

The water sanctuary Taugl

Location

Country: Austria

Scale: national

Region: Salzburg (Taugl basin groundwater body)

Compensated /improved ecosystem services

Protection of groundwater quality and quantity

Management

The Water Association of the Salzburg Basin (Wasserverband Salzburger Becken – WSB) is responsible for supplying its members with drinking water of high quality. Its mandate comprises extracting and disseminating drinking water, developing and maintaining installations, managing its groundwater utility, and securing the water supply in case of emergency.

The drinking water used by the WSB stems from the “Taugl” groundwater body which was made accessible in 2004 through the development of the groundwater utility Taugl. The WSB has obtained a permit to abstract 150 l/s from this groundwater body. The permit is given under the condition that the groundwater model on which it is based will be updated on a yearly basis and takes into account the collected quantitative and qualitative groundwater data. Such groundwater monitoring has to observe the basic geological conditions around the Taugl utility, but also the hydro-geological impacts of upstream and downstream areas. However, a new calculation is only necessary, if extreme events or new groundwater levels have not been reflected in the recent model.

In order to ensure the drinking water supply of the region and consequently the protection of the Taugl groundwater body, a payment for ecosystem services scheme is in place. It is important to understand that the development and implementation of this PES scheme is not based on voluntarism, but mandatory according to the Austrian water law. Its legal basis can be found in § 34 of the Water Rights Act which introduces the legal instrument of declaring water sanctuaries (Wasserschongebiete). § 34 entitles water suppliers to demand the declaration of water sanctuaries, if this is necessary to protect a groundwater body which serves for the general water supply. After the development of the Taugl groundwater utility in 2004, the State Governor (Landeshauptfrau) of the provincial state of Salzburg was obliged to designate the area around the groundwater utility as a water sanctuary.

Based on § 34 Para. 2 of the Water Rights Act, this was done in 2006 through the ordinance for the water sanctuary Taugl Wasserschongebietsverordnung Taugl). This ordinance replaced a previous ordinance from 1996 (Taugl-Schongebietsverordnung) which already designated a “general” Taugl sanctuary according to § 35 of the Water Rights Act. However, this “general” sanctuary aimed only at protecting the water resources which could ensure the future water supply.

A mandatory PES scheme is therefore created, if:

- Due to the designation of the water sanctuary, a land owner is restricted in his rights to use the land; and
- The use of the land that is now limited was legal before the designation took place.

The water sanctuary Taugl is 100 km² large and affects around 250 agricultural and forestry enterprises. For these enterprises the prohibition of certain pesticides represents the main use restriction and management difficulty.

Stakeholders

Sellers or service providers:

Farm and forest land owners who provide the forest ecosystem services

Buyers and beneficiaries of services:

Customers of the local water suppliers who benefit from the services and in the end fund the compensation payments

Knowledge providers:

A cadastre for the entire territory under the responsibility of the WSB that has been constantly updated due to rapid changes in the agricultural and forestry industries, as well as developments of population density. This cadastre provides the WSB with up to date information on groundwater quality and quantity problems and the potential sources of these problems. The identification and monitoring of all agricultural sites and the different types of agricultural activities helps the water supplier to make a risk analysis. On the basis of this analysis, the WSB can comply with its obligation to develop preventive and protection measures.

Intermediaries:

The State Governor (through the Directorate for Agriculture and Forestry) who designates the water sanctuary and thus builds the overall framework for the scheme.

The Water Association of the Salzburg Basin and its members serve only as intermediaries who link the respective parties.

Timeline

Establishment year: 1999

Time horizon: long term

Status of PES: unknown

Availability of economic data

Compensation required by § 7 of the Wasserschongebietsverordnung Taugl, § 34 Para. 4 and § 117 Para. 1 of the Water Rights Act is regulated by a framework agreement between the Directorate for Agriculture and Forestry and the WSB which shall ensure an efficient management of the land owners' claims. The framework agreement was already established in 1999 in order to regulate the compensation under the TauglSchongebietsverordnung. Since it has proven its value in practice and has been well received by the affected enterprises, the agreement has been renewed in 2004.

After the replacement of the Taugl-Schongebietsverordnung by the asserschongebietsverordnung Taugl, the framework agreement still regulates the compensation of the affected land owners. The agreement remains valid, since the prohibition of pesticides under the previous ordinance which built the main basis for the agreement has been maintained under the current ordinance. From 1999 until 2006, the WSB paid a full amount of € 1.548.750,27 (in average € 193.593,78/a) for the compensation of land owners. The money spent by WSB is collected from its members (the local water suppliers) who charged their customers.

References / Source of information

C. Van Ham, G. Jansse, and M. Gaworska. 2009. Final report study on the Economic value of groundwater and biodiversity in European forests. 90 p.
http://ec.europa.eu/environment/forests/pdf/grounwater_report.pdf