

Wyoming Surface Water Quality Standards Triennial Review

Compilation of Recreation Designated Uses and Surface Water Quality Criteria for Recreation Adopted by Other States¹

Background on Designated Uses

- Primary contact recreation (or equivalent) is a Clean Water Act Section 101(a)(2) use and must be designated on all waters unless it has been demonstrated that the use is not an existing use and a use attainability analysis has been completed to demonstrate that the use is not an attainable use.
- States are allowed to adopt subcategories of designated uses such as secondary contact recreation
- States are allowed to adopt seasonal uses

Summary (See Table)

Designated Uses

- Primary and Secondary Contact Recreation are used most commonly: ~ 18 states
- Primary Contact Terms
 - Whole body contact, full body contact, total body contact, water contact, immersion contact
- Secondary Contact Terms
 - Secondary body contact, limited contact, limited body contact, partial body contact, not primary contact, noncontact water, incidental contact
- Other Uses
 - Existing Primary Contact, Undetermined, Bathing, Children
- Concepts Included
 - Description of the type of water contact (e.g., immersion, complete submergence, etc.)
 - Use by humans
 - Frequency of the contact (likely, frequent, regularly, minimal, infrequent)
 - Seasonality (recreation season)
 - Accidental ingestion
 - Exposure of certain sensitive body parts (e.g., ears, eyes, nose, etc.)
 - Examples of activities
 - Use is defaulted or made through a use attainability analysis
 - Description of what would prevent a waterbody from achieving primary contact recreation (e.g., low flow conditions, sparsely populated area, limited access)
 - Not a potable water supply unless treatment is applied

Narrative Criteria

- Most states have “free from” narrative criteria for a number of pollution types that prohibit pollution in amounts that would impair beneficial uses
- Some states include narrative criteria specific to recreation

¹ Summary was compiled by reviewing a subset of Surface Water Quality Standards from other states. The summary is not comprehensive, but is intended to provide a cross-section of different approaches.

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- Missouri: There shall be no significant human health hazard from incidental contact with the water
- Alabama: Toxic substances; color producing substances; odor producing substances; or other deleterious substances attributable to sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances or wastes, as will not render the water unsafe or unsuitable for swimming and water-contact sports.

Cyanotoxin Criteria

- South Dakota has proposed inclusion of the cyanotoxin criteria in their current triennial review
- South Carolina has adopted microcystin and cylindrospermopsin into their water quality standards
- Many states, including Wyoming, use the recommended criteria in their harmful algal/cyanobacterial bloom programs

Waterborne Pathogen Criteria

- Primary Contact Recreation
 - *E. coli*
 - A number of states use 126 CFU/100 mL geometric mean
 - ~8 states use the single sample maximum of 410 CFU/100 mL
 - ~8 states use no more than 10% of samples can exceed
 - ~1 state uses no more than 20%
 - Some states continue to use fecal coliforms
 - Some states use enterococci
- Secondary Contact Recreation
 - *E. coli*
 - A number of states use 630 CFU/100 mL geometric mean
 - New Mexico uses 548 CFU/100 mL geometric mean
 - Idaho uses 576 CFU/100 mL geometric mean
- Duration
 - 30-day duration: ~ 12 states
 - 90-day duration: ~ 1 state
 - 60-day duration: ~ 1 state (WY)
- Frequency
 - Most states do not include frequency for fecal indicator/waterborne pathogen criteria

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
Alabama			Toxic substances; color producing substances; odor producing substances; or other deleterious substances attributable to sewage, industrial wastes, or other wastes: only such amounts, whether alone or in combination with other substances or wastes, as will not render the water unsafe or unsuitable for swimming and water-contact sports. The policy of nondegradation of high quality waters shall be stringently applied to bacterial quality of recreational waters.	
Alaska	Contact recreation	No definition		In a 30-day period, the geometric mean of samples may not exceed 126 Escherichia coli (E. coli) colony forming units (CFU)/100ml, and not more than 10% of the samples may exceed a statistical threshold value (STV) of 410 E. coli CFU/100 ml
Alaska	Secondary recreation	No definition		In a 30-day period, the geometric mean of samples may not exceed 200 fecal coliform/100 ml, and not more than 10% of the total samples may exceed 400 fecal coliform/100 ml.

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
Arizona	Full-body contact	“Full-body contact (FBC)” means the use of a surface water for swimming or other recreational activity that causes the human body to come into direct contact with the water to the point of complete submergence. The use is such that ingestion of the water is likely and sensitive body organs, such as the eyes, ears, or nose, may be exposed to direct contact with the water.	Cause the growth of algae or aquatic plants that inhibit or prohibit the habitation, growth, or propagation of aquatic life or impair recreational uses;	E. coli bacteria. The following water quality standards for Escherichia coli (E. coli) are expressed in colony forming units per 100 milliliters of water (cfu/100 ml) or as a Most Probable Number (MPN): E. coli Geometric mean (minimum of four samples in 30 days): FBC=126; PBC=126. Single sample maximum: FBC=235; PBC= 575
Arizona	Partial-body contact	“Partial-body contact (PBC)” means the recreational use of a surface water that may cause the human body to come into direct contact with the water, but normally not to the point of complete submergence (for example, wading or boating). The use is such that ingestion of the water is not likely and sensitive body organs, such as the eyes, ears, or nose, will not normally be exposed to direct contact with the water.		No not specify
Arkansas	Primary contact	Primary Contact Recreation - This beneficial use designates waters where full body contact is involved. Any streams with watersheds of greater than 10 mi ² are designated for full body contact. All streams with watersheds less than 10 mi ² may be designated for primary		

