



**Australian Government**



**Water for the Future**

# Bega to Yellow Pinch Dam Water Transfer Pipeline – Soil and Water Impacts

The Bega to Yellow Pinch Dam Water Transfer Pipeline is being developed by the NSW Department of Commerce, in collaboration with Bega Valley Shire Council. The installation of the pipeline would generate physical impacts. These have been assessed in an environmental assessment report (termed a 'Review of Environmental Factors'). Information on soil and water impacts has been extracted from this report.

## **1. Soils**

### **Potential Impacts on soils**

The installation of the Bega to Yellow Pinch Water Transfer Pipeline trench could result in increased soil compaction, erosion, sedimentation, mixing between the naturally developed soil layers and the loss of important microscopic animals and organic matter in the soil. A risk of pollution is also present (for example, concrete or hydrocarbon spills).

During construction, approximately 30 000m<sup>3</sup> of soil would be removed and about 9000 m<sup>3</sup> of soil and rock would be permanently displaced. Approximately 85% of the pipeline route would be within the road verge of the existing Princes Highway, where the soil has already experienced a high level of disturbance

### **Measures to reduce impacts**

General measures to limit the impact on soil include

- An erosion and sediment control plan would be put place, with controls regularly checked
- Impact area would be minimised as much as possible and site stabilisation and rehabilitation would be undertaken without delay
- Soil disturbance activities avoided during rainfall periods
- Topsoils would be excavated, stored separately and put back into place to minimise the impact on soil layering and other organic components
- The extent of disturbance would be minimised by constraining all activity to clearly defined easements and access routes



## **2. Water**

### **Water course values**

The Bega to Yellow Pinch Dam Water Transfer Pipeline passes through the Bega River catchment, the Frogs Hollow Creek sub-catchment and the catchment of Newlands Creek.

In general, water courses in the vicinity of the pipeline route have been previously disturbed by road works or stock grazing and are in poor condition. Many of the creeks and rivers contain large quantities of sandy sediments. Newlands Creeks is the exception as it is relatively undisturbed and in good condition.

A number of drainage lines and water courses will need to be crossed by the pipeline. Small drainage lines would be trenched through, the larger water courses would be crossed using underboring, horizontal directional drilling (HDD) or by mounting the pipeline on concrete piers. To cross Frog Hollows Creek, the pipeline would be attached to the underside of the existing Princes Highway Bridge, avoiding disturbing the waterway.

### **Potential impacts of the pipeline**

Risks during construction include increased stormwater runoff, higher sediment loads from exposed soils and potential contaminants from construction chemicals. The importance of maintaining high water quality in local drainage lines and water courses, including the Bega River which supplies town water, underscores the importance of addressing these risks.

### **Measures to reduce impacts**

Measures would be put in place to reduce the impact on water values. These include:

- Implementing an erosion and sediment control plan with controls such as sediment fencing and settling ponds, which would be inspected regularly.
- Revegetating the exposed soils created during the pipeline trenching process.
- Work would not take place during periods of heavy rainfall.
- Scour valves would not discharge directly into a water course, but would release water into an appropriate sediment trap.
- Construction waste would be contained safely on site and removed at the conclusion of works.
- All machinery would be maintained to the highest level, and any work required on the machines would only occur in an area that is appropriately protected against the risk of chemical spill.

