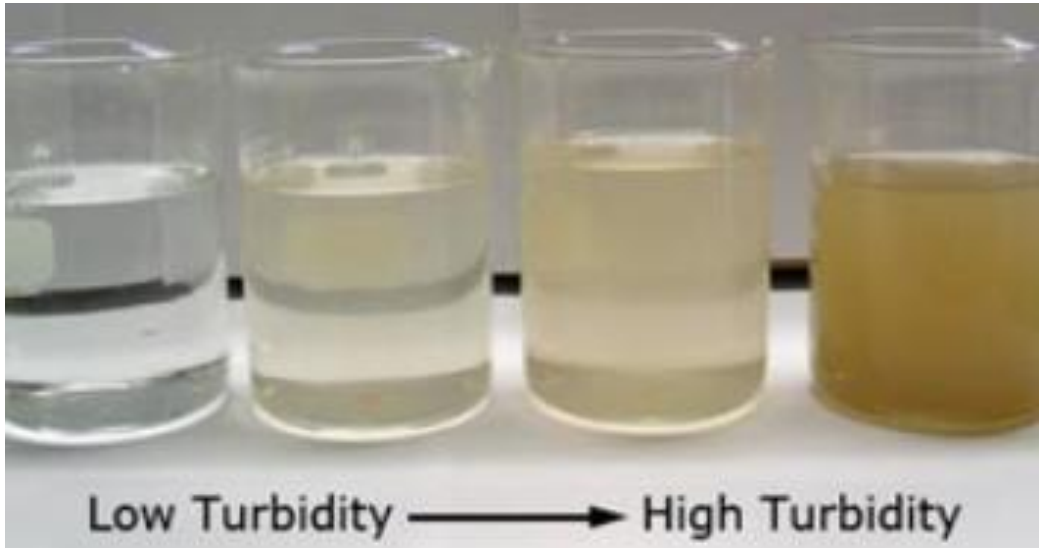
(i) The North Platte River from Guernsey Dam to the Nebraska line during the annual "silt run" from Guernsey Dam; and

(ii) Short-term increases of turbidity that have been determined by the administrator to have only a minimal effect on water uses. Such determinations shall be made on a case-by-case basis and shall be subject to whatever controls, monitoring and best management practices are necessary to fully maintain and protect all water uses. The procedures used to implement this section are described in the *Turbidity Implementation Policy*.



Turbidity Criteria Issues

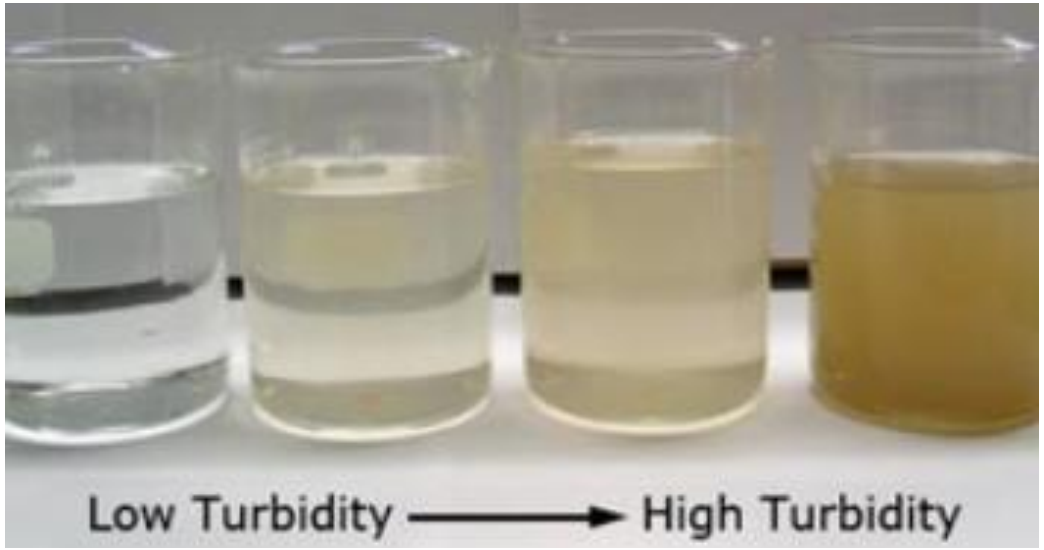
- Criteria are not based on EPA recommendations, origin unclear
- Do not include a duration or frequency
- “Increase” criteria are difficult to implement
- 10 and 15 NTU increases are very small
- Waterbodies have high natural variability