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
		contact recreation after site verification.		
Arkansas	Secondary contact	(E) Secondary Contact Recreation - This beneficial use designates waters where secondary activities like boating, fishing or wading are involved.		
Missouri	Whole-body contact	A. Whole body contact recreation (WBC)—Activities involving direct human contact with waters of the state to the point of complete body submergence. The water may be ingested accidentally and certain sensitive body organs, such as the eyes, ears, and the nose, will be exposed to the water. Although the water may be ingested accidentally, it is not intended to be used as a potable supply unless acceptable treatment is applied. Waters designated are intended to be used for swimming, water skiing, or skin diving.	There shall be no significant human health hazard from incidental contact with the water	D. E. coli limits. During the recreation season, discharges to waters designated for whole body contact “A” as defined in part (1)(C)2.A.(I) of 10 CSR 20-7.031 shall be limited to one hundred twenty-six (126) colony forming units per one hundred (100) milliliters (ml) expressed as a monthly geometric mean for POTWs and non-POTWs. During the recreation season, discharges to waters designated for whole body contact “B” as defined in part (1)(C)2.A.(II) of 10 CSR 20-7.031 shall be limited to two hundred six (206) colony forming units per one hundred (100) ml expressed as a monthly geometric mean for POTWs and non- POTWs.

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
Missouri	Secondary contact	B. Secondary contact recreation (SCR)—Uses include fishing, wading, commercial and recreational boating, any limited contact incidental to shoreline activities, and activities in which users do not swim or float in the water. These recreational activities may result in contact with the water that is either incidental or accidental and the probability of ingesting appreciable quantities of water is minimal;		During the recreation season, discharges to waters designated for secondary contact recreational as defined in subparagraph (1)(C)2.B. of 10 CSR 20-7.031 shall be limited to one thousand one hundred thirty four (1,134) colony forming units per one hundred (100) ml expressed as a monthly geometric mean for POTWs and non- POTWs. For the entire calendar year, discharges to waters that are defined by paragraph (1)(B)3. of this rule as losing streams shall be limited to one hundred twenty-six (126) colony forming units per one hundred (100) ml expressed as a daily maximum;
California 2	Water Contact Recreation	Uses of water for recreational activities involving body contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and uses of natural hot springs.		Fecal Coliform (MPN/100ml) geometric mean < 200 90th percentile < 400 Total Coliform (MPN/100ml) median < 240 no sample > 10,000 Enterococcus (MPN/100ml)g geometric mean < 35 no sample > 104

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
California 2	Noncontact water recreation	Uses of water for recreational activities involving proximity to water, but not normally involving contact with water where water ingestion is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities. Water quality considerations relevant to noncontact water recreation, such as hiking, camping, or boating, and those activities related to tide pool or other nature studies require protection of habitats and aesthetic features. In some cases, preservation of a natural wilderness condition is justified, particularly when nature study is a major dedicated use.		Fecal Coliform (MPN/100ml) mean < 2000 90th percentile < 4000
California 3	Water Contact Recreation (REC-1)	Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs.		Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200/100 mL, nor shall more than ten percent of total samples during any 30-day period exceed 400/100 mL.

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California 3	Non-Contact Water Recreation (REC-2)	Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.		Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 2000/100 mL, nor shall more than ten percent of samples collected during any 30-day period exceed 4000/100 mL.
California 4	Water Contact Recreation (REC-1)	Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs.		Total and fecal coliform bacteria are used to indicate the likelihood of pathogenic bacteria in surface waters. Water quality objectives for total and fecal coliform bacteria vary with the beneficial uses of the waterbody and are described below: In Marine Waters Designated for Water Contact Recreation (REC-1) 1.Geometric Mean Limits a.Total coliform density shall not exceed 1,000/100 ml. b.Fecal coliform density shall not exceed 200/100 ml. c.Enterococcus density shall not exceed 35/100 ml. 2.Single Sample Limits a.Total coliform density shall not exceed 10,000/100 ml. b.Fecal coliform

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				density shall not exceed 400/100 ml. c. Enterococcus density shall not exceed 104/100 ml. d. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1. In Fresh Waters Designated for Water Contact Recreation (REC-1) 1. Geometric Mean Limits a. E. coli density shall not exceed 126/100ml. 2. Single Sample Limits a. E. coli density shall not exceed 235/100 ml.
California 4	Limited Water Contact Recreation (LREC-1)	Uses of water for recreational activities involving body contact with water, where full REC-1 use is limited by physical conditions such as very shallow water depth and restricted access and, as a result, ingestion of water is incidental and infrequent.		In Fresh Waters Designated for Limited Contact Recreation (LREC-1) 1. Geometric Mean Limits a. E. coli density shall not exceed 126/100 ml. 2. Single Sample Limits a. E. coli density shall not exceed 576/100 ml. The single sample limit for E. coli is based on EPA's determination of the most appropriate single sample maximum density for water bodies infrequently used for full-body recreation.

