



Managing COVID-19: Continuous Operations & Wastewater Monitoring

August 28, 2020

WaterReuse Association
Northern California

Presentation Outline

1 Maintaining Continuous Operations

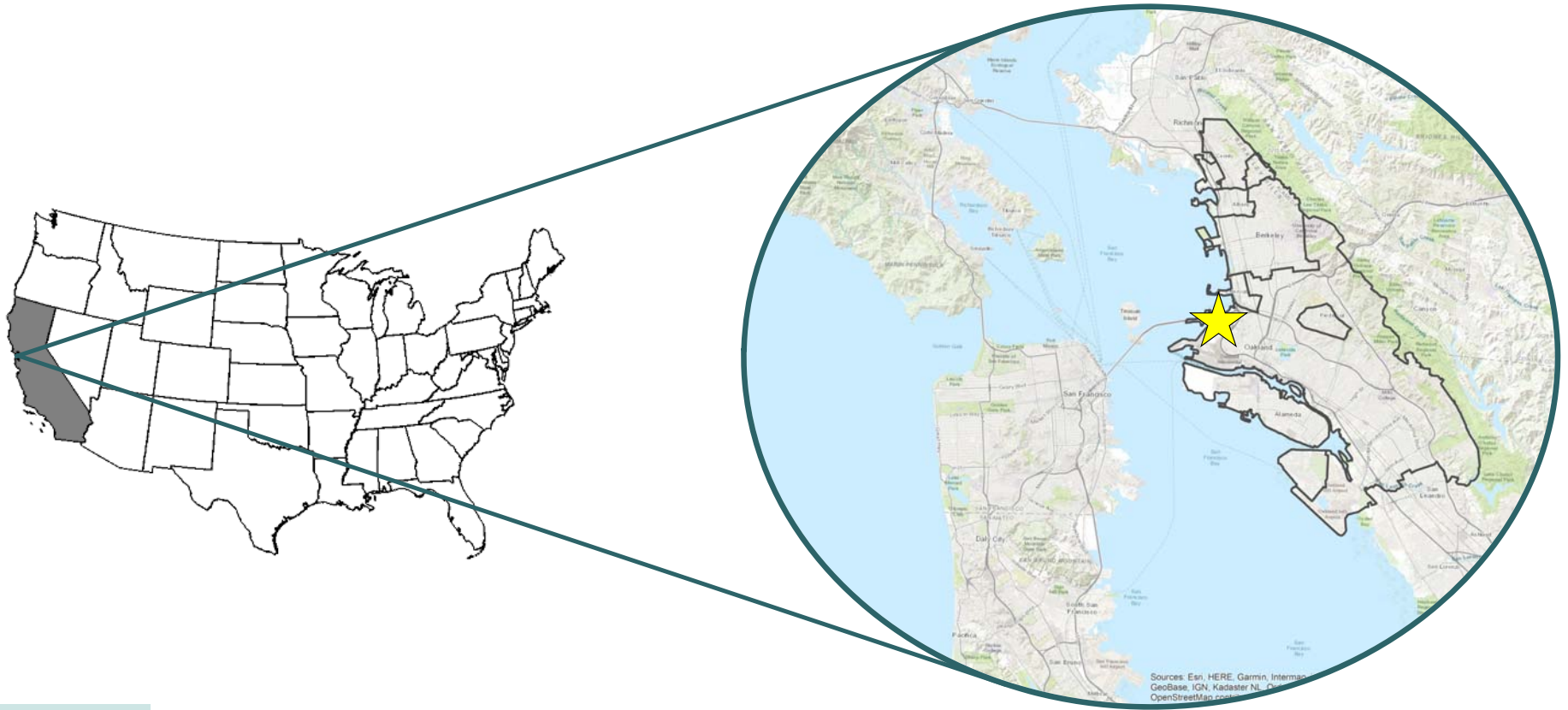
2 Wastewater Monitoring

3 Next Steps



INTRODUCTION

Introduction to EBMUD



INTRODUCTION

Introduction to EBMUD



BY THE NUMBERS

1 Wastewater
Treatment Plant

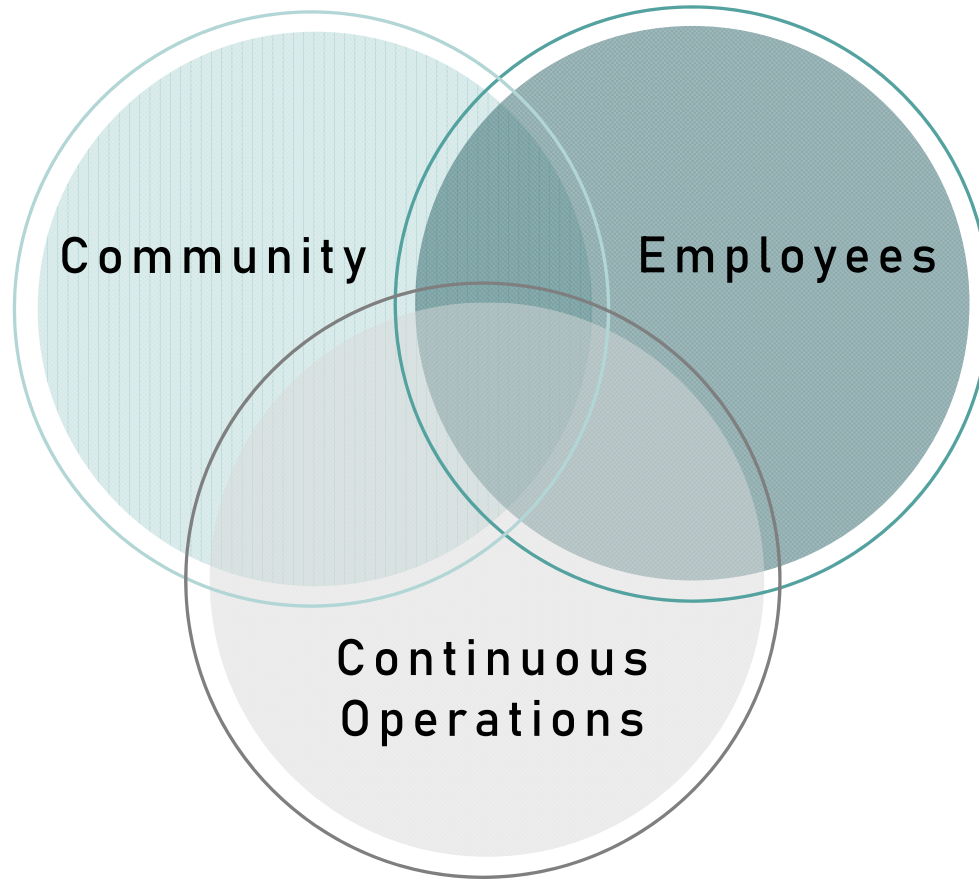
700k Wastewater
Customers *in 2020*

2k Total
Employees

270 Wastewater
Employees

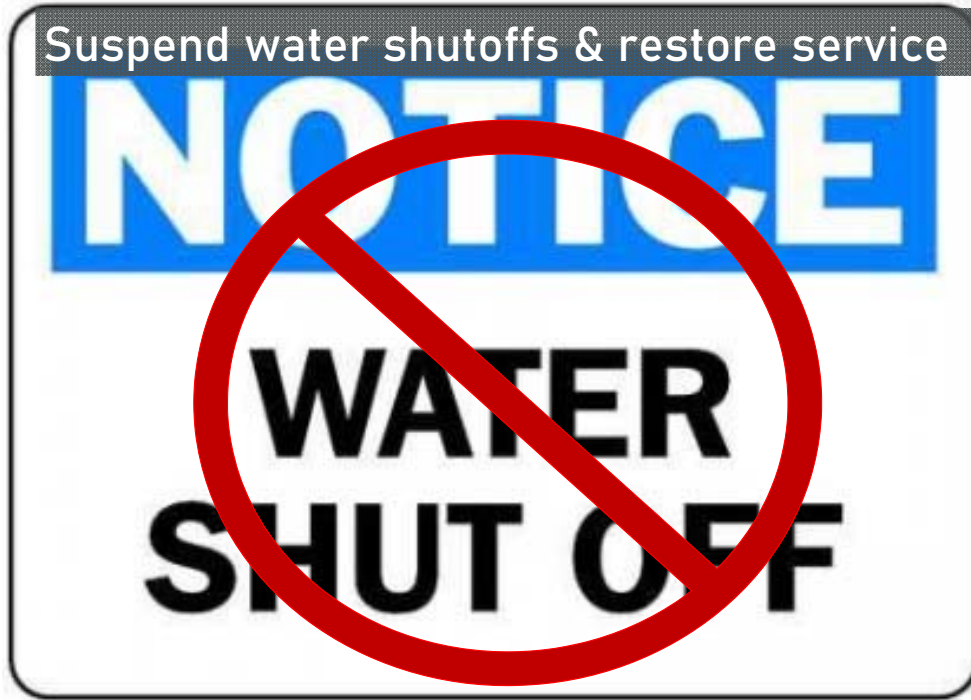
RESPONSE TYPES

Three Response Types

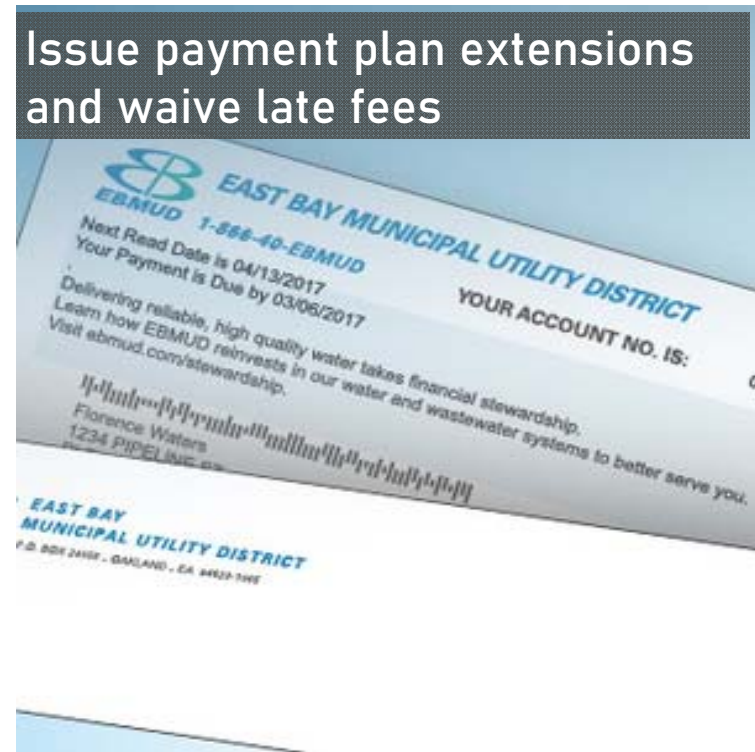


Community

Suspend water shutoffs & restore service



Issue payment plan extensions and waive late fees



EMPLOYEES

Employees

Maximize Telecommuting



Secure Additional Parking



Testing for Essential Workers

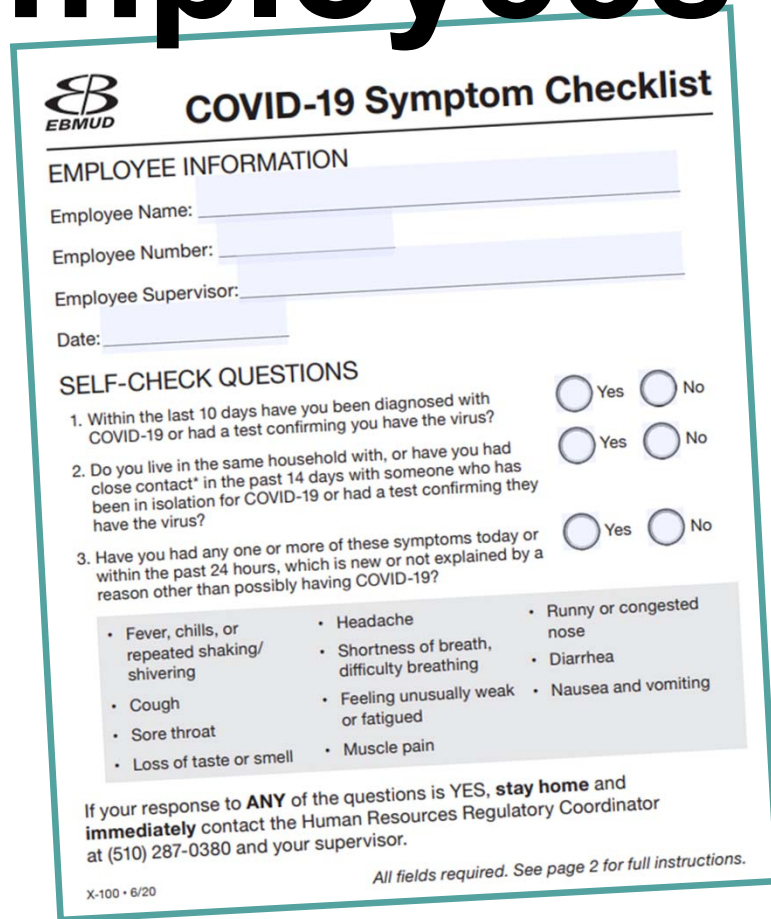


Increase Cleaning Procedures



Encourage Self-Quarantining
& Advance Sick Leave

Employees



EBMUD **COVID-19 Symptom Checklist**

EMPLOYEE INFORMATION

Employee Name: _____

Employee Number: _____

Employee Supervisor: _____

Date: _____

SELF-CHECK QUESTIONS

1. Within the last 10 days have you been diagnosed with COVID-19 or had a test confirming you have the virus? ☐ Yes ☐ No

2. Do you live in the same household with, or have you had close contact* in the past 14 days with someone who has been in isolation for COVID-19 or had a test confirming they have the virus? ☐ Yes ☐ No

3. Have you had any one or more of these symptoms today or within the past 24 hours, which is new or not explained by a reason other than possibly having COVID-19? ☐ Yes ☐ No

• Fever, chills, or repeated shaking/shivering	• Headache	• Runny or congested nose
• Cough	• Shortness of breath, difficulty breathing	• Diarrhea
• Sore throat	• Feeling unusually weak or fatigued	• Nausea and vomiting
• Loss of taste or smell	• Muscle pain	

If your response to **ANY** of the questions is YES, **stay home** and **immediately** contact the Human Resources Regulatory Coordinator at (510) 287-0380 and your supervisor.

X-100 • 6/20

All fields required. See page 2 for full instructions.

1 Minimize Exposure Risk

2 Improve Contact Tracing

SOCIAL DISTANCING

Social Distancing

Office



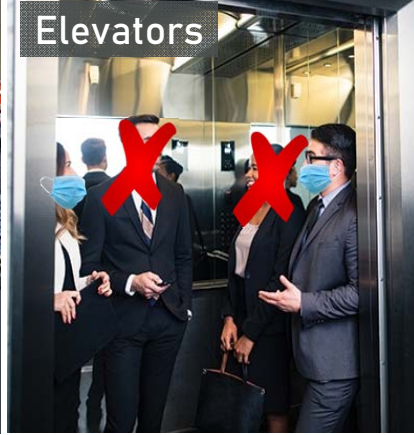
Add Plexiglass Extenders



Common Areas



Elevators



Tricycles



Rent Trailers



Masks & Hand Sanitizer

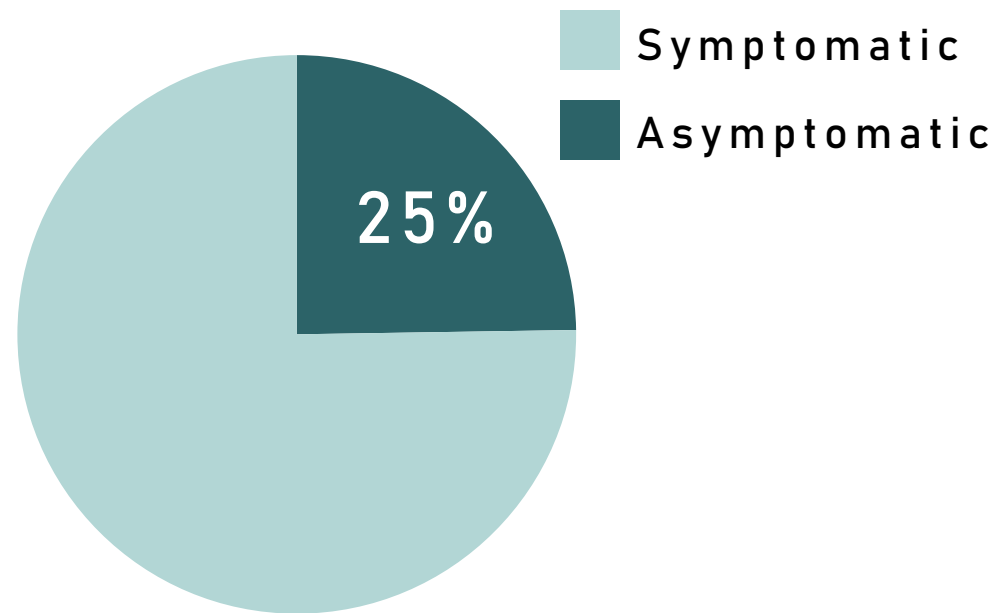
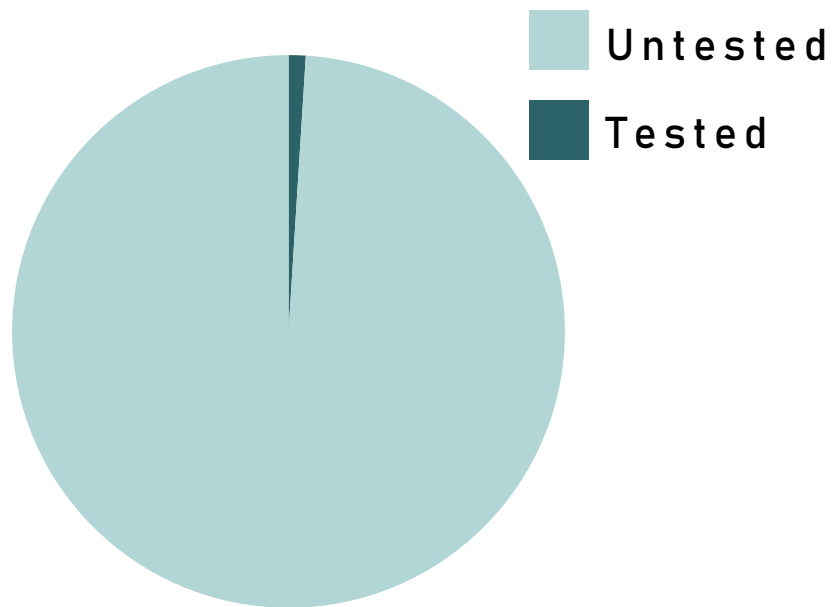


Homemade Hand Sanitizer

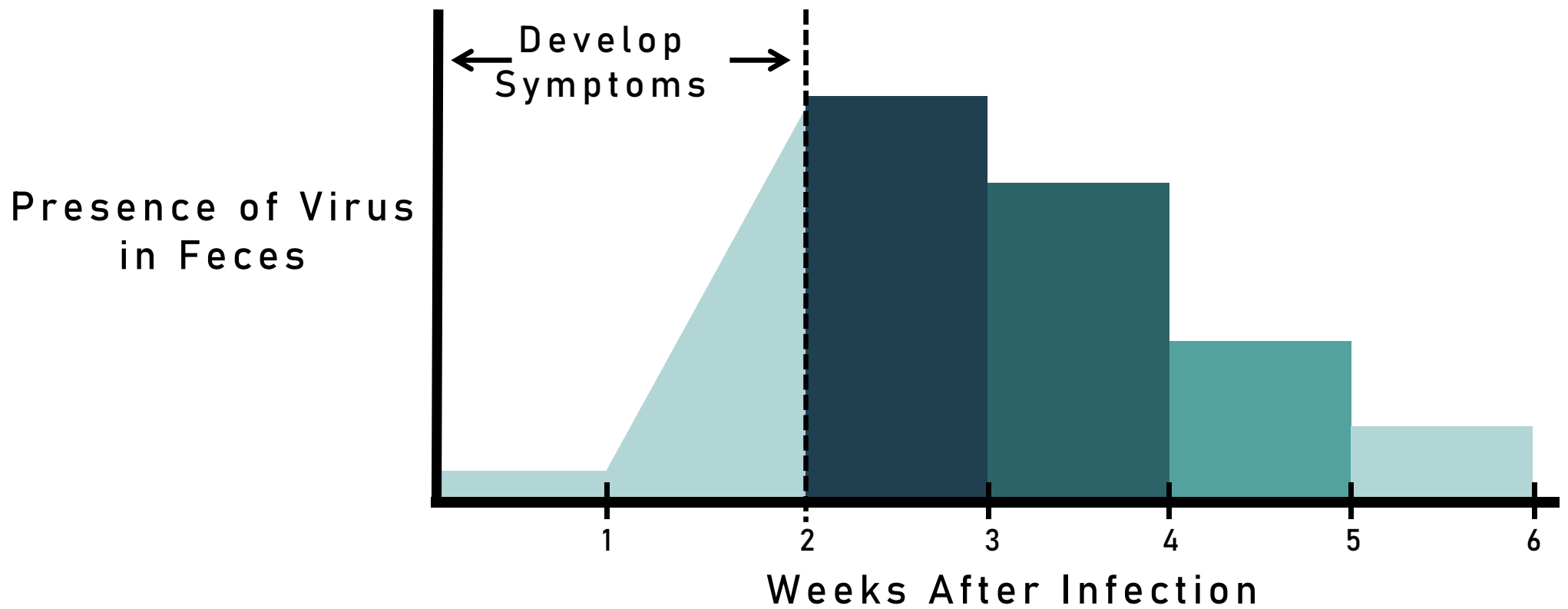


PROBLEM

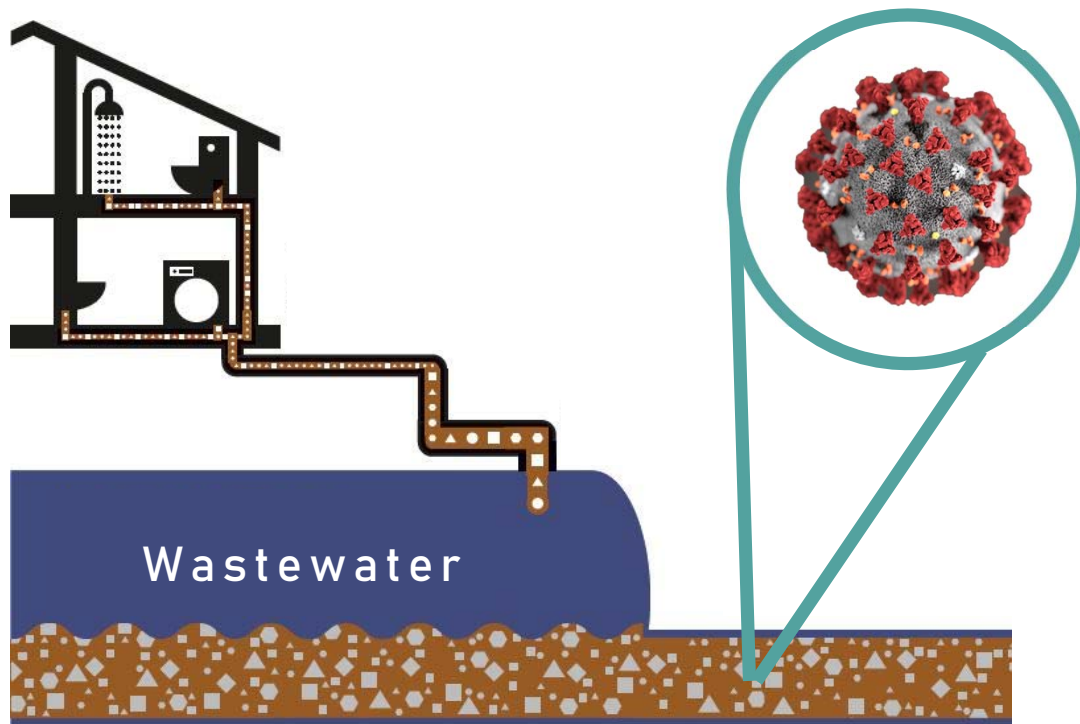
Problem



Solution



Sewage Signal



HIGHLIGHTS

Research groups across the globe have started analyzing sewage signals

The virus has been detected in wastewater before cases were confirmed:

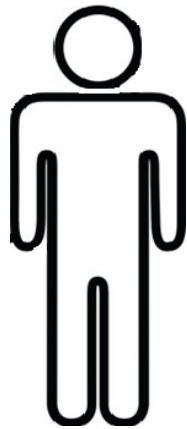
Mid-December: Italy

Mid-January: Spain

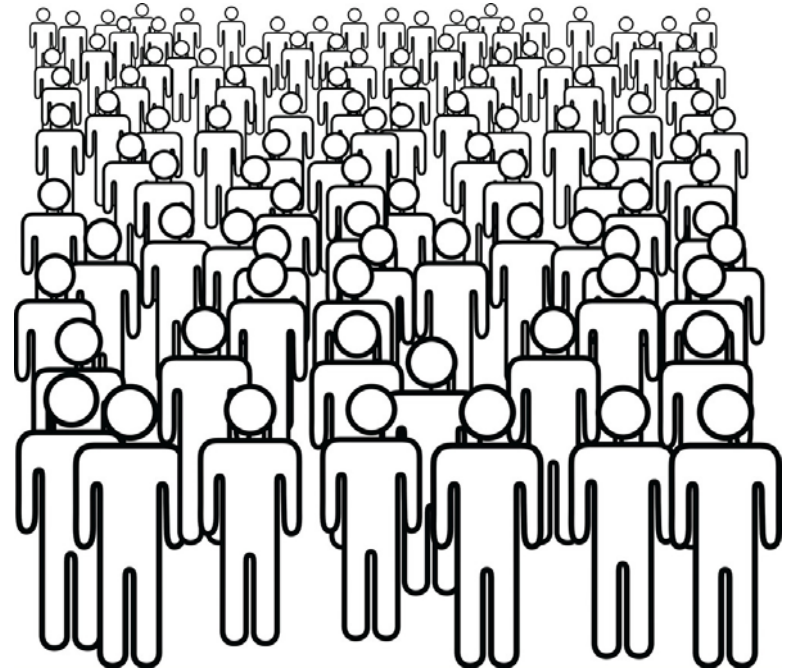
Early February: Netherlands

The Impact of One Test

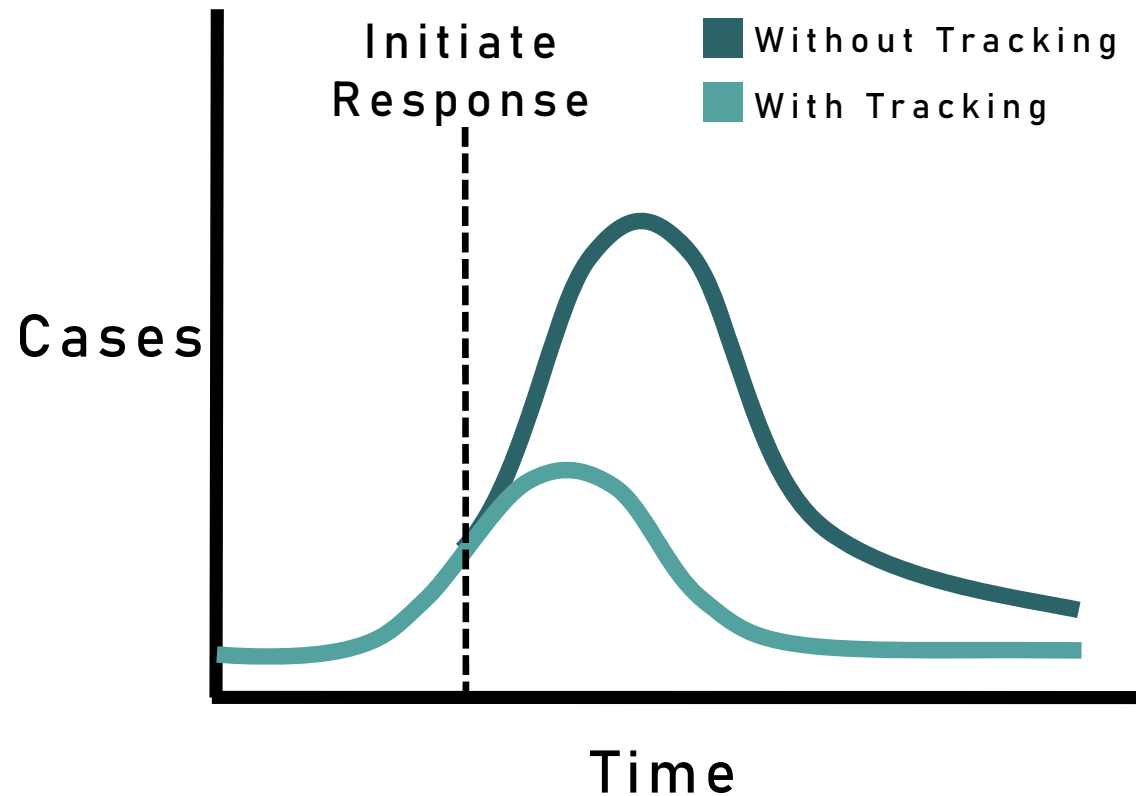
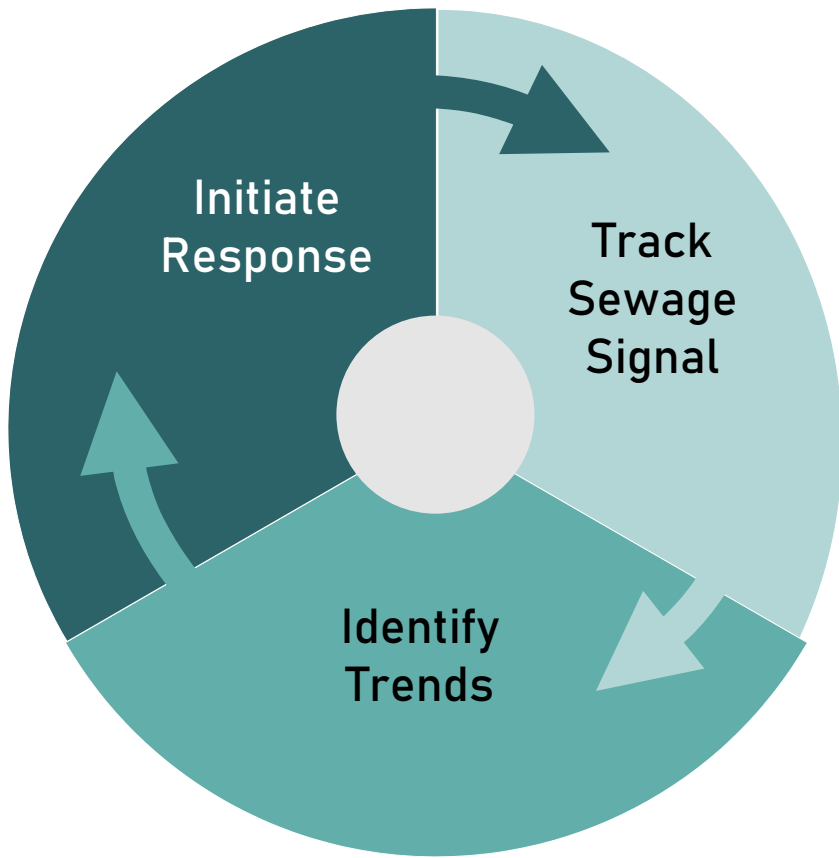
Conventional Testing



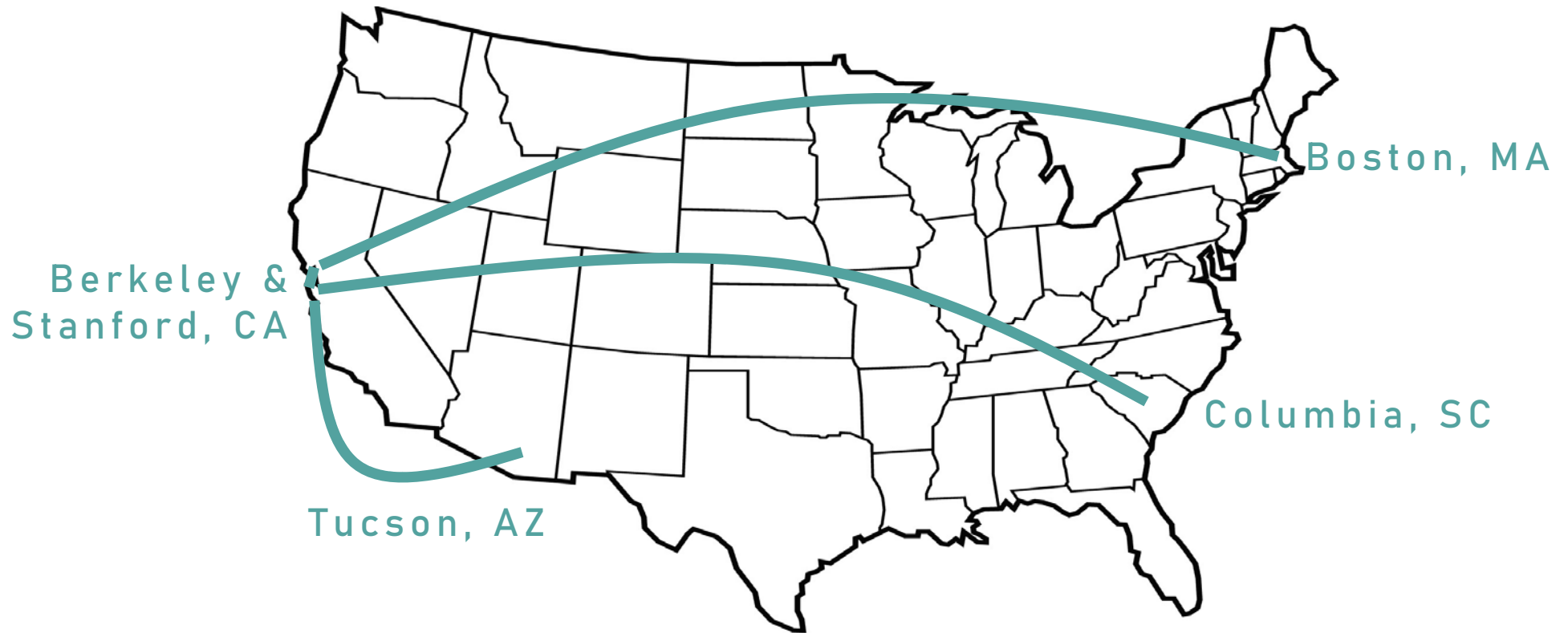
Sewage Signal



How To Use the Sewage Signal



EBMUD's Collaboration

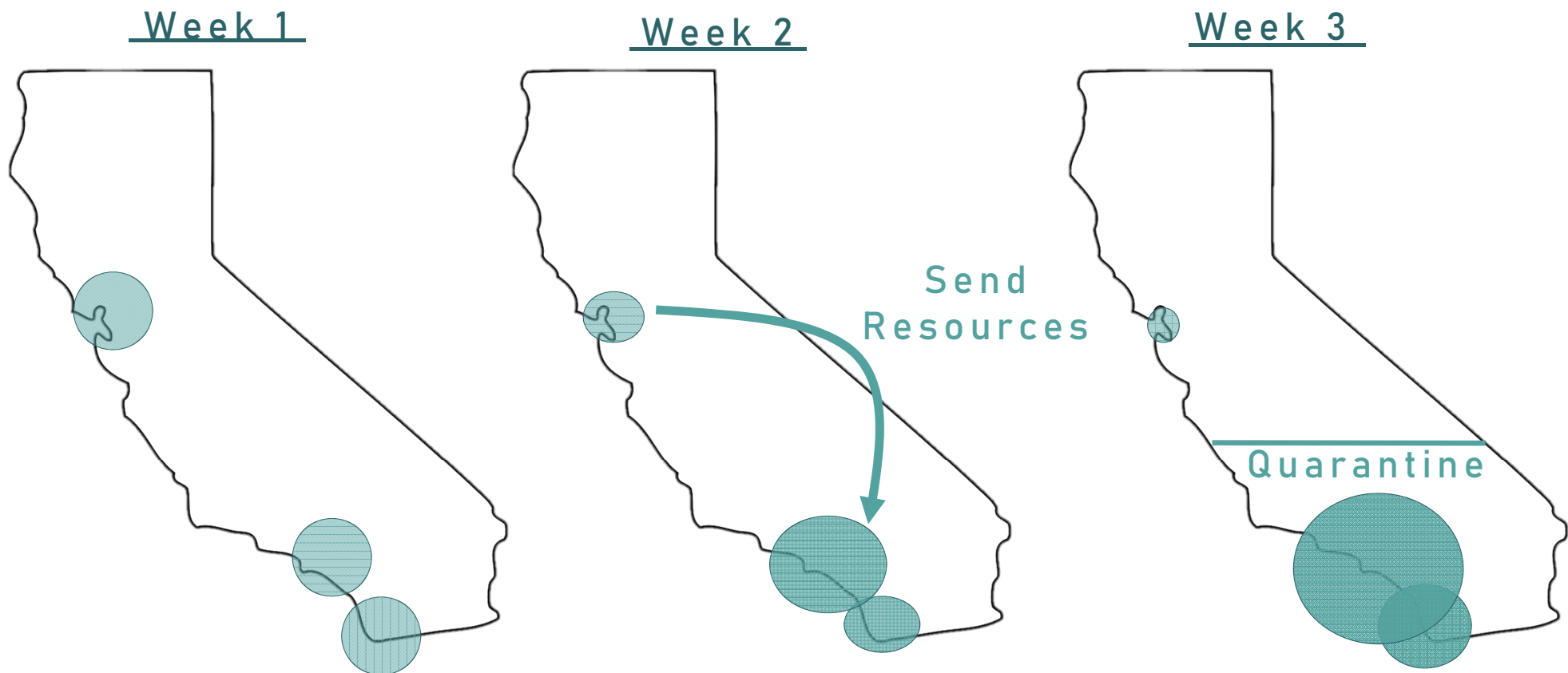


Start Small, Think Big



POTENTIAL IMPACT

Potential Impact



SAMPLING

Sampling



SAMPLING

Sampling

Set Up Sampler



Lock Up If In Public

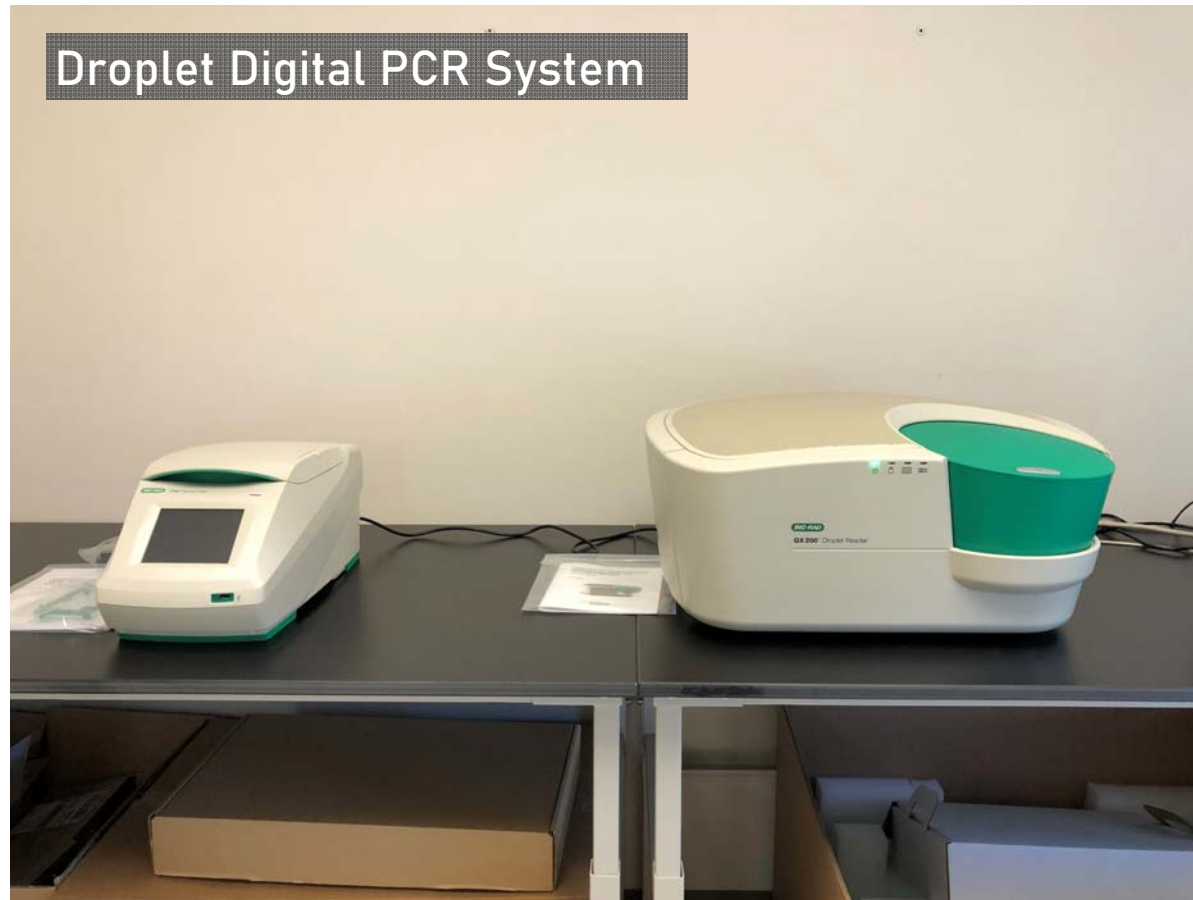


Make Composite Sample



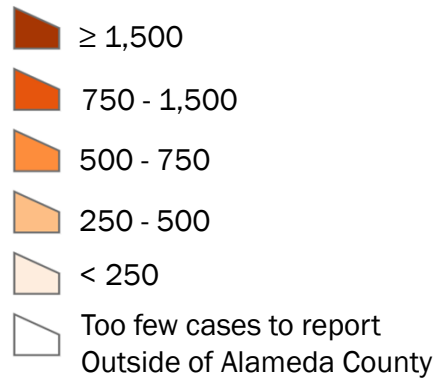
ANALYSIS

Analysis

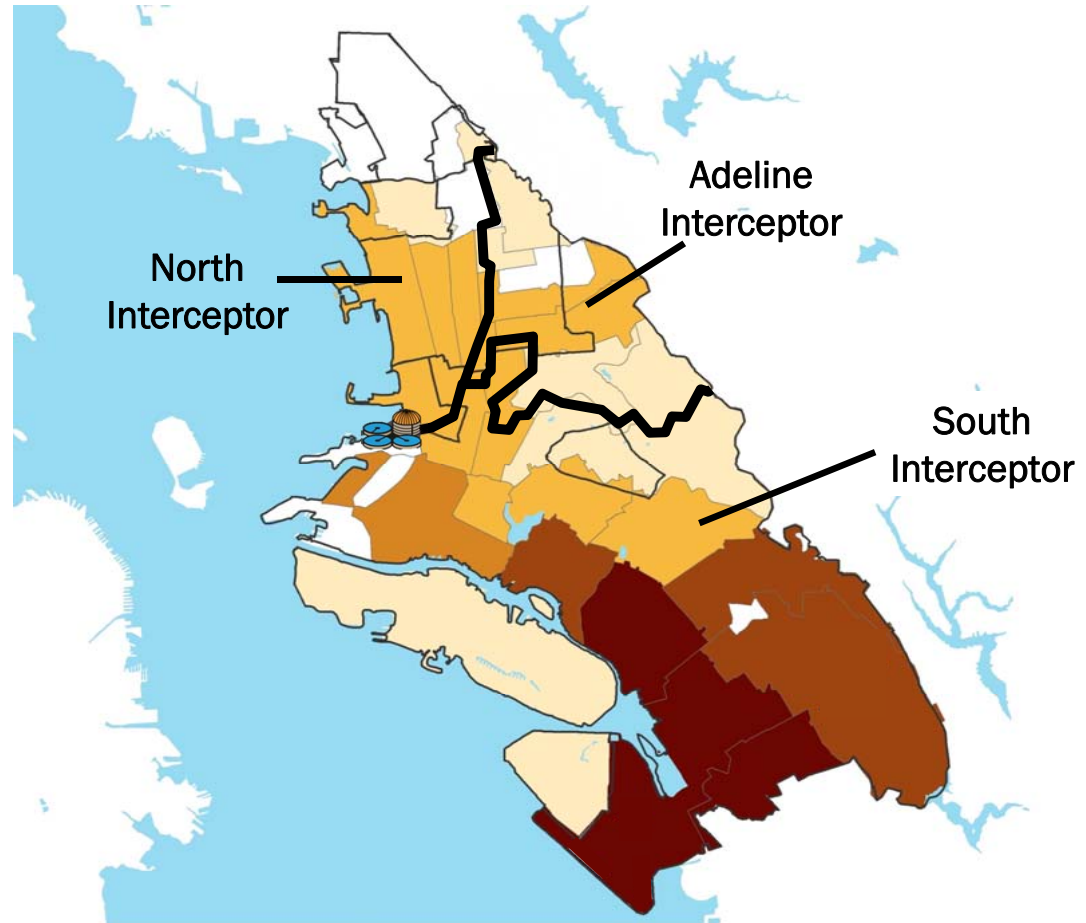
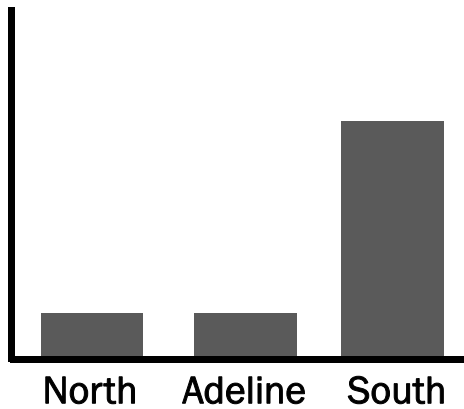


