

# 3. Recycled Water Usage

MCWD USER SUPERVISOR TRAINING

# Training Contents

## 1. Usage

1. Title 22 Approved Uses
2. Approved Usage Areas

## 2. Prohibited Conditions

## 3. Cross-Connections & Back Flow

## 4. Permit Compliance

# Title 22 Approved Uses

- Title 22 Division 4 regulates uses for recycled water in California
- Title 22 recycled water **approved uses**:
  - Irrigation
  - Impoundments
  - Cooling
  - General – flushing toilets, firefighting, etc.
- MCWD permit is **more limited**
  - Check with the MCWD Engineering Department that your proposed use is **approved under MCWD's agency permit**



# Recycled Water Use Area



Recycled water can only be applied within **approved Use Areas**

- Defined within Permit Application
- **Explicit prohibited** to apply recycled water outside Use Area
  - Even to User's property
- Clearly identified and maintained

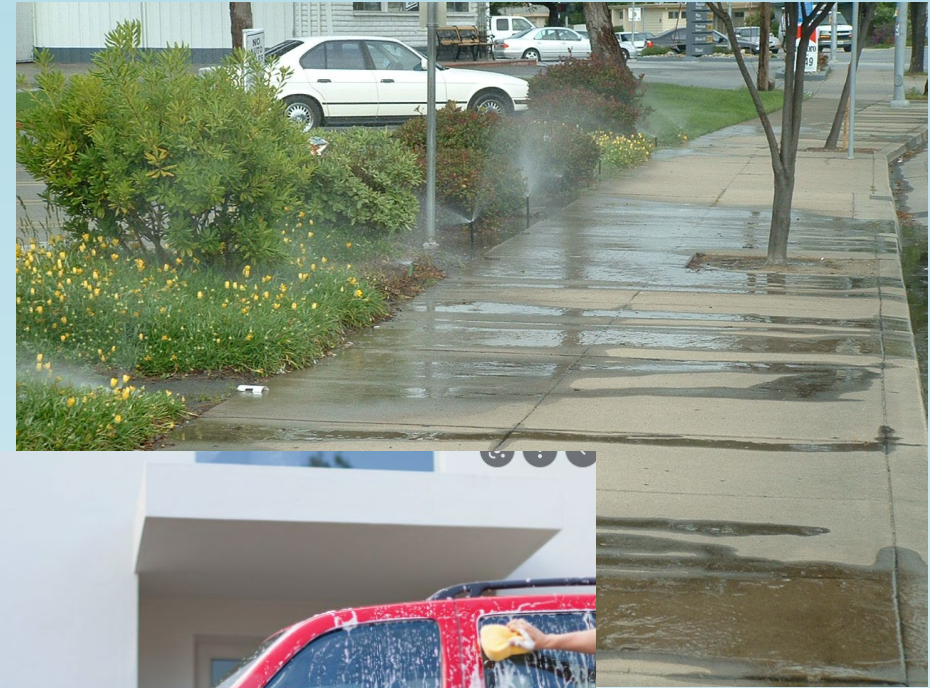
# Training Contents

1. Usage
2. **Prohibited Conditions**
3. Cross-Connections & Back Flow
4. Permit Compliance



# Prohibited Conditions

- Use of recycled water for any purposes other than those approved in the Recycled Water Use Permit is **strictly prohibited**.
- Prohibited conditions and uses include but are not limited to:
  - Runoff, erosion, ponding, and windblown spray
  - Unprotected drinking fountains and public facilities
  - Connections to hose bibs and/or fire hydrants
  - Disposal of recycled water without approval from appropriate agencies



# Prohibited Conditions

- Irrigation within 50 feet of any domestic water supply well (without certain requirements) or any reservoir/stream providing domestic water
- Impoundment within 100 feet of any domestic water supply well
- Reuse of equipment without approved disinfection
- Using the public water supply as backup/supplemental source
- Cross-connections between recycled and potable water systems



# Training Contents

1. Usage
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- 3. Cross-Connections & Back Flow**
  1. Public Health
  2. Cross-Connections
  3. Backflow
  4. Backflow Devices
4. Permit Compliance



# Protecting Public Health

Anytime recycled water is being used, the potable supply must be protected

For sites with potable and recycled water services, ensure that:

1. The two systems remain separate by **preventing cross-connections**
2. The public water supply is protected with sufficient **backflow protection**



# Cross-Connections

Cross-connection: a physical connection between the drinking water system and a non-potable system.