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
California 4	Non-contact Water Recreation (REC-2)	Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.		In waters designated for non-water contact recreation (REC-2) and not designated for water contact recreation (REC-1), the fecal coliform concentration shall not exceed a log mean of 2000/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of samples collected during any 30-day period exceed 4000/100 ml
California 7	Water Contact Recreation (REC1)	Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, and use of natural hot springs.		All except Colorado River: E. coli 126 per 100 ml enterococci 33 per 100 ml nor shall any sample exceed the following maximum E. coli 400 per 100 ml enterococci 100 per 100 ml In addition to the objectives above, in waters designated for water contact recreation (REC I), the fecal coliform concentration based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN per 100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN per 100 ml Colorado River: E. coli 235 per 100 ml enterococci 61 per 100 ml

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
California 7	Non-Contact Water Recreation (REC2)	Uses of water for recreational activities involving proximity to water, but not normally involving contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.		All except Colorado River: E. coli 630 per 100 ml enterococci 165 per 100 ml nor shall any sample exceed the following maximum E. coli 2000 per 100 ml enterococci 500 per 100 ml Colorado River: E. coli 1175 per 100 ml enterococci 305 per 100 ml
California 8	Water Contact Recreation (REC1: Primary Contact Recreation)	Recreational activities involving body contact with water where ingestion of water is reasonably possible. These uses may include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing and use of natural hot springs.		<126 E. coli organisms per 100 mL
California 8	Non-contact Water Recreation (REC2: Secondary Contact Recreation)	Recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing and aesthetic enjoyment in conjunction with the above activities.		"There is no scientific basis to establish pathogen indicator objectives intended to protect human health as the result of such contact."

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California 9	Contact Water Recreation (REC-1)	Includes uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and SCUBA diving, surfing, white water activities, fishing, or use of natural hot springs.		The fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 organisms per 100 ml. In addition, the fecal coliform concentration shall not exceed 400 organisms per 100 ml for more than 10 percent of the total samples during any 30-day period. In bays and estuaries, the most probable number of total coliform organisms in the upper 60 feet of the water column shall be less than 1,000 organisms per 100 ml (10 organisms per ml); provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 organisms per 100 ml (10 per ml); and provided further that no single sample as described below is exceeded. The most probable number of total coliform organisms in the upper 60 feet of the water column in no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 organisms per 100 ml (100 organisms per ml).

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California 9	Non-contact Water Recreation (REC-2) -	Includes the uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.		Fecal Coliform Water Quality Objective for Non-contact Recreation In waters designated for non-contact recreation (REC-2) and not designated for contact recreation (REC-1), the average fecal coliform concentrations for any 30-day period, shall not exceed 2,000 organisms per 100 ml nor shall more than 10 percent of samples collected during any 30-day period exceed 4,000 organisms per 100 ml.
Colorado (In progress – online standards incomplete)	Primary Contact Recreation	“PRIMARY CONTACT RECREATION” means recreational activities where the ingestion of small quantities of water is likely to occur. Such activities include but are not limited to swimming, rafting, kayaking, tubing, windsurfing, water-skiing, and frequent water play by children.		The E. coli criterion adopted for new recreation class 1a is 126 per 100 milliliters
Colorado (In progress – online standards incomplete)	Potential Primary Contact	Class P - Potential Primary Contact Use These surface waters have the potential to be used for primary contact recreation. This classification shall be assigned to water segments for which no use attainability analysis has been performed demonstrating that a recreation class N classification is appropriate, if a reasonable level of inquiry has failed to identify any existing primary		The E. coli criterion for class 2 waters is set at 630 per 100 ml, based on an EPA policy recommendation that the criteria for secondary recreation uses not be set higher than five times the primary use standard

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		contact uses of the water segment, or where the conclusion of a UAA is that primary contact uses may potentially occur in the segment, but there are no existing primary contact uses.		
Colorado (In progress – online standards incomplete)		Class N - Not Primary Contact Use These surface waters are not suitable or intended to become suitable for primary contact recreation uses. This classification shall be applied only where a use attainability analysis demonstrates that there is not a reasonable likelihood that primary contact uses will occur in the water segment(s) in question within the next 20-year period.		
Colorado (In progress – online standards incomplete)	Undetermined	Class U - Undetermined Use These are surface waters whose quality is to be protected at the same level as existing primary contact use waters, but for which there has not been a reasonable level of inquiry about existing recreational uses and no recreation use attainability analysis has been completed. This shall be the default classification until inquiry or analysis demonstrates that another classification is appropriate.		

