

Company: ALAS SLOVAKIA s.r.o.
Location: Záhorská nížina, Slovakia

Objective The conservation of a protected bird territory no. 20 “Morava” (Moravia) and nature protection of flood territory utilising sedimentation of sludge pits.

Context The exploited gravel deposit is situated in the South West part of Záhorská nížina (Záhorská lowland) about 1,1 km to the south from the village Vysoká pri Morave, in the flood territory of Morava river. The exploitation of the deposit started in 1978.

Mining is realised from under the water level by means of floating mining equipment. The supposed time of extraction is 62 years. The territory belongs to a territory declared in 1988 protected, the CHKO Záhorie declared in 1988. In 2004 the flood area of Morava river was declared protected bird zone no. 20 Morava. In 2018, the gravel deposit was still running.

Solution During the exploitation and treatment of aggregates, technological waste water is generated. The technological water is conveyed after the application on the sorting line to the sludge bed. Water after sedimentation freely flows into the mining lake.

Favourable technological and natural conditions enable nesting of the most important bird species in the country like *Porzana porzana* (Spotted crane), *Botaurus stellaris* (Bittern), *Falco cherrug* (Saker Falcon), *Netta rufina* (Net-crested Porchard) and several other species. It is a regular winter quarters of more than 20.000 pieces of several goose species.

An irreversible phenomenon in the locality if the uncovering of alluvial meadows and extinction of their biotopes. By modification of banks in the course and after the operations, favourable conditions for the settlement of aqueous and water area linked communities will be created.

Result The preservation of the protected bird population that are the object of protection in the protected territory “CHVÚ Niva Moravy”.

The analysis of the results of the monitoring of water quality in Morava rive indicate the overall trend of quality improvement. The activities of gravel mining provide conditions for the preservation of existing and creation of new ones for nesting and emergence of protected birds in the area, conditions for the appearance of wide range of autochthon fish species and protection of marshland and aqueous communities of plants leading to the support of the diversity of phytogene population and orthinological fauna.

