

# Revised Total Coliform Rule (rTCR) Sampling Guidance

November 8, 2022

# Key things to remember when sampling for bacteria

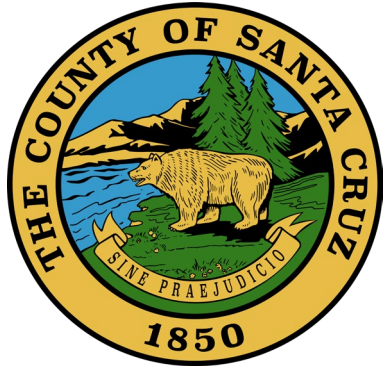
1. Be prepared to take repeat samples

*Repeat samples must be collected 24 hours after being notified of a positive routine sample.*

2. Sample according to your Bacteriological Sample Siting Plan (BSSP).

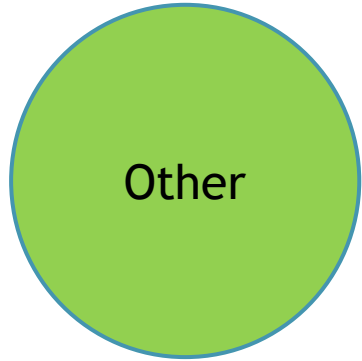
3. If you want it to count, you must label it properly!

*Samples should be labeled as a Routine or Repeat sample if they are for compliance purposes*



**Let's look at some common mistakes  
and their consequences.**

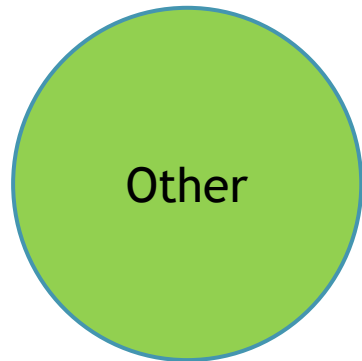
# What is wrong here?



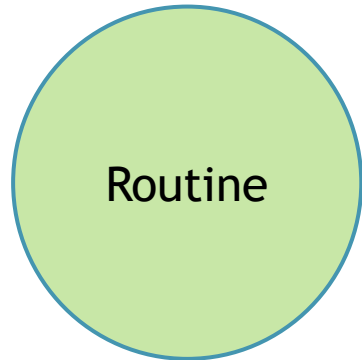
Other

Collected sample is absent for bacteria (Total Coliforms and E. coli)

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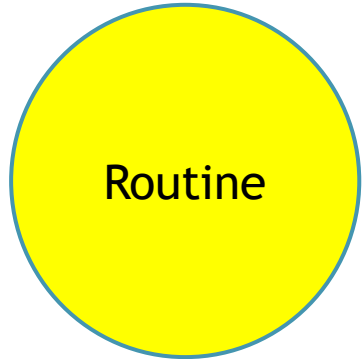


Collected sample is absent for bacteria (Total Coliforms and E. coli)

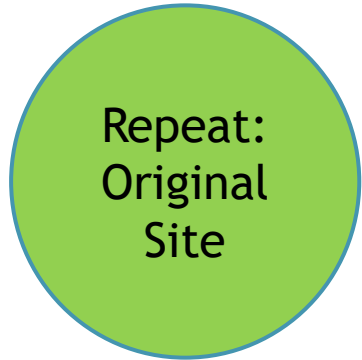


The operator did not label the sample as routine. This system could receive a citation for failure to collect a routine sample, despite a bacteria sample being collected. Compliance samples (Routine and Repeat) must be reported to the Regulatory Agency by the Laboratory and labeling a sample as routine is how they will know if a sample is for compliance.