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Delaware	Primary Contact Recreation	“Primary Contact Recreation” means any water-based form of recreation, the practice of which has a high probability for total body immersion or ingestion of water (examples include but are not limited to swimming and water skiing)		Fresh: ENT: GM 100, SSM 185 Marine: ENT GM 35, SSM 104 Coastal waters: Geometric Mean of samples collected over a 30 day period shall not exceed 35. The statistical threshold value of samples collected over a 30 day period shall not exceed 130 in more than 10 percent of the samples collected.
Delaware	Secondary Contact Recreation	“Secondary Contact Recreation” means a water-based form of recreation, the practice of which has a low probability for total body immersion or ingestion of water (examples include but are not limited to wading, boating, and fishing).		Fresh: ENT: GM 500, SSM 925 Marine: ENT GM 175, SSM 520
Texas	Primary contact 1	Activities that are presumed to involve a significant risk of ingestion of water (e.g., wading by children, swimming, water skiing, diving, tubing, surfing, handfishing as defined by Texas Parks and Wildlife Code, §66.115, and the following whitewater activities: kayaking, canoeing, and rafting).		Fresh: The geometric mean criterion for E. coli is 126 per 100 mL. In addition, the single sample criterion for E. coli is 399 per 100 mL. High saline: the geometric mean criterion for Enterococci is 33 per 100 mL and the single sample criterion is 78 per 100 mL. Marine: The geometric mean criterion for Enterococci is 35 per 100 mL. In addition, the single sample criterion for Enterococci is 130 per 100 mL.

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Texas	Primary contact 2	Primary contact recreation 2--Water recreation activities, such as wading by children, swimming, water skiing, diving, tubing, surfing, handfishing as defined by Texas Parks and Wildlife Code, §66.115, and whitewater kayaking, canoeing, and rafting, that involve a significant risk of ingestion of water but that occur less frequently than for primary contact recreation 1 due to: (A) physical characteristics of the water body; or (B) limited public access.		Primary contact recreation 2. The geometric mean criterion for E. coli is 206 per 100 mL
Texas	Secondary contact 1			Fresh: Secondary contact recreation 1. The geometric mean criterion for E. coli is 630 per 100 mL High Saline: the geometric mean criterion for Enterococci is 165 per 100 mL Marine: The geometric mean criterion for Enterococci is 175 per 100 mL
Texas	Secondary contact 2			Secondary contact recreation 2. The geometric mean criterion for E. coli is 1,030 per 100 mL
Texas	Noncontact	Activities that do not involve a significant risk of water ingestion, such as those with limited body contact incidental to shoreline activity, including birding, hiking, and biking. Noncontact recreation use may also be assigned where primary		Fresh. The geometric mean criterion for E. coli is 2,060 per 100 mL. Marine: The geometric mean criterion for Enterococci is 350 per 100 mL.

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		and secondary contact recreation activities should not occur because of unsafe conditions, such as ship and barge traffic.		
Utah	Primary contact recreation	Class 2A -- Protected for frequent primary contact recreation where there is a high likelihood of ingestion of water or a high degree of bodily contact with the water. Examples include, but are not limited to, swimming, rafting, kayaking, diving, and water skiing.		E. coli GM 126, max 409
Utah	Secondary contact recreation	Class 2B -- Protected for infrequent primary contact recreation. Also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing.		E. coli GM 206, max 668
Kansas	Primary contact	Recreation on and after April 1 through October 31 of each year, during which a person is immersed to the extent that some inadvertent ingestion of water is probable.		Table 1i. Escherichia coli Criteria For Classified Stream Segments
Kansas	Secondary contact	Recreation during which the ingestion of classified surface waters other than classified stream segments is not probable. This use		

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		shall include wading, fishing, trapping, and hunting.		
Washington DC	Primary contact	Those water contact sports or activities that result in frequent whole body immersion or involve significant risks of ingestion of the water. (Terminology is there, but cannot confirm definition in regulations)		
Washington DC	Secondary contact	Those water contact sports or activities that seldom result in whole body immersion or do not involve significant risks of ingestion of the water. Terminology is there, but cannot confirm definition in regulations)		
GA	In progress			
Guam	Whole Body Contact Recreation	Any recreation or other use in which there is whole body contact with the water (e.g. including, but not limited to, activities such as skin diving and swimming).		Concentrations of enterococci bacteria shall not exceed 35 CFU/100 ml based upon the geometric mean of samples taken in any thirty (30) day interval and the Statistical Threshold Value (STV) OF 130 CFU/100 ml should not be exceeded by more than 10 percent of the samples taken during the same thirty (30) day interval For all surface waters, microbiological analysis may

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				include the use of Escherichia coli (E. coli) indicator and/or enterococci indicator. (i) Concentrations of E. coli shall be no greater than 126 CFU/100 ml based upon the geometric mean of samples taken in any thirty (30) day interval AND the Statistical Threshold Value (STV) OF 410 CFU/100 ml should not be exceeded by more than 10 percent of the samples taken during the same thirty (30) day interval
Guam	Limited body contact	Any recreational or other use in which contact with the water is either incidental or accidental, and in which the probability of ingesting appreciable quantities of water is minimal. recreation with limited body contact. Specific intended uses include the following: shipping, boating and berthing, industrial cooling water, and marinas.		Same as whole body contact.

