**Factsheet Kesselbach-Valley**

<table>
<thead>
<tr>
<th>Torrent-ID: WLV-WB-102966</th>
<th>Catchment area: 3.5 km²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receiving water course: River Traun</td>
<td></td>
</tr>
</tbody>
</table>

**Torrent characteristics**

- **Design event:** 32.0 m³/s
- **Main process:** debris flow
- **Bed load:** 40 000 m³
- **Tributaries:** Steinkogleckgraben, Kriegraben, Sulzgraben, Rauheckgraben, Scharlinggraben

**Location:** municipal border between Bad Ischl and Ebensee – Northern Limestone Alps (district Gmunden, state of Upper Austria)

- **Highest elevation:** Hohe Schrott 1 839 m.a.sl.
- **Outlet altitude (Traun):** 459 m.a.sl.
- **Altitude difference:** 1 380 m.a.sl.
- **Aspect:** west
- **Torrent length:** approx. 800 m
- **Geology:** dolomite, limestone, lateral moraine, scree material
- **Climate:** Nordstau weather system, Atlantic influenced, high precipitation level
- **Precipitation:**
  - average annual precipitation: 1909 mm
  - maximum daily precipitation: 217 mm, 12.09.1899
- **Vegetation:** spruce-fir-beech forest, forest cover approx. 40 %, timberline 1600 m.a.sl.
- **Settlement:** scattered settlement on the alluvial fan (3 residential houses, 2 farms)

**Protective structures, afforestation measures**

First measures in 1901 for the protection of the railway line and traffic route, supplementary project in 1911; several later improvements during the 20th century: methodical torrent control structures in combination with afforestation and soil bioengineering structures (eg. brushwood set)

- **Latest project:** started in 1994, finished in 2016
- **Recent developments:** debris flow events in 2002, 2010 and 2013 caused by heavy rainfall led to deep fluvial erosion in the upper catchment and debris accumulation on the alluvial fan
  - storm events (Kyrill, Emma, Paula) with high amount of windfall in 2007, 2008
  - (Dry) avalanche event in 2009

**Urgent measures taken:** adaptation of the running project 1994: inclined rake barrier

- **Next steps:** follow-up project

**Protected goods:**

- permanent settlement, Austrian Federal Railway line, main supply lines for natural gas and electricity (ÖÖ Netz GmbH), state road B 145 “Salzkammergutstraße” => high level of protection required due to importance of linear infrastructure and subsequently also accessibility of towns up the valley