

STORMWATER MANAGER

THEORETICAL PART



Context:

You find yourself in a small coastal town in Spain. In recent years, the town has faced an increasing challenge due to unpredictable weather patterns and the growing intensity of storms. Heavy rainfall now frequently causes urban flooding, damaging homes, roads, and vital infrastructure. The town's traditional drainage systems, designed decades ago, are no longer sufficient to manage the volume of stormwater.

To address this crisis, the local government is exploring innovative stormwater management solutions, such as constructing underground reservoirs, creating bioswales, and restoring nearby wetlands to naturally absorb excess rainwater. These measures aim to protect the town while preserving its natural ecosystem and cultural heritage.

However, the proposal has sparked debates among residents and stakeholders. Fishermen are concerned about potential disruptions to waterways connected to their livelihoods. Environmental groups fear that infrastructure development could upset the balance of ecological preservation. Meanwhile, residents of the most flood-prone neighbourhoods are demanding urgent action but question how resources will be allocated. As a Stormwater Manager, your role is to work with the community and experts to develop a sustainable, inclusive, and effective plan to protect this town from future floods.

GUIDANCE PART



Related Contents/Skills:

Communication

Collaboration

Problem-Solving

Civil
Engineering

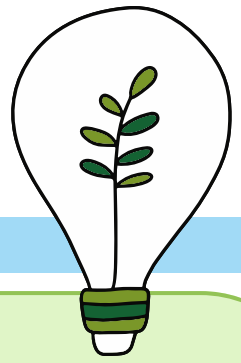
Sustainability
Awareness

Hydrology and
Hydraulics

Urban Design

Self-Reflection Questions:

- If you were a resident of this town, what concerns would you have about the implementation of this plan?
- What challenges might you face in trying to balance infrastructure development with the preservation of the natural ecosystem?
- How would you involve different stakeholders, such as fishermen, environmentalists, and residents, in the design and implementation of the stormwater management plan?
- What criteria would you use to prioritise the areas of the town that require urgent interventions?



Analysis:

- What is the main problem or need to be addressed?**
- What knowledge and skills are necessary to tackle this situation?**
- What are the strengths and weaknesses of the context in which this problem arises?**

Planning:

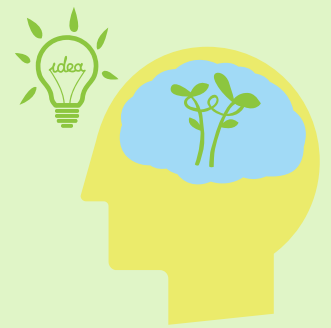
- How can an initial plan be developed to address the identified needs?**
- What material and human resources are available to address the situation?**
- What specific actions should be taken to implement the solution?**

Suggestions and Prevention:

- What suggestions can be offered to execute the proposed solutions?**
- How can risks or potential future problems related to the solution be prevented?**

Evaluation:

- What methods can be used to assess the success and sustainability of the implemented solutions?**
- How will the evaluation be conducted, what instruments will be used, and what variables will be analysed?**



Expected Results after Implementation

**What are the expected outcomes after implementing the solutions?
How is the future context expected to look after our intervention?
What suggestions can be made for future applications, maintenance, or performance improvements?**

Reflection on Developed Competencies and Project Impact:

**What competencies were developed and what is the potential impact of the project?
What difficulties or strengths were identified during the implementation of this EcoJob in a real context?
How is the coherence of the EcoJob analysed, and how suitable is it in relation to the identified need?**

