# Fact Sheet

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KAWARTHA CONSERVATION

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# Erosion Control Blankets

Erosion control blankets are lightweight and are made of an open weave of mulch, straw or wood fibers, held together by natural or synthetic netting. They are used as a bare soil cover and protective barrier to allow for vegetation to establish and are often applied to soils that have a high erosion risk, on steep sites or for site rehabilitation (*Figure 1).*

Erosion control blankets should be used in conjunction with soil seeding, preventing the seed washing away and erosion of the prepared seedbed. Once established, the vegetation provides permanent erosion control.

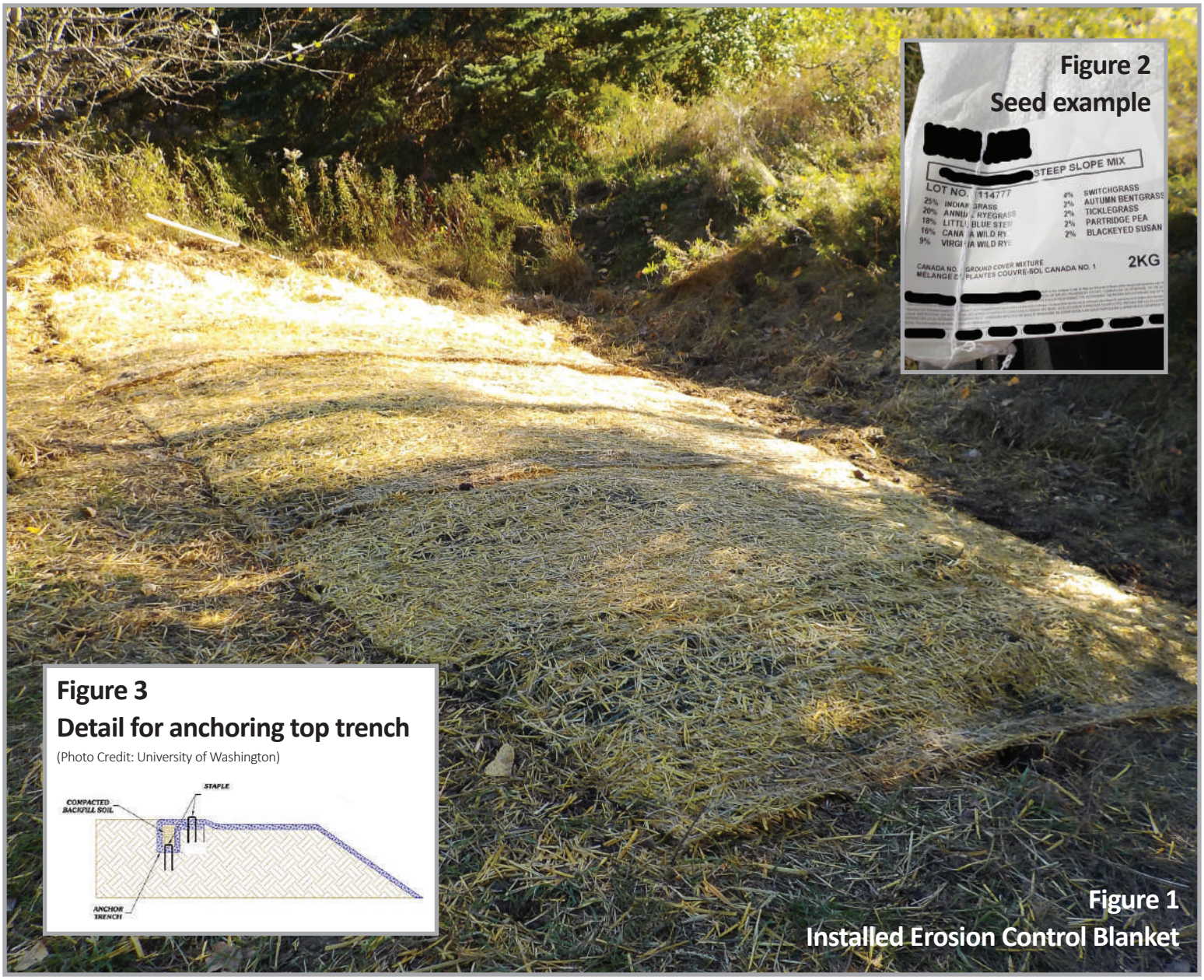


**Figure 2**
**Seed example**

**Figure 3**
**Detail for anchoring top trench**
(Photo Credit: University of Washington)




**Figure 1**
**Installed Erosion Control Blanket**

# Erosion Control Blankets

## Installation

There are a variety of erosion control blankets available on the market. Ensure that the blanket you select is appropriate to the site conditions based on manufacturer recommendations. The size of the site, time of year, and length and steepness of the slope must be taken into account.

## To install:

- Prepare the area by smoothing out any ruts, rills, potholes, small hills, and removing any large rocks.
- Dig a trench along the contour at both the top and bottom of the slope. The trench should be large and deep enough to hold the erosion control blanket in place. Place the excavated soil on the downhill side of each trench. Follow manufacturer's recommendations.
- Seed the area with a native seed mix suitable to the site. For example, riparian seed mixes are most suitable for areas adjacent to lakes and streams. Apply seed at the rate recommended by the supplier (*Figure 2)*.
- Lay the roll of blanket adjacent to the trench on the uphill side at the top of the slope. Place the edge of the blanket into the trench. Pin/staple the blanket into the trench. Backfill the trench with the excavated soil and pack down to secure (*Figure 3)*. Follow manufacturer's instructions on placement of the pins/staples. Be sure that when the blanket will be rolled out the woven netting is facing up and the mulch/straw material is in contact with the ground.
- Roll the blanket down the slope to the trench at the bottom. Cut the blanket so that there is enough extra to place in the trench. Pin/staple the blanket into the trench. Backfill the trench with the excavated soil and pack down to secure. Follow manufacturer's instructions on placement of the pins/staples.
- Secure the main body and edges of the blanket with the pins/staples supplied according to manufacturer's instructions.
- If a second blanket is required be sure to overlap the blankets at least 15 cm (6 inches) or according to manufacturer's instructions. Overlapping blankets should take into account the predominant water and wind direction (*Figure 4)*.

## Maintenance & Removal

Close inspection after rainfall events and major runoff occurrences is essential. Check for damage due to water running under the mat or blanket or if it has been displaced by wind. Re-stabilise with anchor pins or staples. If significant erosion has occurred repair the fabric. Grading and reseeding may also be necessary. Continue inspections until vegetation is firmly established.

## Common deficiencies include:

- Slumping of blanket down slope (*Figure 5)*, due to:
  - Inadequate staking.
  - Inadequate contact with soil.
  - Lack of stabilization at both the top and bottom of the slope with trenching.
- Lack of seeding underneath.

Removal of erosion control blankets is not usually required, particularly if the blanket is 100% biodegradable. An erosion control blanket should only be removed if there are concerns over impacts to wildlife, and only after vegetation has been established. Cutting the blanket into manageable pieces is recommended during removal to minimize impacts to the vegetation that has already been established.

Figure 4
Overlap

Figure 5
Slumping of blanket down slope

## Pros & Cons

| Pros | Cons |
|---|---|
| ■ Available in 100% biodegradable materials. | ■ Can negatively impact wildlife, including snakes |
| ■ Increase water infiltration into the soil. | ■ Not recommended for steep slopes with sandy soils, or slopes with many rocks on the surface |
| ■ Increase the retention of soil moisture to promote seed germination | |

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