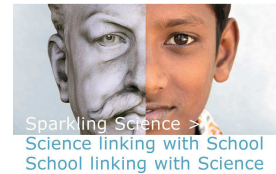




wasser
cluster
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bmwfw

Project PowerStreams

SPA 05 -036

Project leader: Dr. Gabriele Weigelhofer

Duration 1.10.2014 – 30.9.2016

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The project **PowerStreams** aims to analyse the effects of nutrient loading and stream channelization on the efficiency and sustainability of the self-purification capacity of streams. We want to identify options for a sustainable management of stream ecosystems by quantifying the interaction of these different human impacts on the stream metabolism.

The project is a research-education-cooperation with four partner schools: Francisco Josephinum, BRG

Waidhofen/Ybbs, BORG Mistelbach, and HBLFA Raumberg-Gumpenstein. Together with the students, we will measure both the in-stream uptake of dissolved nitrogen and organic carbon and the in-stream production of green-house gases via short-term nutrient addition experiments. The investigations will be carried out in natural as well as degraded stream reaches showing low to high nutrients loads. In laboratory experiments, the students will examine the potential of sediments to produce or retain nutrients and green-house gases under different environmental conditions within the scope of their pre-scientific theses. In addition, we will analyse the effects of long-term additions of dissolved organic carbon on the metabolism and the water quality of streams. Based on our co-operations, we will develop a concept for the support of young academics through research weeks and joint supervisions of pre-scientific theses.

Links:

www.sparklingscience.at/
www.bmwfw.gv.at/

Links to the schools:

www.brgwy.at/
www.josephinum.at/
www.borgmistelbach.ac.at/
www.raumberg-gumpenstein.at/