- **Strictly prohibited** under MCWD Recycled Water Use Permit





# Cross-Connections

How does a cross-connection happen?

- Switching pipes during construction
  - Intentional or unintentional connection of the two systems
- Water system repairs/additions
  - Improperly or unmarked recycled water lines
  - Isolation valves
    - Vales can be opened

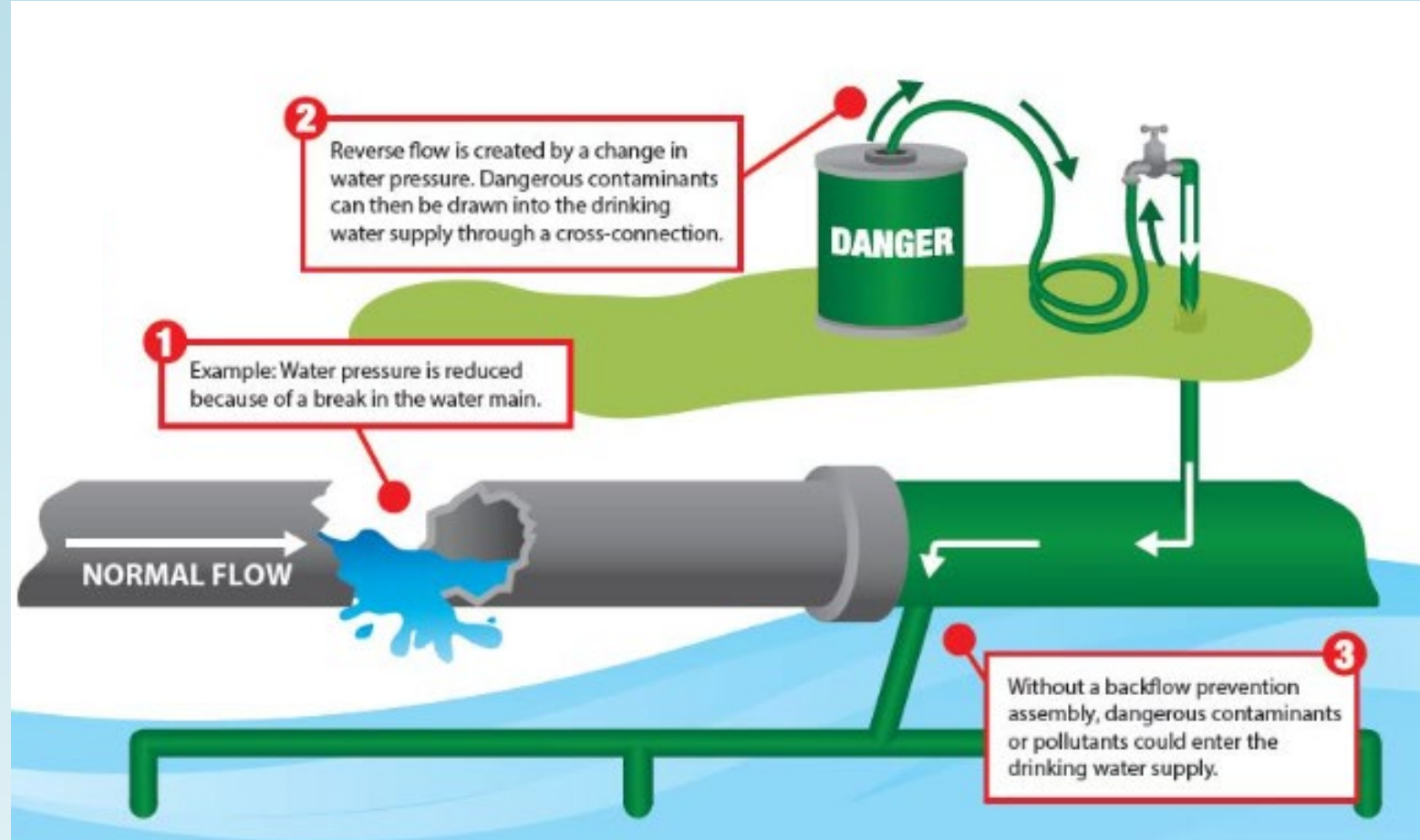
**Immediately notify MCWD** if a cross-connection is identified



# Backflow

Backflow: the unwanted flow of water in the reverse direction.