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Idaho	Primary contact recreation	Primary contact recreation (PCR): water quality appropriate for prolonged and intimate contact by humans or for recreational activities when the ingestion of small quantities of water is likely to occur. Such activities include, but are not restricted to, those used for swimming, water skiing, or skin diving.		Geometric Mean Criterion. Waters designated for primary or secondary contact recreation are not to contain E. coli bacteria in concentrations exceeding a geometric mean of one hundred twenty-six (126) E. coli organisms per one hundred (100) mL based on a minimum of five (5) samples taken every three (3) to seven (7) days over a thirty (30) day period. (4-11-06) b. Use of Single Sample Values. A water sample exceeding the E. coli single sample maximums below indicates likely exceedance of the geometric mean criterion, but is not alone a violation of water quality standards. If a single sample exceeds the maximums set forth in Subsections 251.01.b.i., 251.01.b.ii., and 251.01.b.iii., then additional samples must be taken as specified in Subsection 251.01.c.: (4-11-06) ii. For waters designated as primary contact recreation, a single sample maximum of four hundred six (406) E. coli organisms per one hundred (100) mL; or (4-11-06)

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Idaho	Secondary contact recreation	Secondary contact recreation (SCR): water quality appropriate for recreational uses on or about the water and which are not included in the primary contact category. These activities may include fishing, boating, wading, infrequent swimming, and other activities where ingestion of raw water is not likely to occur.		For waters designated as secondary contact recreation, a single sample maximum of five hundred seventy-six (576) E. coli organisms per one hundred (100) mL; or Note: a revision without secondary contact criteria is pending.
Iowa	Primary contact	Waters in which recreational or other uses may result in prolonged and direct contact with the water, involving considerable risk of ingesting water in quantities sufficient to pose a health hazard. Such activities would include, but not be limited to, swimming, diving, water skiing, and water contact recreational canoeing.		Bacteria Criteria Table (organisms/100 ml of water) Use or Category Geometric Mean Sample Maximum Class A1 (GM SSM) 3/15 – 11/15 126 235 11/16 – 3/14 Does not apply Does not apply Class A2 (Only)
Iowa	Secondary contact	Waters in which recreational or other uses may result in contact with the water that is either incidental or accidental. During the recreational use, the probability of ingesting appreciable quantities of water is minimal. Class A2 uses include fishing, commercial and recreational boating, any limited contact incidental to shoreline activities and activities in which users do not swim		3/15 – 11/15 630 2880 11/16 – 3/14 Does not apply Does not apply

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		or float in the water body while on a boating activity		
Iowa	Children	Children's recreational use (Class "A3"). Waters in which recreational uses by children are common. Class A3 waters are water bodies having definite banks and bed with visible evidence of the flow or occurrence of water. This type of use would primarily occur in urban or residential areas.		3/15 – 11/15 126 235 11/16 – 3/14 Does not apply Does not apply Class A1 - Primary Contact Recreational Use Class A2 - Secondary Contact Recreational Use Class A3 - Children's Recreational Use
Illinois	Primary Contact	35 IAC 301.323 "Primary Contact" means any recreational or other water use in which there is prolonged and intimate contact with the water involving considerable risk of ingesting water in quantities sufficient to pose a significant health hazard, such as swimming and water skiing.		200 FC No more than 10% of samples may exceed 400 FC. 20 FC No more than 10% of samples may exceed 400 FC. 200 FC No more than 10% of samples may exceed 400 FC. 200 FC or 126 EC A FC count of 500 or an EC count of 235 in each of two samples collected on the same day shall require closing the beach. The beach shall not be reopened until two additional samples collected on the same day are both less than 500 FC or 235 EC. A FC count of 500 or an EC count of 235 in any single sample of a two sample set shall require the

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				submission of two additional samples to be collected on the same day within 24 hours after notification by the Department. If either of the two follow-up samples exceeds a FC count of 500 or an EC count of 235, the beach shall be closed and not reopened until two additional samples collected on the same day are both less than 500 FC or 235 EC.
Illinois	Incidental Contact Recreation	35 IAC 301.282 "Incidental Contact Recreation" means any recreational activity in which human contact with the water is incidental and in which the probability of ingesting appreciable quantities of water is minimal, such as fishing; commercial boating; small craft recreational boating; and any limited contact associated with shoreline activity such as wading.		None
Illinois	Non-contact	35 IAC 301.324 "Non-contact Recreation" means any recreational or other water use in which human contact with the water is unlikely, such as pass through commercial or recreational navigation, and where physical conditions or hydrologic		None