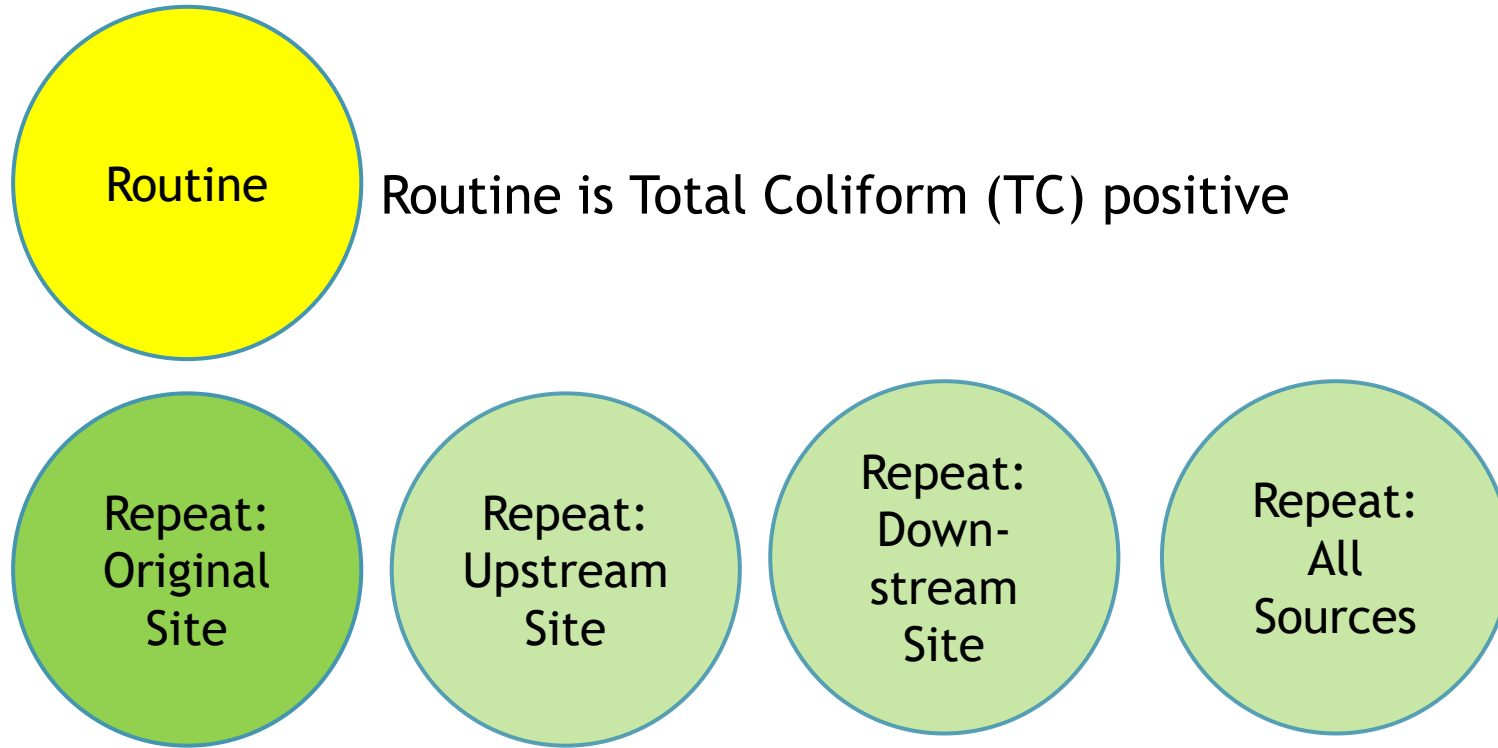
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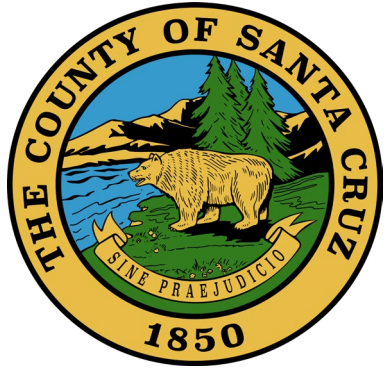
Routine is Total Coliform (TC) positive



