

NEWPORT BAY FECAL COLIFORM TARGETS – SHELLFISH HARVESTING

Evaluation of alternate indicators of health risk
from consumption of raw shellfish

WHAT GOT US HERE?

Deadline for compliance with the TMDL targets is 2022

BUT

Shellfish standards based on water column fecal coliform are unrealistic in an urbanized watershed

WHERE DO WE START?

National Shellfish Sanitation Program provides guidelines for growing area sanitary standards

The standards are based on water column fecal coliform

2015 guidelines allow potential substitution with male-specific coliphage

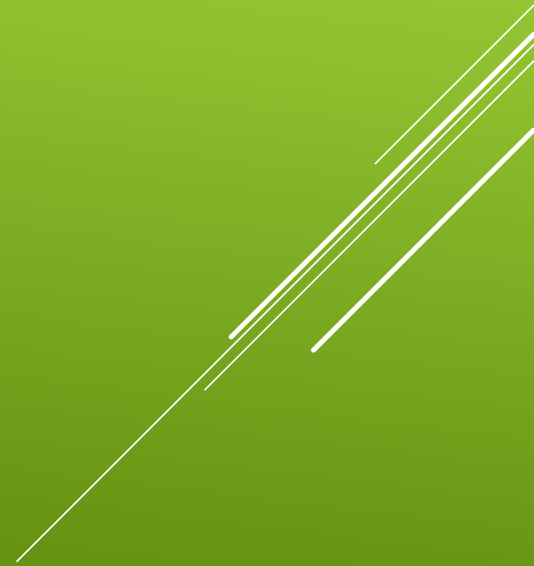
CAN WE DETECT VIRUS IN TISSUE?

Do virus-free shellfish deployed in Newport Bay bioaccumulate pathogenic viruses or surrogate indicators (male-specific coliphage)?



DO VIRAL MARKERS IN TISSUE COVARY WITH COLIFORM IN WATER?

Are ambient levels of water column fecal indicator bacteria in Newport Bay predictive of tissue levels of virus (or surrogate indicators) in the deployed shellfish?



ARE THE LEVELS OF VIRUS IN TISSUE MEANINGFUL WITH RESPECT TO FOOD SAFETY?

Are shellfish tissue levels of virus high enough to be a potential health risk based on comparison with published benchmarks for the average ingested inoculum resulting in food-borne illness?

IS IT FEASIBLE TO REPLACE THE CURRENT COLIFORM TARGETS WITH SHELLFISH VIRUS MEASUREMENTS?

Would shellfish tissue virus (or viral surrogate indicator) levels be a feasible and practical alternative to the current numeric target for the SHEL beneficial use in the Newport Bay Fecal Coliform TMDL?

