

<b>Title</b>	<b>Demonstrate knowledge of the impact of erosion and sedimentation on an infrastructure worksite</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>5</b>

<b>Purpose</b>	People credited with this unit standard are able to: <ul style="list-style-type: none"> <li>– demonstrate knowledge of the impact of erosion and sedimentation on an infrastructure worksite;</li> <li>– demonstrate knowledge of Mana Whenua values for an infrastructure worksite.</li> </ul>
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<b>Classification</b>	Infrastructure Works > Generic Infrastructure Works
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<b>Available grade</b>	Achieved
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## Guidance Information

1 Learning and assessment for this unit standard must be in accordance with the following:

- Health and Safety at Work Act 2015;
- Resource Management Act 1991;
- Heritage New Zealand Pouhere Taonga Act 2014;
- Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017 (forestry earthworks regulations 22-35); and all subsequent amendments and replacements.

2 Definitions

*Consequences of erosion and sedimentation* include but are not limited to - ecological (water quality, habitat destruction), legal (non-compliance with legislation), financial (costs associated with reinstatement, cleaning, infringements), social (irresponsible operator, impact on the community), cultural (impacting mana whenua, and mauri values).

*Industry Guidelines* refer to local authority guidelines such as Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region commonly known as GDO5.

*Flora and fauna* refer to plant and wildlife, respectively. The indigenous plant and wildlife of a geographical region is that region's flora and fauna. Both are collective terms for groups of plant or wildlife specific to a region or time.

*Fundamental principles of erosion and sediment control* refer to minimising disturbance, stage construction, protect slopes, protect watercourses, rapidly stabilise exposed areas, install perimeter controls and diversions, employ sediment retention devices, training and experience.

*Mana Whenua values* refer to an understanding of Mauri and the practical application of mana whenua values in the appropriate context.

*Te Aranga Design Principles* refer to Rangatiratanga, Kaitiakitanga, Manaakitanga, Wairuatanga, Kotahitanga, Whanaungatanga, Mātauranga.

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## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of the impact of erosion and sedimentation on an infrastructure worksite.

#### Performance criteria

- 1.1 Fundamental principles of erosion and sediment control are explained in accordance with erosion and sediment control guidelines.
- 1.2 Factors influencing erosion and sedimentation are explained in accordance with erosion and sediment control guidelines.  
  
Range weather, topography, soil characteristics, ground cover, existing vegetation, period of soil exposure.
- 1.3 Consequences of erosion and sedimentation are explained in terms of impacts to sensitive receptors and non-compliance.
- 1.4 Components of a site map showing sensitive receptors and areas where erosion and sedimentation could occur are identified and explained in accordance with the map legend and features.
- 1.5 Compliance requirements are explained in terms of the worksite.  
  
Range may include but not limited to – regional and district plans, industry guidelines, National Environmental Standards, relevant Acts and Regulations.
- 1.6 Regional organisations that must be consulted regarding erosion and sediment control plans are identified and their requirements explained in terms of compliance.

### Outcome 2

Demonstrate knowledge of Mana Whenua values for an infrastructure worksite.

#### Performance criteria

- 2.1 Mana Whenua values, including the different states of water in the Maori context, are explained in terms of considerations during earthworks on the infrastructure worksite.
- 2.2 Te Aranga Design Principles that inform culturally appropriate erosion and sediment control design, are considered for the worksite.

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<b>Planned review date</b>	31 December 2024
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**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	24 October 2019	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0101
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

**Comments on this unit standard**

Please contact Connexis - Infrastructure Industry Training Organisation [qualifications@connexis.org.nz](mailto:qualifications@connexis.org.nz) if you wish to suggest changes to the content of this unit standard.