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
		modifications make direct human contact unlikely or dangerous		
Kentucky	Primary contact	"Primary contact recreation water" means those waters suitable for full body contact recreation during the recreation season of May 1 through October 31. 401 KAR 10:001		(a) Fecal coliform content or Escherichia coli content shall not exceed 200 colonies per 100 ml or 130 colonies per 100 ml respectively as a geometric mean based on not less than five (5) samples taken during a thirty (30) day period. Content also shall not exceed 400 colonies per 100 ml in twenty (20) percent or more of all samples taken during a thirty (30) day period for fecal coliform or 240 colonies per 100 ml for Escherichia coli. Fecal coliform criteria listed in subsection (2)(a) of this section shall apply during the remainder of the year; 401 KAR 10:031
Kentucky	Secondary contact	Secondary contact recreation waters" means those waters suitable for partial body contact recreation, with minimal threat to public health due to water quality. 401 KAR 10:001		Fecal coliform content shall not exceed 1,000 colonies per 100 ml as a thirty (30) day geometric mean based on not less than five (5) samples; nor exceed 2,000 colonies per 100 ml in twenty (20) percent or more of all samples taken during a thirty (30) day period; and 401 KAR 10:031

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
Louisiana	Primary contact	Primary Contact Recreation—any recreational or other water contact use involving prolonged or regular full-body contact with the water and in which the probability of ingesting appreciable amounts of water is considerable. Examples of this type of water use include swimming, skiing, and diving		
Louisiana	Secondary contact	Secondary Contact Recreation—any recreational or other water contact use in which body contact with the water is either incidental or accidental and the probability of ingesting appreciable amounts of water is minimal. Examples of this type of water use include fishing, wading, and boating		
Massachusetts	Primary contact	Primary Contact Recreation. Any recreation or other water use in which there is prolonged and intimate contact with the water with a significant risk of ingestion of water. These include, but are not limited to, wading, swimming, diving, surfing and water skiing.		Complicated, but typical primary contact values
Massachusetts	Secondary contact	Secondary Contact Recreation. Any recreation or other water use in which contact with the water is either incidental or accidental. These include but are not limited to fishing, including human		Complicated, but they are less stringent (5X) than primary contact

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
		consumption of fish, boating and limited contact incident to shoreline activities. Where designated, secondary contact recreation also includes shellfishing, including human consumption of shellfish.		
Michigan	Total body contact	"Total body contact recreation" means any activities normally involving direct contact with water to the point of complete submergence, particularly immersion of the head, with considerable risk of ingesting water, including swimming.		Rule 62. (1) All surface waters of the state protected for total body contact recreation shall not contain more than 130 Escherichia coli (E. coli) per 100 milliliters, as a 30-day geometric mean. Compliance shall be based on the geometric mean of all individual samples taken during 5 or more sampling events representatively spread over a 30-day period. Each sampling event shall consist of 3 or more samples taken at representative locations within a defined sampling area. At no time shall the surface waters of the state protected for total body contact recreation contain more than a maximum of 300 E. coli per 100 milliliters. Compliance shall be based on the geometric mean of 3 or more samples taken during the same sampling event at representative locations within a defined sampling area.

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
Michigan	Partial-body contact	"Partial body contact recreation" means any activities normally involving direct contact of some part of the body with water, but not normally involving immersion of the head or ingesting water, including fishing, wading, hunting, and dry boating.		(2) All surface waters of the state protected for partial body contact recreation shall not contain more than a maximum of 1,000 E. coli per 100 milliliters. Compliance shall be based on the geometric mean of 3 or more samples, taken during the same sampling event, at representative locations within a defined sampling area.
Minnesota	Recreation	Aquatic life and recreation includes all waters of the state that support or may support aquatic biota, bathing, boating, or other recreational purposes and for which quality control is or may be necessary to protect aquatic or terrestrial life or their habitats or the public health, safety, or welfare		Escherichia (E.) coli bacteria shall not exceed 126 organisms per 100 milliliters as a geometric mean of not less than five samples representative of conditions within any calendar month, nor shall more than ten percent of all samples taken during any calendar month individually exceed 1,260 organisms per 100 milliliters. The standard applies only between April 1 and October 31.
Minnesota	Secondary body contact	Not defined.		Not to exceed 630 organisms per 100 milliliters as a geometric mean of not less than five samples representative Escherichia (E.) coli of conditions within any calendar month, nor shall more than ten percent of all samples taken during any

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
				calendar month individually exceed 1,260 organisms per 100 milliliters. The standard applies only between May 1 and October 31.
Montana	Recreation	For purposes of these rules, "recreational" refers to swimming and "recreational area" refers to a public beach or swimming area, including areas adjacent to streams or lakes		Complicated, but different values
Montana	Secondary contact	"Secondary contact recreation" means activities in or on the water where the potential for immersion or ingestion of water is low, such as wading or boating.		Complicated, but different values
Nevada	Contact	Recreation involving contact with the water		G.M. \leq 126 S.V. \leq 410
Nevada	Noncontact	Recreation not involving contact with the water		G.M. \leq 630
New Hampshire	Primary contact	Class A waters, but can't find definition		
New Hampshire	Secondary contact	Class B waters, but can't find definition		
New Jersey	Primary contact	"Primary contact recreation" means water related recreational activities that involve significant ingestion risks and includes, but is not limited		Primary Contact Recreation:(1)Enterococci levels shall not exceed a geometric mean of 35/100 ml, or a single sample maximum of

