

CONVENTION  
(*unofficial translation*)\*



on the Protection, Utilisation,  
Recharge and Monitoring of the  
FRANCO-SWISS GENEVOIS AQUIFER

between

the Community of the 'Annemassienne' region,  
the Community of the 'Genevois' Rural Districts,  
and the Rural District of Viry,  
on one part,

The Republic and Canton of Geneva,  
on the other

\* *Unofficial translation kindly provided to the IWLP by Ms. Florence Rossignol.*

Have agreed as follows:



## ***PREAMBLE***

Recalling the ‘Arrangement on the Protection and Recharge of the Franco-Swiss Genevois Aquifer’ of 9 June 1978 between the State Council of the Republic and Canton of Geneva and the Prefect of Haute-Savoie, who, recognizing the need to establish an agreed management for the aquifer in order to protect this natural resource and to preserve the quality of its waters, defined:

- ✓ the objectives, composition and operation of a Genevois Aquifer Management Commission,
- ✓ the investment and operation terms of the existing installations established to optimize the exploitation of the aquifer, in particular the project of construction of the artificial recharge station,
- ✓ the terms of each user’s extractions, and the volumetric and qualitative controls necessary to an optimal management,
- ✓ the financial arrangements between the two Parties, in particular the terms of the French contribution to the investments costs and functioning of the artificial recharge station.

Recalling the Convention concerning the financing of an analysis laboratory of the waters of the Arve of January 9<sup>th</sup> 1985, between the Mayor of Gaillard (Haute-Savoie), duly authorized for this purpose by the rural districts of Gaillard and Viry as well as the multi-functional Management Committee of the Annemassienne Region and the Management Committee of the Canton of Saint-Julien-en-Genevois, on the one hand, and the Councillor of the State delegated by the Republic and Canton of Geneva on the other,

Considering the evolution of the legislative provisions in particular:

- The international provisions concerning transboundary cooperation and in particular the Agreement of Karlsruhe on transboundary cooperation between local authorities and state local organizations of 23 January 1996 entered into force for Geneva July 1<sup>st</sup> 2004 (A 1 11) and for France February 2<sup>nd</sup> 2007 (article L 1115-1 of CGCT)
- The Franco-Swiss bilateral agreements and in particular the Convention on the Protection and Utilization of Transboundary Waters and International Lakes of March 17<sup>th</sup> 1992, entered into force in Switzerland on October 6<sup>th</sup> 1996 (RS 0.0814.20) and on September 28<sup>th</sup> 1998 in France,
- The French legislative provisions, in particular,



- The Environmental Code, and in particular articles
    - L.210-1 and L.211-1 to L.217-1;
    - R.211-94 to R.211-95 (vulnerable zones);
    - R.214-1 to R.214-56 on authorization and declaration procedures,
  - Act no. 2006-1772 of December 30<sup>th</sup> 2006 on water and aquatic environments and Act no. 92-3 of January 3<sup>rd</sup> on water and their application,
  - The Public Health Code, in particular:
    - L.1321-1 to L.1321-10 concerning drinking water;
    - R. 1321-1 to R.1321-63 concerning water for human consumption excluding mineral waters,
  - Act no. 2004-806 of August 9<sup>th</sup> 2004 concerning public health policy,
  - The General Code of Local Authorities in particular Articles L.2224-7 to L.2224-12-5 concerning water and sanitation.
- The Swiss federal and cantonal legislative provisions, in particular
- Articles 56 and 76 paragraph 4 on the Federal Constitution of the Swiss Confederation of April 18<sup>th</sup> 1999 (RS 101),
  - Article 61c paragraph 2 on the Law on the Organisation of the Government and the Administration of March 21<sup>st</sup> 1997 (RS 172.010),
  - The Federal legislation on the Protection of the Environment of October 7<sup>th</sup> 1983 (RS 814.01),
  - The Federal legislation on the Protection of Water of January 24<sup>th</sup> 1991 (RS 814.20),
  - Articles 158 to 160 and Article 160D of Constitution of the Republic and Canton of Genève of May 24<sup>th</sup> 1864 (A 2 00), in particular Article 158B Paragraph 1, adopted June 17<sup>th</sup> 2007 and in force since July 5<sup>th</sup> 2007, according to which the Industrial Services of Genève (SIG) are owners of their possessions and holders of the rights relating to their management, in particular the Genevois recharge station,
  - The legislation ratifying the extension of the Genève Canton to the Agreement on Karlsruhe on Transboundary Cooperation between Local Authorities and Local State Organisations signed January 23<sup>rd</sup> of April 22<sup>nd</sup> 2004 (A 1 11.0),