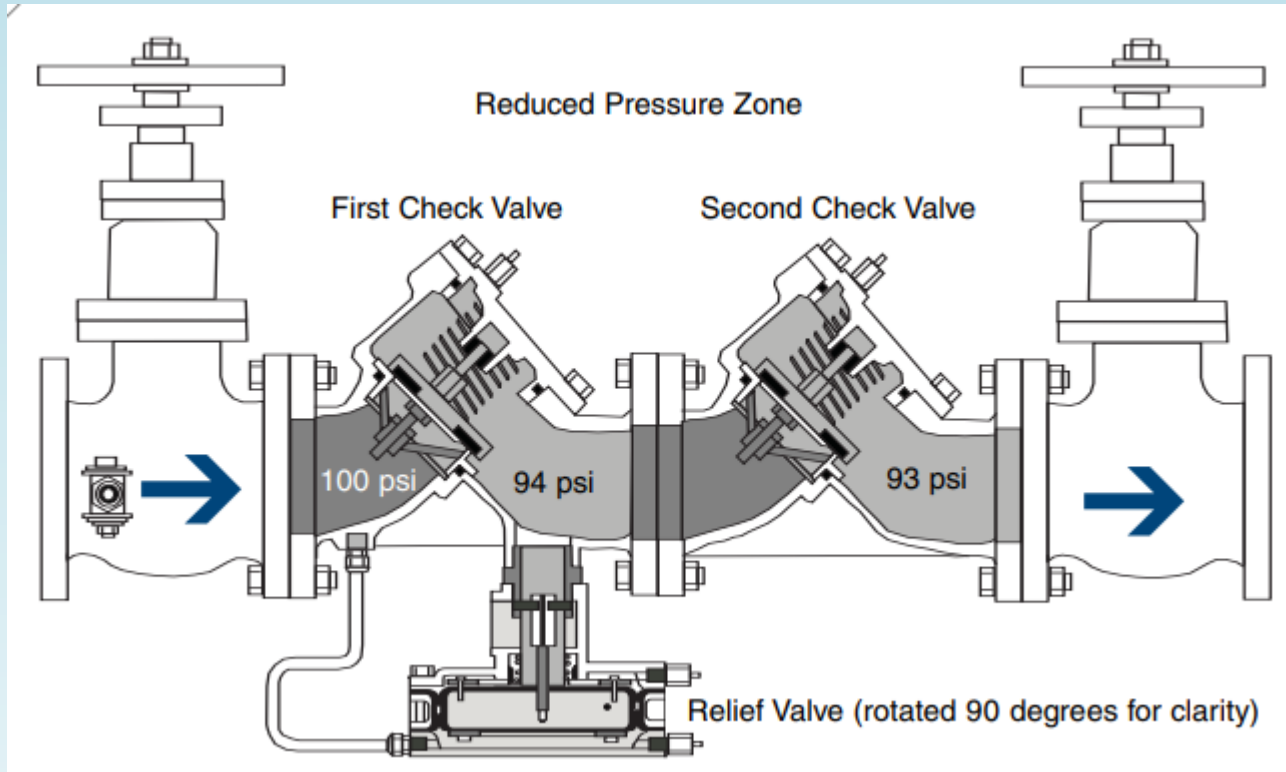
- Caused by pressure difference in pipes
- Controlled through **backflow prevention devices**
- Protects the public drinking water supply





# Backflow Devices

- Reduced Pressure (RP) Principle Device
  - California/Nevada American Water Works Association (CA/NV AWWA) tester





