Activity 7.1 – Solutions to Pollution

Introduction
In this activity students are asked to plan an innovative hypothetical method to prevent stormwater pollution in their local waterway. They will need to decide between a source control or an end-of-pipe solution. They may decide to adopt an existing method or design something completely different.

Estimated lesson time: Introduction: 40 minutes. This activity is suitable for homework or a class research assignment.

Outcomes
HSIE Stage 2
This activity meets the following syllabus outcomes: Relationships with Places ENS 2.6

Science and Technology K-6
This activity meets the following syllabus outcomes:
Stage 2
PS S2.5, DM S2.8
Stage 3
PS S3.5, DM S3.8

Keywords
• filter
• degradation
• sediment
• bund
• gross pollution trap
• habitat
• capacity
• erosion
• retention
• infiltration
• wetland
• fishway

Process
Identify Issue
Students work individually or in teams to imagine they are professionals faced with the challenge of coming up with an innovative design to clean up the local creek. They should choose one of the problems identified in Sections 4 and 5 and develop a creative ‘solution to pollution’.

Develop an Innovative Solution
Students brainstorm ideas about how to prevent pollution. Their approach could be to:
• design a small community education project targeting one issue or group, or
• develop on-site method for pollution control, or
• design an ‘end-of-pipe’ stormwater treatment device.

They may also like to contact their local council to find out what stormwater pollution prevention activities are being implemented in the local area.

Present Ideas
Individuals/student teams can present their design to the class. If the solution is to a school issue, they may also like to make a presentation to their school principal. It may be interesting to invite a representative of local government to hear their idea.