Post-Harvest Water

Post-harvest water can spread contamination. Post-harvest water is used for rinsing, washing, moving commodities such as in flumes, cooling, ice making, post-harvest fungicide and wax application, hand washing, and cleaning/sanitizing tools and equipment.

Post-harvest water management

- Water
  - Must know initial quality and intended use
- Anti-microbial products, including sanitizers
  - Adding a sanitizer to water is not intended to “wash” the produce, but instead to prevent cross-contamination.
  - Anti-microbial products must be labeled for intended use, such as “water for contact with fruits and vegetables.”
  - Many sanitizers are available, including those approved for organic use.

Water quality criteria for harvest and post-harvest activities

- Water must have no detectable generic E. coli per 100 milliliters (mL) of water per sample if the water is used for:
  - Direct contact with covered produce during or after harvest.
  - Direct contact with food contact surfaces.
  - Making ice.
  - Hand washing.
- Untreated surface water may not be used for any post-harvest activity.

Water quality testing requirements

- Public water supply: Copy of test results or current certificates of compliance; contact your public water supply provider for these documents
- Untreated ground water:
  - Initial year: Take four samples during the growing season.
  - Subsequent years: Take one sample during the growing season.
Key water quality variable

- **Quality at start of use:** No detectable generic *E. coli* in 100 mL of sample

Suggested water quality variables to consider

- **pH:** Acidity level can affect sanitizer effectiveness. For example, the recommended pH range for a chlorine sanitizer solution is 6.5 to 7.5.
- **Temperature:** If warm produce is submerged in cold water, bacterial infiltration of produce can occur.
- **Turbidity:** Look at the water. If it appears dirty or cloudy, it’s time to change it.

When to change water

- Post-harvest water must be managed, including changing water when necessary.
- Water changing schedules should consider:
  - Organic load including soil, leaves, or decaying or damaged product.
  - Turbidity measurements.
  - Volume of produce.
  - Type of produce.
  - Product flow and operating conditions.
  - Type of antimicrobial product.
  - Type of equipment.

### Keep records

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<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
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<tbody>
<tr>
<td>Water quality test results for generic <em>E. coli</em></td>
<td>Sanitizer solution concentration</td>
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<tr>
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<td>pH</td>
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<td>Water changes</td>
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