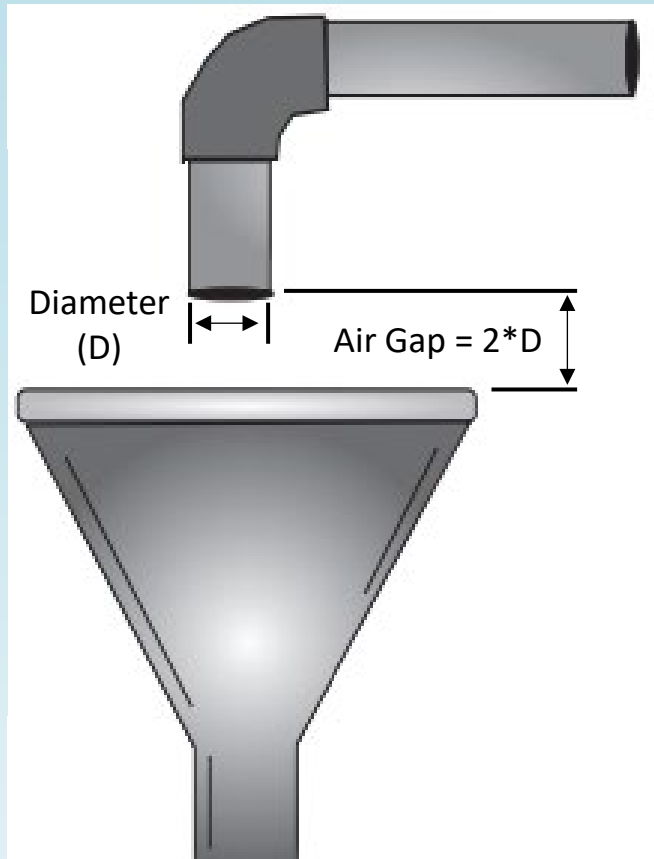
# Backflow Devices



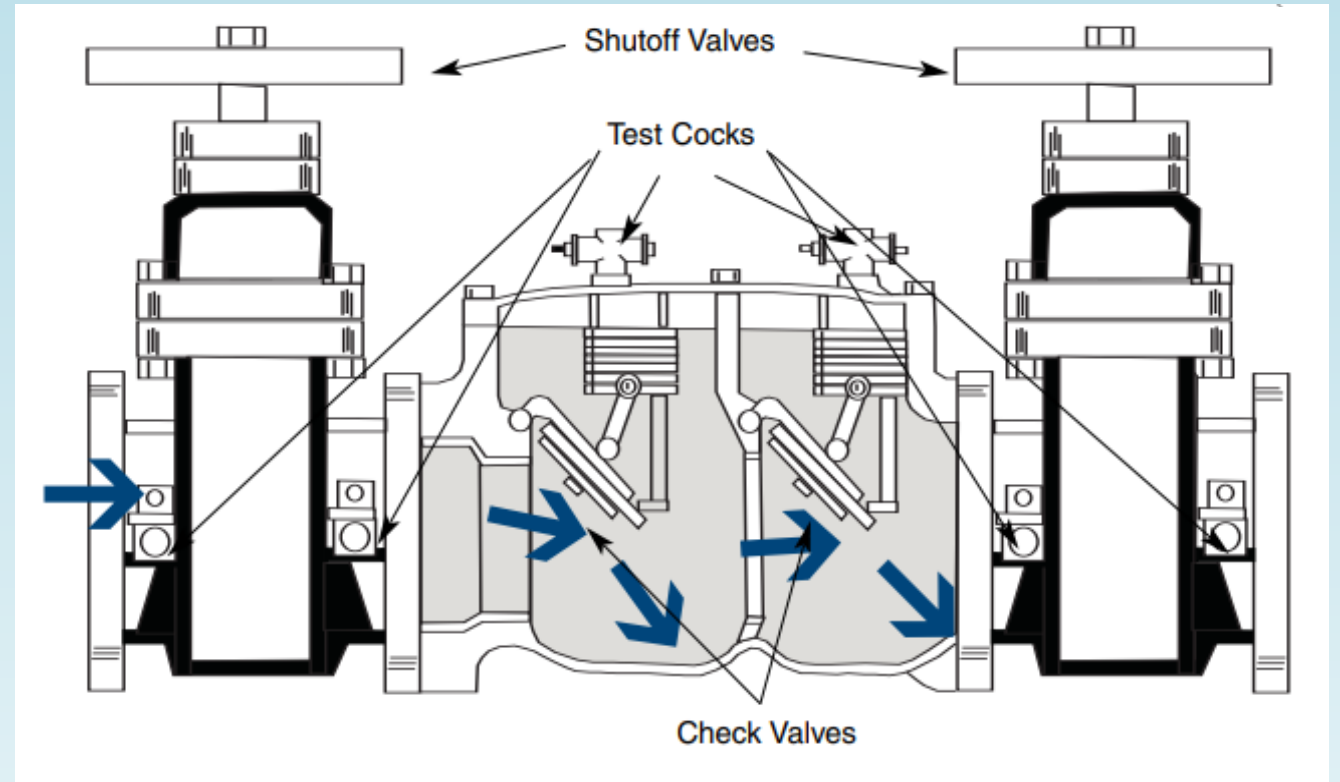


# Backflow Devices

- Air Gap



- Double Check Valves



# Backflow Devices

## Potential Violations:

- Failed to complete **annual testing**
  - CA-NV AWWA certified backflow prevention device tester
  - Only for RP, others visually inspected
- Failure to address **leaking device**





# Training Contents

1. Usage
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3. Cross-Connections & Back Flow
- 4. Permit Compliance**
  1. Violations
  2. Enforcement

# Violations



Violations include the following prohibitions:

- overspray
- ponding
- irrigation during rainy weather
- irrigation during the restricted time of day
- irrigation at the non-allowed site
- unapproved construction
- broken irrigation facility
- spill less than 50,000 gallons
- Spill over 50,000 gallons
- Cross-connection
- Backflow failure
- Illness reported linked to recycled water

# Violations

## Two classes of violations

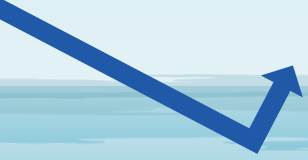
### Minor Violations

**Unlikely** to make someone immediately sick

Immediately (24 hours) call MCWD

- We will determine if a violation has occurred
- Discuss what happened and how it was addressed
- Send in Notification of Violation form
- DONE

MCWD website has  
a form to help you  
capture this  
information



