



FAQs - Bacteria Methodology Update in the Water Quality Program Policy (WQP Policy 1-11)

What is the purpose of the update to WQP Policy 1-11?

This update is necessary because Ecology revised the Surface Water Quality Standards for the protection of water contact recreation bacteria criteria in January 2019. The key changes to these criteria are:

1. New bacterial indicators for contact recreation uses
 - Fresh water indicator – *Escherichia coli* (*E. coli*)
 - Marine water indicator – enterococci
2. All waters are now protected for primary contact recreation (extraordinary and secondary contact recreation uses were removed from the standards)
3. The averaging period to calculate the geometric mean for contact recreation bacterial indicators changed from 12 months to 3 months
4. The minimum number of samples needed to calculate the geometric mean changed from 5 to 3
5. A transition period was established to allow fecal coliform data to be used until January 1, 2021

What indicators will Ecology use to determine contact recreation use impairments?

Freshwater: In freshwater environments, *Escherichia coli* (*E. coli*) data is the new bacteria indicator. However, because the new rule allows a two year transition period to apply the new indicators (until 12/31/2020), fecal coliform data will be accepted as an alternative indicator for the next Water Quality Assessment (WQA). If both *E. coli* and fecal coliform data are available for a single WQA assessment unit, data will be assessed for each parameter and the waterbody will have a unique category determination made for both parameters. Future WQAs (after 12/31/2020) will assess only *E. coli* in freshwater to determine whether recreational uses are met or impaired. In future WQAs, listings based on fecal coliform will be inactivated if more recent *E. coli* data on the same assessment unit demonstrates consistent impairment or attainment of water quality standards.

Marine: In marine environments, enterococci is the new indicator for recreational use impairment determinations for marine waters. Since fecal coliform remains the bacteria indicator for determining shellfish use impairment in marine waters, any new fecal coliform data will be assessed in accordance with the shellfish harvesting use.

How will the WQA Policy 1-11 revisions affect existing freshwater fecal coliform Category 5 listings for water contact recreation?

The revised WQA Policy will apply to all bacteria data collected from 2006 through 2017. This will result in the reassessment of some data that were used in the previous WQA and could

result in a change to existing fecal coliform listings. Listings based on fecal coliform data collected prior to 2006 were assessed in accordance with the previous WQA Policy. The most significant change between the old and new recreational use bacteria methodology is that the allowable averaging period was reduced from 12 months to 3 months due to the January, 2019 rule change.

Note: It is possible that current listings based on data previously assessed may change in the next WQA due to application of the new Policy 1-11 methodology. The WQA team will consult with TMDL leads if this affects any Category 4A listings and determine what the appropriate category should be.

How will the WQA Policy 1-11 revisions affect existing marine fecal coliform Category 5 listings based on shellfish harvesting?

The WQA Policy update does not change the shellfish harvesting numeric criteria or listing methodology. Therefore, these changes will not impact current or future shellfish harvesting use impairment determinations. Fecal coliform will remain the indicator for this use in marine waters. All current fecal coliform listings in marine waters are now attributed to shellfish harvesting use.

What will happen to current Category 4As and 4Bs that are based on fecal coliform data beyond 2020?

Marine: Category 4A & 4B marine waters will not change unless new bacteria data are meeting Category 1 requirements based on the current shellfish harvesting use methodology .

Freshwater: Category 4A & 4B fresh waters that were approved by EPA to meet both freshwater recreational uses and downstream shellfish harvesting uses may continue to use fecal coliform to determine compliance with the TMDL. On a case-by-case basis, Category 4As & 4Bs approved by EPA to meet only recreational uses may use fecal coliform data collected prior to 12/31/2020. However, where possible, it is preferable that *E.coli* data are collected to demonstrate that recreational uses are now being attained in the assessment unit. (This will allow a Category 4A to move to a Category 1 if it meets WQA Policy requirements and is supported by the TMDL lead).

What will Ecology do with freshwater fecal coliform data collected after 2020?

After this upcoming WQA, fecal coliform will no longer be used to assess water contact recreation uses unless fecal coliform data are necessary to determine compliance with load allocations under a Total Maximum Daily Load (modification of an existing category 4A).