- The legislation on alienation as a result of transfers of assets between the Genevese State and the Industrial Services of Genève of January 2007, in particular Article 5 establishing that SIG will replace the State in its rights and obligations in relation to the ownership and exploitation of the assets transferred from State to the SIG, which include the Genevois Aquifer Recharge Station.

### ***Preliminary Article-***

The present Convention was established with the common goal of ensuring the future of the Franco-Swiss Genevois Aquifer and hence to secure for the parties, as far as possible, the capacity to extract water destined for providing its people with drinking water.

The present Convention defines the administrative, legal, technical and financial arrangements necessary to execute this mandate.

## FIRST CHAPTER

### Management Commission

#### Article 1- Composition:

1. A Genevois Aquifer Management Commission is hereby created which shall consist of three Swiss members designated by the Council of State of Republic and Canton of Geneva and of the three French members representing the three Communities parties to this Convention
2. The Commission shall be co-headed by a member with deliberative powers designated by each delegation.
3. The Commission can appoint, in a consultative capacity, technicians designated by each party and specialized in water matters.
4. The Sub-Prefect of Saint-Julien-en-Genevois, representing the French State, shall be a Commission member in a consultative capacity.

#### ***Article 2- Mandate:***

1. The mandate of the Commission shall be to propose a yearly aquifer utilization programme which, as far as possible, takes into account the needs of the various users. To this effect, the Commission shall be entitled to formulate any useful proposal on the measures to be taken in order to ensure the protection of the waters of the aquifer and to remedy possible



causes of pollution thereof.

2. The Commission shall in particular give its technical opinion on the construction of new extraction works on the aquifer and on the modification of existing equipment.
3. The Commission shall perform the audit of the investment and operational costs of the recharge installation within the meaning of Articles 12 and 13 of the present Convention.

***Article 3 – Operation:***

1. Each party shall assume for itself the running costs of the Commission.
2. The Commission, as necessary and on an equal basis, shall designate representatives entrusted with the control of the volume of water extracted by the various users.
3. The Commission shall convene periodically, at least once a year, as well as whenever so requested by either of its member delegations.
4. The meetings of the Commission shall be held alternatively in Geneva and in one of the other communities parties to the present Convention.
5. The conclusions of the Commission's meetings shall be recorded in a joint report. The services of secretariat are assumed by:
  - For the Geneva State, by the Aquifer Service (hereby 'the Service')
  - For the French party, by the Community of the 'Annemassienne' Region.

<b>SECOND CHAPTER</b>
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<b>Waterworks and Equipment</b>
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***Article 4 – Inventory:***

1. The Inventory of the recharge equipment and existing extraction works is annexed to the present Convention. This annex is kept up to date yearly and provided to the Parties.
2. All the terms of the waterworks already performed, such as authorized water volumes, installed power, protection perimeters shall be submitted to detailed survey.

***Article 5 – New Waterworks and Equipment:***

1. Every new waterworks or equipment, as well as any modification to existing waterworks and equipment, shall be subject to the prior technical opinion of the Commission in accordance with Article 2.2.
2. Subject to the provisions of the present Arrangement, the respective authorities of the parties shall make sovereign decisions in respect of the projects submitted to them.
3. The Commission shall oversee the construction of the waterworks and equipment referred to in paragraph 1, until they are set into operation.

