Name(s)

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Project Number

J0928

Project Title

Venice Canals: Picturesque or Contaminated?

Abstract

Objectives/Goals

Study of coliform bacteria contamination in the Venice Beach canals. Hypothesis: If coliform is present in the Venice Beach canals, then coliform levels will be the highest in the canal area the furthest away from the canal system water inlet.

Methods/Materials

Materials: Water sampling containers, SimPlate Single Test Medium Kit, Incubator, UV light (366 nm) Method: Collect water from each Venice Beach canal location, fill individual test containers, shake well to blend water sample with test medium, remove the lid from the SimPlate device and pour the sample/medium mixture onto the center of the test plate and distribute evenly,incubate in the dark for 24 to 28 h at $35 \pm 1°C$. observe color change of the liquid in the wells, count the number of wells showing a color change showing fluorescence under UV light.

Results

Sampling points A through C can be considered to be the furthest away from the entrance at sampling point J. Sampling points G through I can be considered to be the least distance from the entrance at sampling point J. The total colonies found in points A through C is 2213 while the total colonies found in points G through I is 4824. These data indicate a much higher level of coliform at the entrance locations than at the far reaches of the canal system.

Conclusions/Discussion

From the results of my experiment, I reject my hypothesis. Coliform levels are actually the highest in the canal area closest to the canal system water inlet. The hypothesis should be restated to: If coliform is present in the Venice Beach canals, then coliform levels will be the highest in the canal area closest to the canal system water inlet.

Summary Statement

This project studied and compared the levels of coliform at various locations in the Venice, CA canal system.

Help Received

Mother took me to Venice, CA to take samples, helped type report.