# What is wrong here?



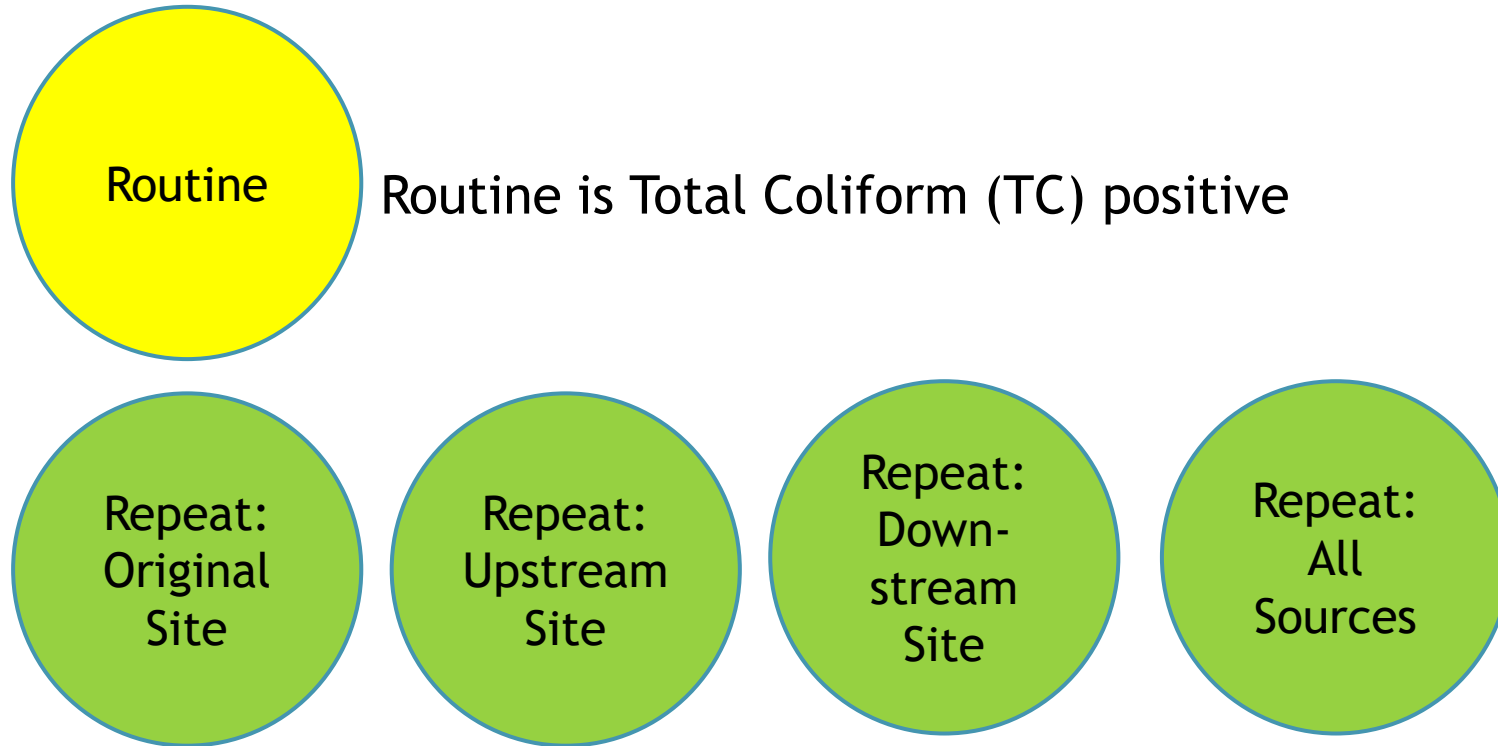
The operator did not collect a full repeat sample set as defined in the BSSP. Even though a repeat was absent for bacteria, this would put them out of compliance with their sampling plan and would result in a citation and a required site assessment



Now let's look at some scenarios where bacteria are detected and see what should be done next.