### Major Violations

**Likely** to make someone immediately sick

Immediately call MCWD, State DDW, Regional Board, and County Health Department if:

- Cross-connection identified
- Illness suspected to be related to recycled water
- Discharge over 50,000 gallons

Follow up with written notification within 10 business days

- Series of steps to be documented and completed

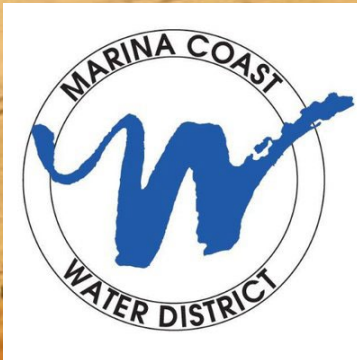
# Enforcement

- MCWD reserves the right to decide if a violation has occurred
  - If a violation has occurred, MCWD will immediately notify the User and direct corrective action
    - Failure to take corrective action will result in enforcement actions taken by MCWD, including termination of service
    - If service is discontinued, MCWD will notify the User within 24 hours
- MCWD has the right to discontinue recycled water service at any time. Service discontinuation may occur if:
  - MCWD distribution system cannot supply quality recycled water
  - Nonpayment of any MCWD bills, service fees, or charges by user
  - Any violations of Recycled Water Use Permit (can also incur permit revocation)
- MCWD may revoke Permit if service conditions are not satisfied



Please reach out to MCWD  
Engineering Department if you have  
any questions

Thanks for watching our training!



MCWD Recycled Water - Safe, sustainable,  
drought-proof solutions protecting our  
groundwater's future