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
		to, wading, swimming, diving, surfing, and water skiing.		104/100ml.SE1 and SC(2)E. Coli levels shall not exceed a geometric mean of 126/100 ml or a single sample maximum of 235/100 ml.
New Jersey	Secondary contact	“Secondary contact recreation” means recreational activities where the probability of water ingestion is minimal and includes, but is not limited to, boating and fishing.		Secondary Contact Recreation:(1)Fecal coliform levels shall not exceed a geometric mean of 770/100 ml.SE2(2)Fecal coliform levels shall not exceed a geometric mean of 1500/100ml.SE3
New Mexico	Primary contact	“Primary contact” means any recreational or other water use in which there is prolonged and intimate human contact with the water, such as swimming and water skiing, involving considerable risk of ingesting water in quantities sufficient to pose a significant health hazard. Primary contact also means any use of surface waters of the state for cultural, religious or ceremonial purposes in which there is intimate human contact with the water, including but not limited to ingestion or immersion, that could pose a significant health hazard.		Primary contact: The monthly geometric mean of E. coli bacteria of 126 cfu/100 mL or MPN/100 ml and single sample of 410 cfu/100 mL or MPN/100 mL and pH within the range of 6.6 to 9.0 apply to this use. The results for E. coli may be reported as either colony forming units (CFU) or the most probable number (MPN) depending on the analytical method used.

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
New Mexico	Secondary contact	“Secondary contact” means any recreational or other water use in which human contact with the water may occur and in which the probability of ingesting appreciable quantities of water is minimal, such as fishing, wading, commercial and recreational boating and any limited seasonal contact.		Secondary contact: The monthly geometric mean of E. coli bacteria of 548 cfu/100 mL or MPN/100 mL and single sample of 2507 cfu/100 mL or MPN/100 mL apply to this use. The results for E. coli may be reported as either colony forming units (CFU) or the most probable number (MPN), depending on the analytical method used.
New York	Primary contact	Primary contact recreation means recreational activity that involves significant ingestion risk, including but not limited to wading, swimming, diving, surfing and water skiing.		Complicated. Not clear, so disregard for now.
New York	Secondary contact	Secondary contact recreation means recreational activity in which the probability of significant contact with the water or water ingestion is minimal, including but not limited to boating, fishing, and shoreline recreational activity involving limited contact with surface waters.		Complicated. Not clear, so disregard for now.
North Carolina			Sewage, industrial wastes, or other wastes: none shall be allowed that are not treated to the satisfaction of the Commission. Discharges in the immediate vicinity of bathing areas shall not be allowed if the	

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
			Director determines that the waste cannot be treated to ensure the protection of primary contact recreation	
Ohio	Primary contact	"Primary contact" - these are waters that, during the recreation season, are suitable for one or more full body contact recreation activities such as, but not limited to, wading, swimming, boating, water skiing, canoeing, kayaking, and scuba diving. All surface waters of the state are designated as primary contact recreation unless otherwise designated as bathing waters or secondary contact recreation	Free from public health nuisances associated with raw or poorly treated sewage reaching surface waters of the state.	90-day geometric mean 126, STV 410
Ohio	Secondary contact	"Secondary contact" - these are waters that result in minimal exposure potential to water borne pathogens because the waters are: rarely used for water based recreation such as, but not limited to, wading; situated in remote, sparsely populated areas; have restricted access points; and have insufficient depth to provide full body immersion, thereby		90-day geometric mean 1030, STV 1030

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
		greatly limiting the potential for water based recreation activities. Waters designated secondary contact recreation are identified in rules 3745-1-08 to 3745-1-30 of the Administrative Code.		
Oklahoma	Primary contact	785:45-5-16.Primary Body Contact Recreation(a)Primary Body Contact Recreation involves direct body contact with the water where a possibilityof ingestion exists. In these cases the water shall not contain chemical, physical or biological substances in concentrations that are irritating to skin or sense organs or are toxic or cause illness upon ingestion by human beings.		(b)Escherichia coli (E.coli).(1)The Primary Body Contact Recreation subcategory designated for a waterbody shall be deemed to be fully supported with respect to E. coli the geometric mean of 126 colonies per 100 ml is met. These values are based upon all samples collected overthe recreation period in accordance with OAC 785:46-15-3(c).(2)The Primary Body Contact Recreation subcategory designated for a waterbody shall be deemed to be not supported with respect to E. coliif the geometric mean of 126 colonies per 100 ml is not met. These values are based upon all samples collected over the recreation period in accordance with OAC 785:46-15-3(c).(c)Enterococci.(1)The

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
				<p>Primary Body Contact Recreation subcategory designated for a waterbody shall be deemed to be fully supported with respect to enterococci if the geometric mean of 33 colonies per 100 ml is met. These values are based upon all samples collected over the recreation period in accordance with OAC 785:46-15-3(c).(2)The Primary Body Contact Recreation subcategory designated for a waterbody shall be deemed to be not supported with respect to enterococci if the geometric mean of 33 colonies per 100 ml is not met. These values are based upon all samples collected over the recreation period in accordance with OAC 785:46-15-3(c)</p>
Oklahoma	Secondary contact	<p>785:45-5-17.Secondary Body Contact Recreation(a)The water quality requirements for Secondary Body Contact Recreation are usually not as stringent as for Primary Body Contact Recreation.(b)The Secondary Body Contact Recreation beneficial use is designated where ingestion of</p>		None