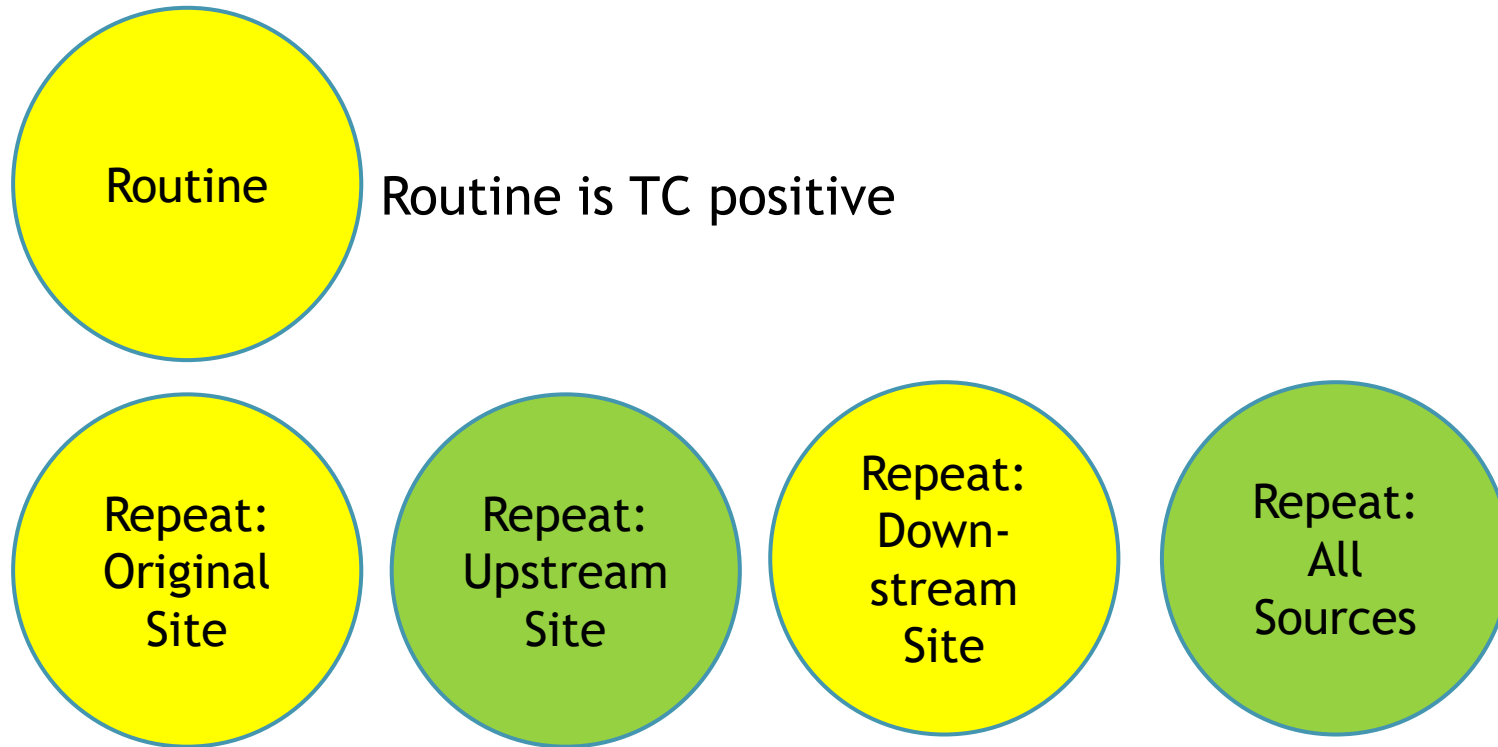


# Scenario 1:



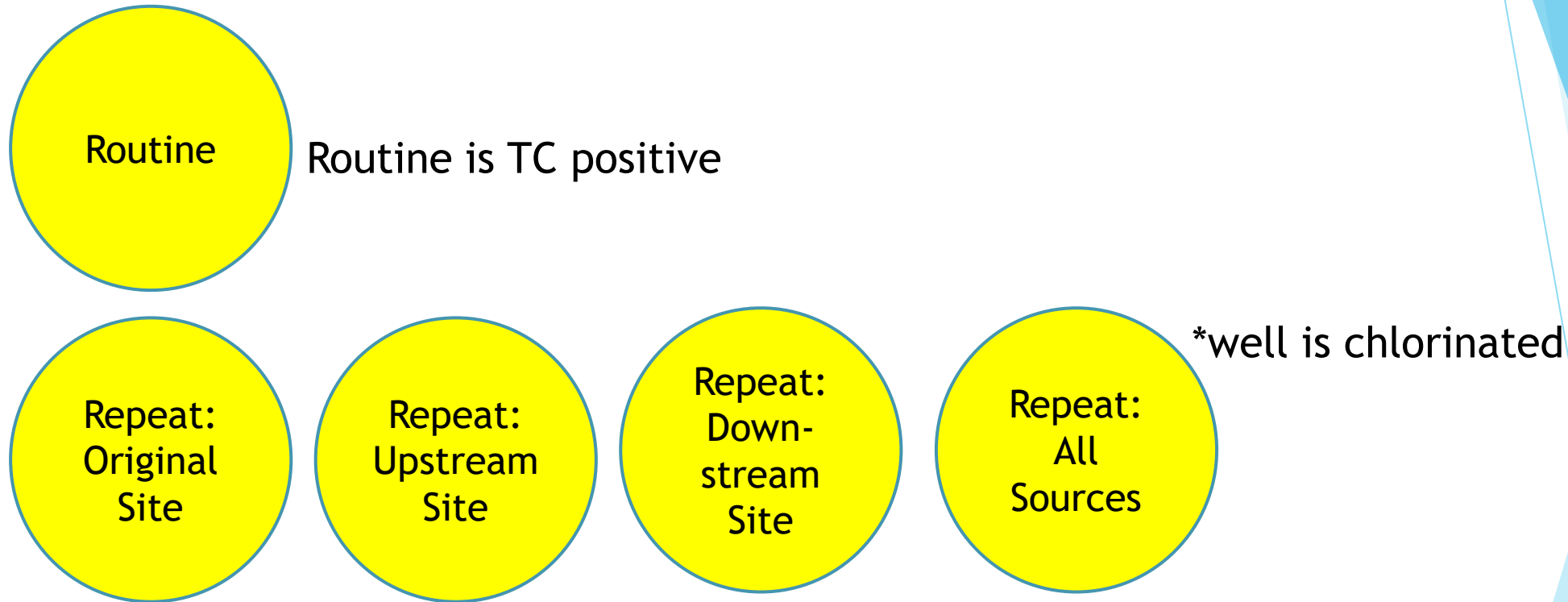
Repeat sample set is fully absent for bacteria, suggesting a false positive on the routine sample (or minor contamination which is no longer present). No further action is required. Operator is in full compliance with sampling requirements.

