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# SUSTAINABLE CLASSROOM SPECIALIST SCS CERTIFICATE

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ONLINE TRAINING BY KRISHNAJI PAWAR

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MODULE  
**17**

# Water Efficiency and Quality

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# **SUSTAINABLE CLASSROOM SPECIALIST SCS CERTIFICATE**

Water efficiency and quality in school buildings are crucial for sustainable design and environmental stewardship. These practices significantly influence the health of students and the overall health of the community. To achieve water efficiency, schools should implement systems and practices that reduce water consumption while maintaining functionality and comfort.

# Learning Objectives

- Green school buildings are dynamic learning environments.
- Operations and Maintenance for Whole School Sustainability
- Meaningful, purposeful, and engaging learning
- Sustainable Spaces and Smart Transportation
- Energy Efficiency - Lighting
- Energy Efficiency - Plug Loads & HVAC Systems
- **Water Efficiency and Quality**
- Indoor Environment: Air Quality and Acoustics
- Smart Cleaning & Integrative Pest Management
- Materials and Resources
- Emerging Design and Technology
- Summary and Resources
- SCS Quiz: Test Your Knowledge!

# INTRODUCTION

- Water efficiency refers to sustainable management of water resources to minimize waste and optimize utility.
- Implementation of systems and practices that reduce water consumption while maintaining functionality and comfort is crucial.
- Water Use Assessment: Measures the volume of water used across different school facilities and identifies high-consumption areas.
- Installation of water-efficient fixtures and appliances: Low-flow faucets, dual-flush toilets, and waterless urinals can significantly decrease water use in restrooms.
- Smart Irrigation Systems: Adjust watering schedules based on weather conditions and soil moisture levels to reduce water waste.
- Rainwater Harvesting: Allows schools to collect and store rainwater for non-potable uses, reducing dependence on municipal water supplies and mitigating stormwater runoff.

# WATER QUALITY IN SCHOOL BUILDINGS

- Source Protection: Protects the sources of water supply from potential contaminants.
- Filtration and Treatment Systems: Installs appropriate filtration and treatment systems to ensure water is free from harmful pathogens and contaminants.
- Regular Testing and Maintenance: Establishes routine maintenance schedules for plumbing and water systems to prevent leaks and the growth of harmful microorganisms.
- Educational Programs: Incorporates water quality education into the curriculum to raise awareness among students about the importance of water conservation and safety.



# PROBLEMATIC WATER INDICATORS

- Solids: Presence of suspended solids in water may indicate contamination from soil erosion, runoff, or improper waste disposal.
- Odor: An unusual or foul odor from water sources can suggest the presence of organic matter or chemical contaminants.
- Discoloration: Water that appears discolored can be a sign of chemical contamination, sediment influx, or biological growth.



# IMPORTANCE OF REPORTING WATER LEAKS



- Water leaks can lead to mold growth, structural deterioration, and pest infestations.
- Establishing a culture of vigilance regarding water leaks is essential for maintaining a safe, healthy, and efficient school environment.

# REPORTING WASTEFUL WATER SITUATIONS

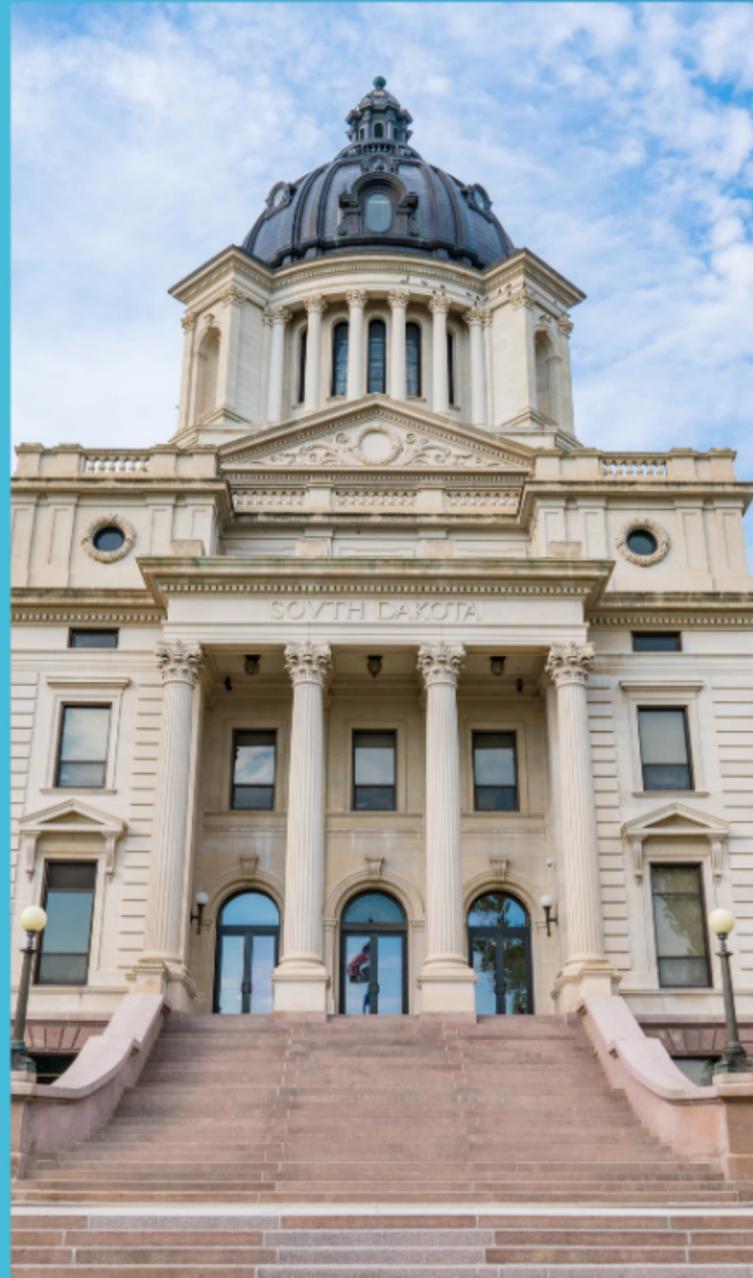
- Running toilets, irrigation overuse, and leaky faucets are common scenarios that can waste water.
- Encouraging staff and students to report these situations fosters a collective responsibility for water conservation.

## Promoting Water-Efficient Strategies and Fixtures

- Low-flow fixtures, rainwater harvesting, xeriscaping principles in school landscaping, and education and engagement can be implemented to maximize resource use while minimizing environmental impact.



# IMPORTANCE OF WATER QUALITY AND REDUCTION



- Green schools prioritize the health and well-being of students and staff.
- High-quality water is essential for maintaining hydration, supporting sanitation efforts, and ensuring overall school community health.
- Water reduction is critical in the context of sustainability.
- Green schools adopt a holistic approach that includes resource conservation, energy efficiency, and waste reduction.

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