***Article 6 – Recording of Water Extractions:***

1. All waterworks shall be equipped with a device for the recording of the volume of water extracted from the aquifer, which shall conform to legislation, gauged regularly, and which shall be entirely the user's responsibility.
2. Readings shall be performed periodically and provided to the members of the Commission.

***Article 7 – Recording of Water Levels***

1. All waterworks shall be equipped with a standard device for the recording of the water-level variations of the aquifer.
2. All recordings shall be available to the parties on demand.

THIRD CHAPTER

Extraction forecasts - limits

***Article 8 – Limits***

Considering the dimensions and the station's artificial recharge capacity, the French communities shall ensure that their total extraction shall not exceed 5 000 000 m<sup>3</sup> per year, of which 2 million m<sup>3</sup> exempt of payment. If necessary, dispensations to this 5 000 000 m<sup>3</sup> limit can be accepted by the Management Commission after consultations with the operator.

***Article 9 – Forecasts - Reserved water volume:***

1. In order to ensure the rational management of the recharge installation, at the beginning of the year each user or group of users shall announce to the



Commission their estimated volume of extractions from the aquifer for the next twelve months. Such forecasts are designated as ‘reserved water volume’, or :  $V_r$ .

2. The “total reserved water volume” equals the total of the reserved water volumes by all users, or

$$V_{rt} = V_r 1 + V_r 2 + \dots + V_r$$

3. The operator shall take  $V_{tr}$  into consideration in order to best manage recharge operations, each user being entitled to dispose in priority of the reserved water volume ( $V_r$ ) allocated to the user.
4. Each user or group of users shall be entitled to a 20% extraction margin with respect to his reserved water volume ( $V_r$ ). Extractions in excess of 20% over and above  $V_r$  shall be reported to the Commission in order to let the Commission take all necessary measures. In case of a quantitative management problem, the Geneva State shall request the Commission’s arbitration.

#### FOURTH CHAPTER

##### Quantitative and Qualitative Monitoring of the Resource

###### *Article 10– Recording and control of the extractions and water-levels:*

1. The control and protection of the resource shall be performed jointly by Swiss and French authorities on their respective territories.
2. Water level data, as well as the data from the water quality analysis from the aquifer, performed periodically, shall be reported to the Management Commission and can be controlled any point on request from one or the other delegation.
3. Data from the extractions shall be performed by each user and reported at the end of the year to all users of the Aquifer to the Swiss and French authorities.

#### FIFTH CHAPTER

##### Artificial Recharge Costs Sharing

###### *Article 11 – French share:*

The French share of the artificial recharge costs shall be calculated yearly from the 1<sup>st</sup> of November to the 31 of October.

### ***Article 12 – Investment expenditures:***

Investment expenditures, provided for in Article 5-1, in Swiss Francs, shall be equal to the sum of the accounting amortizations of the managing assets and the remuneration of the invested capital following the formula:

$$I = \Sigma A + R$$

where

A= accounting amortizations

The accounting amortizations are calculated for each installation recorded in the table of fixed assets according to the principle of linear amortization following the accounting norms of the user (IFRS norms):

*A = accounting value at the beginning of the year/residual life expectancy*  
(=the difference between the duration of the amortization of an asset determined by accounting norms and its age)

R= remuneration of the invested capital

The remuneration of the invested capital is calculated following this formula:

$$R = VC_{im} \times i$$

*VC<sub>im</sub>*: average accounting value of the fixed assets during the year.  
The average accounting value of the fixed assets is equal to the arithmetic average of the accounting value of the fixed assets at the beginning of the year and the accounting value of the fixed assets at the end of the year.

*i*: rate of remuneration of the capital  
The rate of remuneration of the capital is equal to the average weighted annual cost of the capital (WACC) of the operation (value of 5.25% in 2007)

A table of fixed assets, by type (civil engineering works, installations, command control) and type of investment is updated annually based on the accounting value at the beginning of the year, acquisitions or transfers during the year and accounting amortizations.

