

Ensuring Compliance with Environmental Regulations in Site Design

Part 1: Dialogue

Sophia (Landscape Architect): As we finalize this site plan, we need to incorporate **stormwater management** strategies to prevent runoff issues.

Liam (Colleague): Absolutely. Proper **stormwater management** will help reduce flooding risks and improve water quality by filtering pollutants.

Sophia: We also have to ensure the project follows **wetlands preservation** guidelines. Some areas on the site might be protected.

Liam: Right. If we disturb wetlands, we'll need to follow strict regulations or consider mitigation efforts to compensate for the impact.

Sophia: Another concern is **erosion control**. If we don't stabilize the soil, we could face major environmental and structural issues.

Liam: Good point. Using vegetation and retaining walls can be effective **erosion control** measures to prevent soil displacement.

Sophia: Have you looked into **LEED for Neighborhood Development (LEED-ND)**? Certification could help demonstrate our commitment to sustainability.

Liam: Yes, **LEED-ND** focuses on smart growth, walkability, and resource efficiency. It might even increase the project's marketability.

Sophia: Finally, I'd suggest emphasizing **native landscaping**. It reduces water consumption and supports the local ecosystem.

Liam: That's a great idea. **Native landscaping** not only conserves water but also requires less maintenance and attracts local wildlife.

Part 2: Comprehension Questions

1. What is one benefit of **stormwater management** in site design?
 - (A) It increases soil acidity
 - (B) It improves water quality and reduces runoff
 - (C) It slows plant growth
 - (D) It eliminates the need for irrigation
 2. Why is **wetlands preservation** important in landscape architecture?
 - (A) It helps control insect populations
 - (B) It speeds up construction timelines
 - (C) It increases land value by removing wetlands
 - (D) It ensures compliance with environmental regulations
 3. How does **erosion control** contribute to site stability?
 - (A) It prevents soil displacement and structural damage
 - (B) It increases water evaporation
 - (C) It removes excess nutrients from the soil
 - (D) It eliminates the need for vegetation
 4. Why is **native landscaping** recommended for sustainable site design?
 - (A) It prevents tree growth
 - (B) It increases the demand for synthetic fertilizers
 - (C) It requires less water and maintenance
 - (D) It makes landscapes look identical year-round
-

Part 3: Vocabulary with Definitions

- **Stormwater management (雨水管理)** – Strategies to control runoff, reduce flooding, and improve water quality.
- **Wetlands preservation (湿地保全)** – Protecting natural wetland areas to maintain biodiversity and comply with regulations.
- **Erosion control (浸食制御)** – Preventing soil displacement using vegetation, retaining walls, or other stabilization techniques.

- **LEED for Neighborhood Development (LEED-ND) (LEED-ND 認証)** – A certification promoting sustainable and environmentally friendly community planning.
 - **Native landscaping (在来植物の造園)** – Using plants native to the area to support the ecosystem and reduce maintenance needs.
-

Part 4: Answer Key

1. **What is one benefit of stormwater management in site design?**
 (B) It improves water quality and reduces runoff
2. **Why is wetlands preservation important in landscape architecture?**
 (D) It ensures compliance with environmental regulations
3. **How does erosion control contribute to site stability?**
 (A) It prevents soil displacement and structural damage
4. **Why is native landscaping recommended for sustainable site design?**
 (C) It requires less water and maintenance