## Scenario 2:



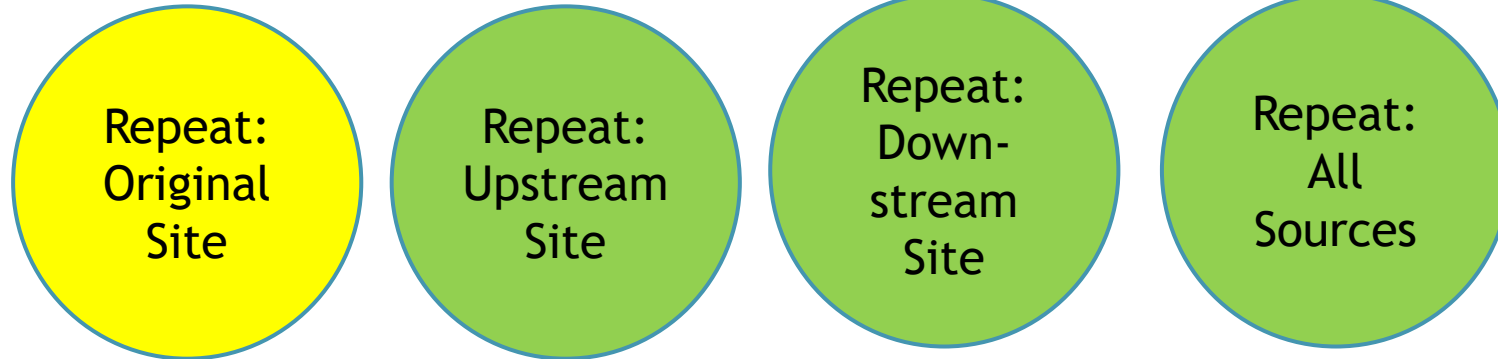
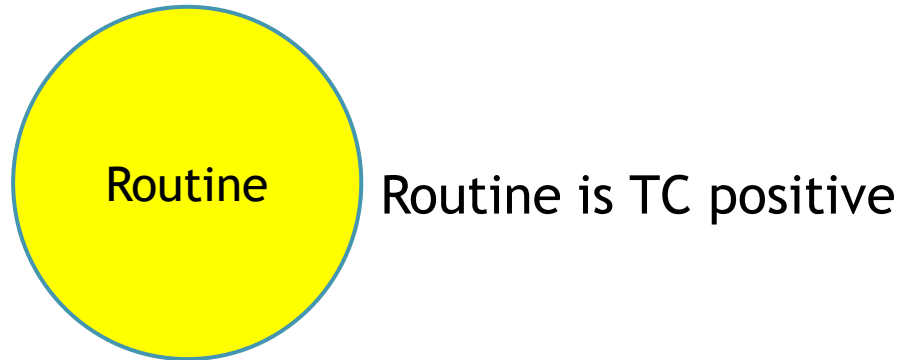
Two of the repeat sample locations are positive for TC, indicating an issue is present in the system. **Within 24 hours**, county staff must be notified. There is no public notification requirement for TC detections, however a water system assessment is required.