Turbidity Criteria Issues

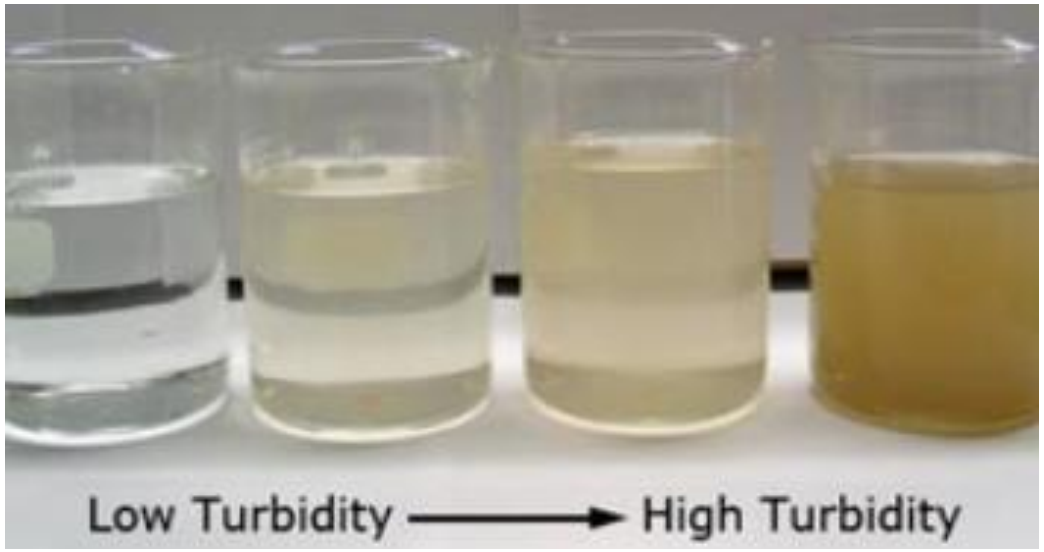
- Impacts of sediment to fish are often measured in suspended sediment concentrations, not turbidity

- Turbidity may not capture larger grain sizes that can impact fisheries



Turbidity Criteria Considerations

- Should we revise our turbidity criteria? If so, how?



Implementation Policies

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Implementation Policies

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Wyoming
Surface Water Quality Standards

Implementation Policies
for

Antidegradation
Mixing Zones and Dilution Allowances
Turbidity
Use Attainability Analysis

Effective September 24, 2013

Implementation Policies

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

DEPARTMENT OF ENVIRONMENTAL QUALITY
WYOMING

Interim Policy on Establishing Effluent Limits for Permitted Point Source Discharges to Class 1 Water Tributaries

August 2, 2007

Implementation Policies

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

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- 401 Certifications

Nonpoint Source Best Management Practices

Point Source Effluent Limits

- WYPDES

Turbidity Waivers

Modifications to Designated Uses and Water Quality Criteria

Implementation Policy Issues

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

- Implementation policies have not been substantively updated since 2007

- "Interim Policy"

- Federal regulations use the term "policy" to refer to elements in rule and "implementation methods" to refer to elements that are outside of rules

Implementation "Policy" Issues

- Implementation policies are referred to, but are not formally "incorporated by reference"

- If the policies are intended to have the force and effect of rule, then they should be incorporated into the rule or "incorporated by reference" following the guidelines identified in the Wyoming Administrative Procedures Act

- Many aspects of the policies are not intended to have the force and effect of rule

Implementation "Policies" Considerations

- What aspects of the "policies" should be in the rules?

- What aspects of implementation methods should be outside of the rules?

    - What should the public involvement process be for various implementation methods and should this be captured in the rules?

Triennial Review Topics

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

- Classification System/Designated Uses
- Recreation Designated Uses and Water Quality Criteria
- Turbidity Criteria
- “Human Health” Criteria
- Implementation “Policies”
- Attorney General Review

	Drinking Water	Game Fish	Non-Game Fish	Fish Consumption	Other Aquatic Life	Recreation	Wildlife	Agriculture	Industry	Scenic Value
1*	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2AB	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2A	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
2B	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2C	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2D	No	When Present	When Present	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3A	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
3B	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
3C	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
3D	No	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
4A	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
4B	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
4C	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes