

# Carpenter Creek Estuary Restoration Monitoring



## WHY ARE WE MONITORING?

To help individuals and organizations make informed decisions about the Carpenter Creek Estuary based on data.



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## WHAT QUESTIONS ARE YOU ASKING?

## PROCESS INDICATORS

Has the South Kingston Bridge project restored natural tidal flushing processes and the related movement of sediment and detritus (floating plant material) movement through the system?

Parameters:

- Tidal Current Velocity
- Sediment Accretion & Erosion
- Water Level



## CONDITION INDICATORS

Do the impacts of changes in Carpenter Creek Estuary's tidal inundation since the South Kingston Bridge project completion support easier fish passage into and out of the estuary and contribute to improved habitat for fish and other wildlife?

Parameters:

- Sediment Characterization
- Estuarine Habitat Types
- Salt Marsh Characterization
- Sediment Accretion/Erosion
- Estuary Vegetation Surveys
- Water Quality

## WHAT KIND OF DATA DO WE COLLECT?

Our monitoring tasks and targeted data are chosen to determine whether Carpenter Creek Estuary is functioning well. For example, we want to know if it supports resident and salmonid fish during critical parts of their lifecycles. We use protocols to do this as best we can with the staff, volunteers, tools and money available.



## BIOLOGICAL INDICATORS

Is Carpenter Creek Estuary being used differently by plant and animal species since the South Kingston Bridge replaced a box culvert?

Parameters:

- Bird and Fish Presence Surveys
- Benthic Surveys
- Terrestrial Insect Surveys