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
		water is not anticipated.(c)Associated activities may include boating, fishing or wading.(d)Waters so designated shall be maintained to be free from human pathogens in numbers which may produce adverse health effects in humans.		
Puerto Rico	Primary contact	Any recreational activity, including swimming or other uses in which there is required prolonged and direct contact of the human body with the water involving considerable likelihood of ingestion in quantities sufficient to pose a significant health hazard or in which there is complete immersion of sensitive organs such as eyes, nose and ears.		
Puerto Rico	Secondary contact	Any recreational activity such as fishing or other use in which human body contact with the water is indirect and sensitive organs such as eyes, nose and ears are not immersed		b. Coliforms. In shellfish growing or harvesting areas, designated by the pertinent agency and adopted by the Board, through Resolution; the median fecal coliform concentration of a series of representative samples of the waters taken sequentially, shall not exceed 14 MPN/100 mL, and not more than 10 percent of the samples shall exceed 43 MPN/100 mL.c. Enterococci. The enterococci density, in terms of

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
				geometric mean shall not exceed 35 colonies/100 mL in any 90-day interval; neither the 90th Percentile of the samples taken shall exceed 130 colonies/100 mL in the same 90-day interval.
South Carolina			No garbage, cinders, ashes, oils, sludge, or other refuse allowed. No treated wastes, toxic wastes, deleterious substances, colored or other wastes alone or in combination with other substances or wastes in sufficient amounts to make the waters unsafe or unsuitable for primary contact recreation or to impair the waters for any other best usage as determined for the specific waters which are assigned to this class.	
South Dakota	Immersion contact	(27) "Immersion recreation," a beneficial use assigned to surface waters of the state which are suitable for uses where the human body may come in direct contact with the water, to the point of complete submersion and where		< 126 /100 mL geometric mean based on a minimum of 5 samples obtained during separate 24-hour periods for any 30-day period and < 235 in any one sample

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
		water may be accidentally ingested or where certain sensitive organs such as the eyes, ears, and nose may be exposed to water;		
South Dakota	Limited contact	(32) "Limited-contact recreation," a beneficial use assigned to surface waters of the state which are suitable for boating, fishing, and other water-related recreation other than immersion recreation where a person's water contact would be limited to the extent that infections of eyes, ears, respiratory or digestive systems, or urogenital areas would normally be avoided;		< 630 /100mL geometric mean based on a minimum of 5 samples obtained during separate 24-hour periods for any 30-day period, and < 1178 in any one sample
Tennessee			There shall be no distinctly visible solids, scum, foam, oily slick, or the formation of slimes, bottom deposits, or sludge banks of such size or character that may be detrimental to recreation. There shall be no total suspended solids, turbidity or color in such amounts or character that will result in any objectionable appearance to the water, considering the nature and location of the water. There shall always be sufficient dissolved oxygen present to	

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
			prevent odors of decomposition and other offensive conditions. - The waters shall not contain substances that will result in objectionable taste or odor. The waters shall not contain toxic substances, whether alone or in combination with other substances, that will render the waters unsafe or unsuitable for water contact activities including the capture and subsequent consumption of fish and shellfish, or will propose toxic conditions that will adversely affect man, animal, aquatic life, or wildlife.	
Virginia	Primary contact	"Primary contact recreation" means any water-based form of recreation, the practice of which has a high probability for total body immersion or ingestion of water (examples include but are not limited to swimming, water skiing, canoeing and kayaking).		E. coli bacteria shall not exceed a monthly geometric mean of 126 CFU/100 ml in freshwater. Enterococci bacteria shall not exceed a monthly geometric mean of 35 CFU/100 ml in transition and saltwater. If there are insufficient data to calculate monthly geometric means in freshwater, no more than 10% of the total samples in the assessment period shall exceed 235 E. coli CFU/100 ml. If there are insufficient data to calculate

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
				monthly geometric means in transition and saltwater, no more than 10% of the total samples in the assessment period shall exceed enterococci 104 CFU/100 ml. For beach advisories or closures, a single sample maximum of 235 E. coli CFU/100 ml in freshwater and a single sample maximum of 104 enterococci CFU/100 ml in saltwater and transition zones shall apply .
Virginia	Secondary contact	"Secondary contact recreation" means a water-based form of recreation, the practice of which has a low probability for total body immersion or ingestion of waters (examples include but are not limited to wading, boating and fishing).		<i>E. coli</i> bacteria shall not exceed a monthly geometric mean of 630 CFU/100 ml in freshwater. If there is insufficient data to calculate monthly geometric means in freshwater, no more than 10% of the total samples in the assessment period shall exceed 1173 E. coli CFU/100 ml. If there is insufficient data to calculate monthly geometric means in transition and saltwater, no more than 10% of the total samples in the assessment period shall exceed 519 enterococci CFU/100 ml.

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State	Term	Definition	Narrative Criteria	Fecal Indicator /Waterborne Pathogen Criteria
Wyoming	Primary contact	"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).		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.
Wyoming	Secondary contact	"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.		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.