Results

Case Rates per 100,000 Population



Wastewater Monitoring



FISCAL IMPACTS

Fiscal Impacts

FY20



FY21



FISCAL IMPACTS

Fiscal Impacts

Service Area Economic Impacts



Lower Water Demand



Increased Need for Customer Assistance



Decreased Development



Increased Delinquencies



Deferral / Partial Suspension of Capital Projects



PRIORITIES

Priorities Are the Same

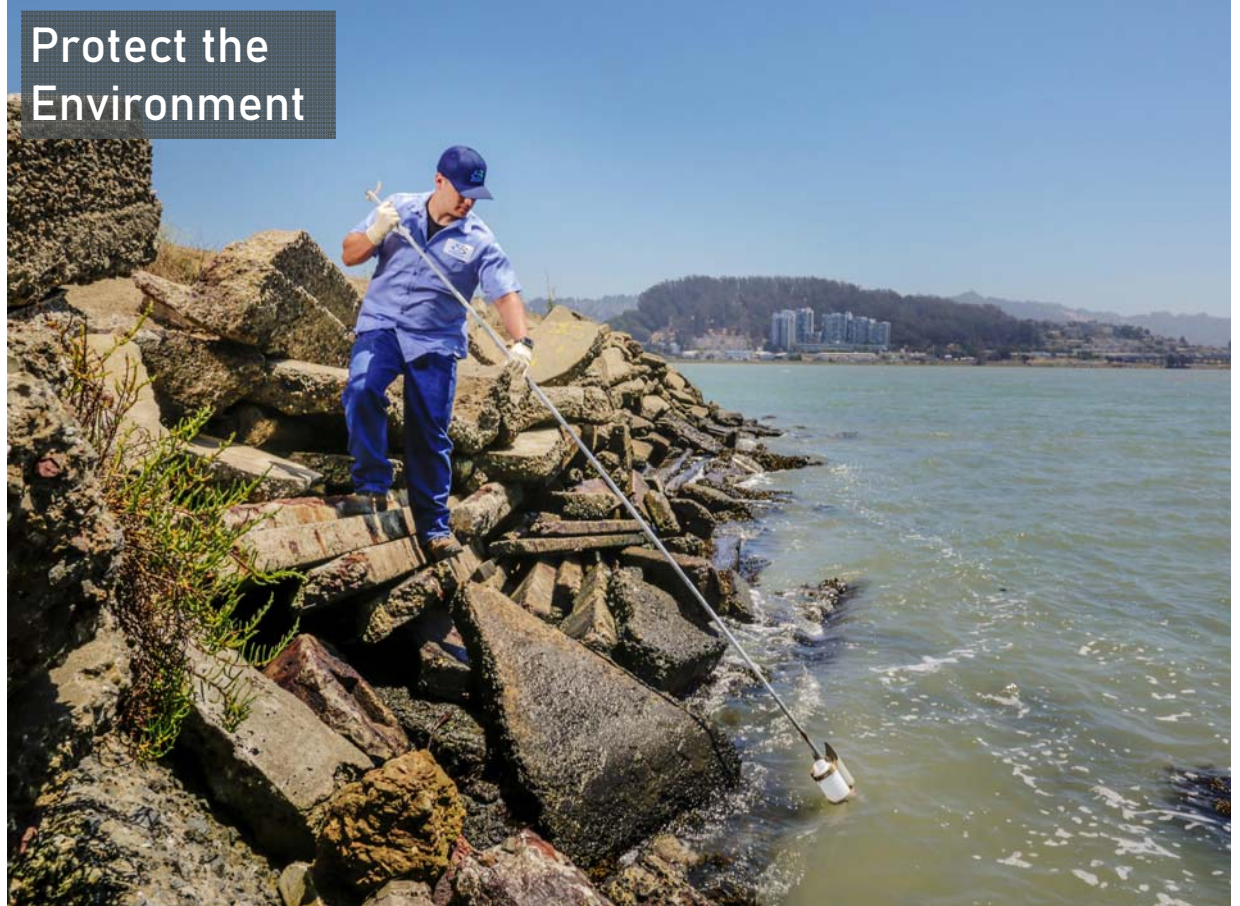
Protect
Employees



Protect Public Health

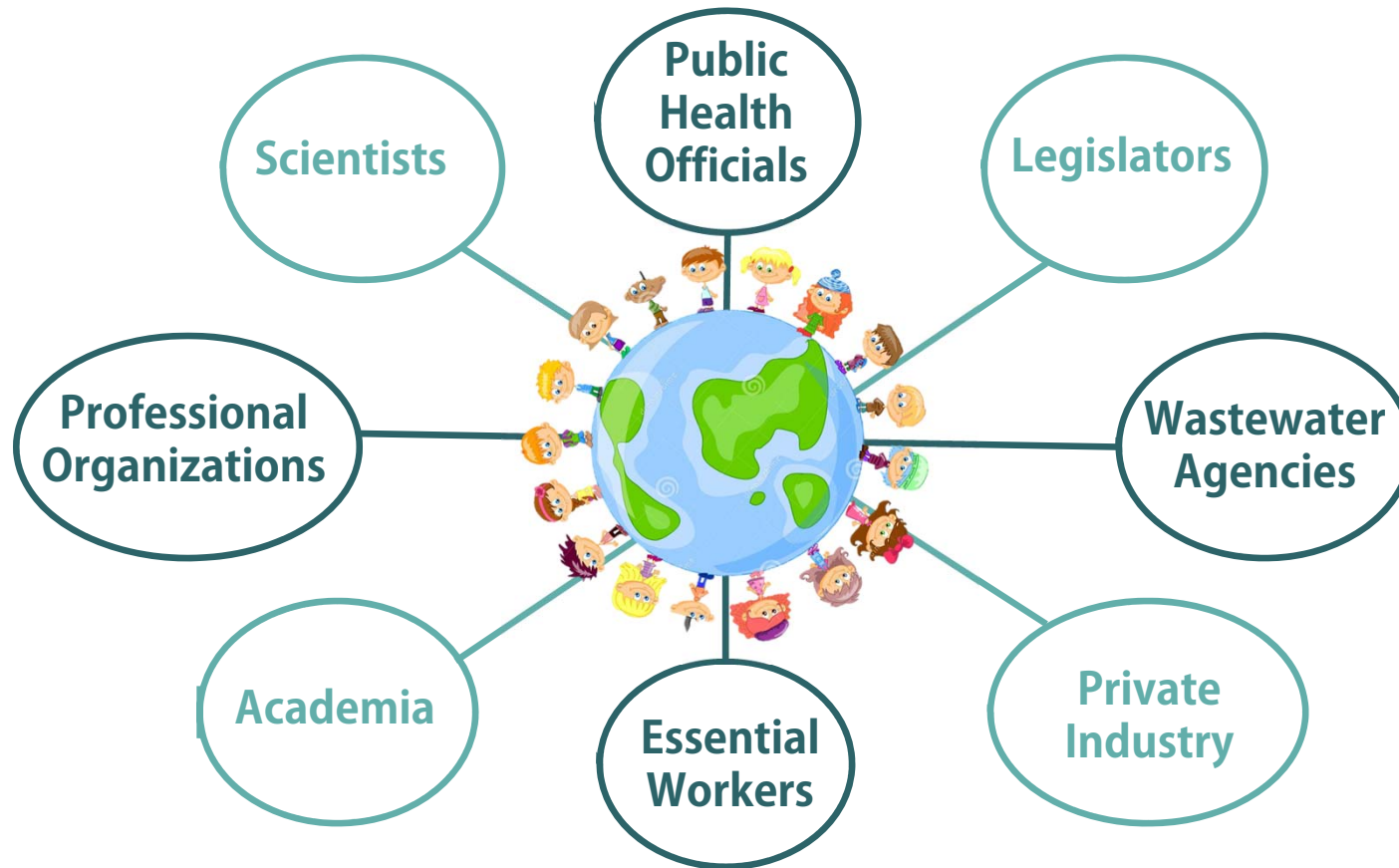


Protect the
Environment



COLLABORATION

Collaboration is the Key



Thank you!
Any questions?



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**Before & After
Social Distancing**