## Scenario 3:



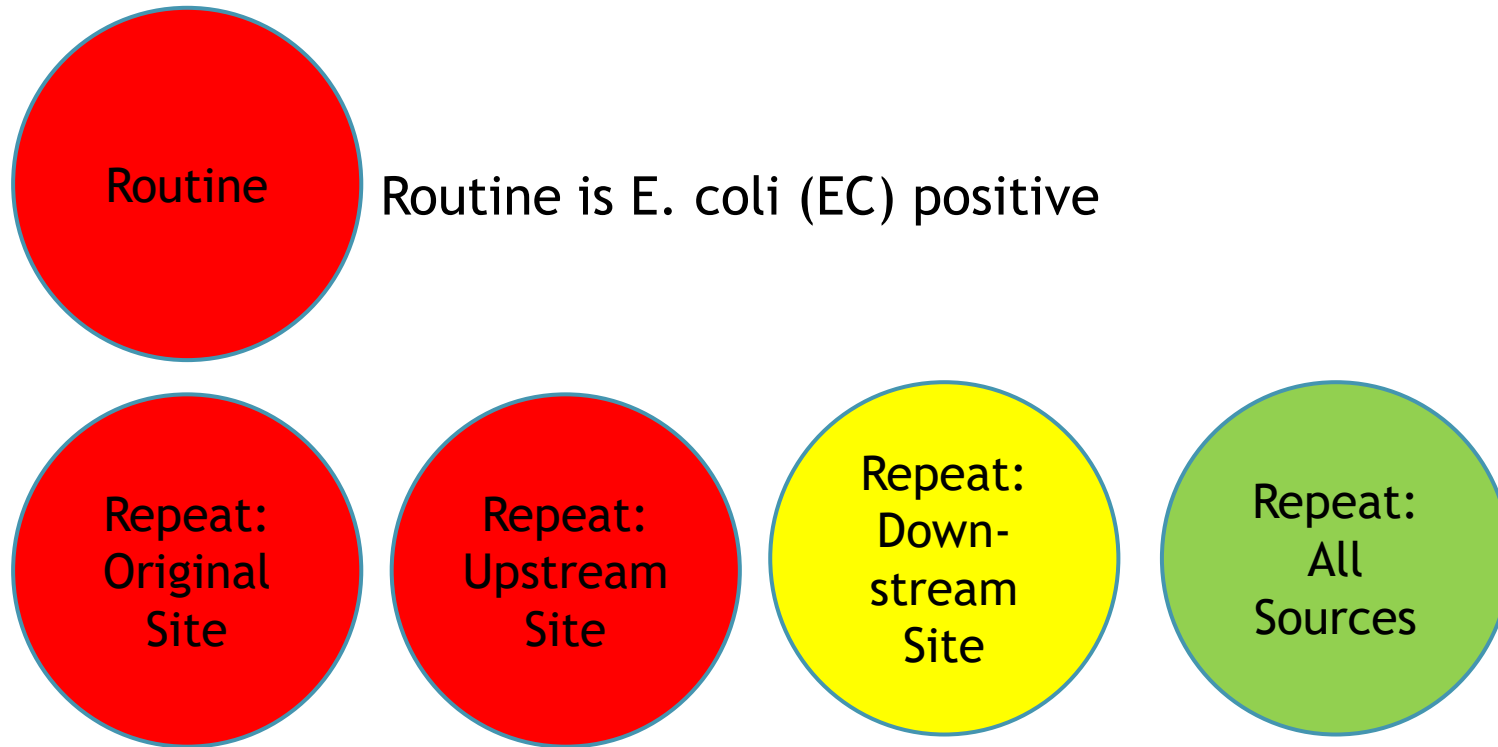
All of the repeat sample locations are positive for TC, indicating an issue with the source(s). In addition to the requirements for Scenario 2, systems that provide continuous disinfection will need to collect 3 consecutive source samples that are absent for bacteria.

## Scenario 4:



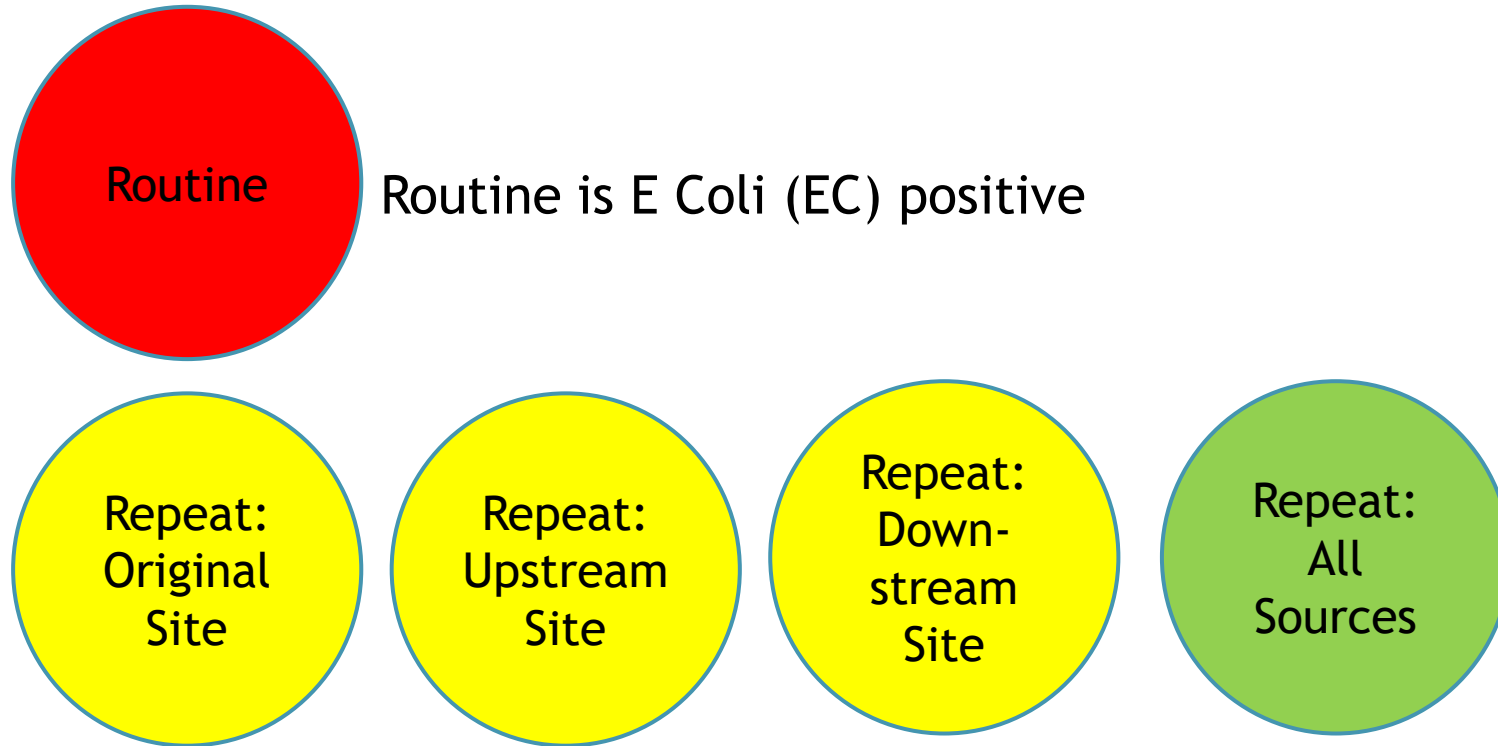
In the repeat sample set, only the original location is positive for TC. This indicates an issue with the location. The operator should request that the location be invalidated and then collect an alternate sample to replace the original location.

# Scenario 5:



In the repeat sample set, detection of EC is confirmed. This situation threatens the health of consumers and County Staff must be notified immediately. A Boil Water Notice must be posted and remain in place until two (2) consecutive bacteria samples, taken at least 24 hours apart, are absent for bacteria. This situation also requires a Level 2 assessment, which includes a County staff inspection of facilities.

## Scenario 6:



In the repeat sample set, Total Coliforms are detected, but not EC. Even though the repeat sample set was absent for EC, **this situation requires the same response as Scenario 5**. If any portion of your Total Coliform positive samples are also coming back EC positive, it indicates the source of the bacteria includes EC and it should be treated accordingly.