### ***Article 13 – Determination of operational costs***

Operational costs E, determined annually, consist of, in Swiss Francs:

- Upkeep, maintenance fees, repairs



- Insurances and taxes
- Other operational costs: management costs and consultancy
- Labour costs
- Rental costs of the area
- Purchase of materials: electric energy, water, treatment products

**Article 14 – French users share**

1. The French share ( $P_f$ ) of the artificial recharge costs shall be calculated for each year according to the following formula to which is applied with applicable TVA.

$$P_f = (I + E) \frac{V_{efp}}{V_{art.pr.}}$$

where:

$V_e$  = volume of water actually extracted in a year by all French and Swiss users,

$V_{ef}$  = volume of water actually pumped and payable by French users

$V_{ef}$  = volume of water actually pumped by French users and payable by French users = 2 000 000 m<sup>3</sup> (exemption of two million cubic meters),

$V_{art.pr.}$  = artificial volume extracted, i.e.  $V_e$ , to which has been subtracted the natural recharge estimated at 7 500 000 m<sup>3</sup> (seven million five hundred cubic meters) per year, estimate which should be corrected by the Commission according to the observations made at the utilization level.

Considering the formula for determining the share of the French users, a reduction, for whatever reason, of the extractions by the Swiss users, should in

no way mean a value of  $\frac{V_{efp}}{V_{art.pr.}}$  superior to the natural recharge

(2 000 000/ 7 500 000= 26.67%) except in special circumstances agreed to by the Management Commission in accordance with article 8.

Shall not be considered a reduction of the Swiss extractions, within the meaning of the preceding paragraph, volumes not pumped but nevertheless billed to the Genevese State by the Swiss users.

2. If the total  $V_{ef}$  of the extractions actually performed by the entirety of the French users should be inferior to 70% of the total  $V_{rf}$  of their reserved volume, the French users' share would nevertheless be calculated, within the limits fixed in preceding paragraph 1, in this case bringing the value of  $V_{ef}$  to 70% of  $V_{rf}$  ( $V_{ef} = 0.7 V_{rf}$ ).



### ***Article 15 – Terms of payment***

In accordance with of the last paragraph of the preamble of the present Convention,

1. At the end of each year, the Genevese State shall proceed to the verification of the detailed account of the French users' share of the recharge costs (hereafter 'the detailed account'), prepared beforehand by the SIG.
2. The Genevese State reports the detailed account to the French parties for notification.
3. Once the detailed account is ratified by the Genevese State, the Genevese State informs the SIG by letter. This letter is annexed to the to bill of the French users' recharge share, sent by the SIG to the French parties.

## SIXTH CHAPTER

### Quality Control Pollution Abatement

### ***Article 16 – Water Analysis:***

1. Water extracted from the aquifer shall be analyzed by both sides on the basis of standard qualitative analysis criteria established by the Commission.
2. Such analyses shall be made at regular intervals, as determined by the Commission. Results shall be exchanged and recorded.
3. Analyses of the water intended to be injected into the aquifer shall be made under the same conditions by the Analysis Laboratory of the waters of the Arve, as determined in the Convention of January 9<sup>th</sup> 1985.

### ***Article 17 – Warning System:***

1. The parties shall maintain a monitoring network installed in the manner determined by the competent local authorities and intended for the issuance of warnings in the case of accidental pollution likely to affect the water quality of the aquifer.
2. In case of warning, protection measures commensurate with the circumstances shall be taken on both sides.

## SEVENTH CHAPTER

### Liability

#### *Article 18 –*

1. The Republic and Canton of Geneva shall be liable for damages caused to the quality of the waters of the aquifer resulting from failure to maintain the recharge installation or from a wrong committed in its operation, especially as regards water treatment, and without prejudice to the right of indemnification the Genevese State may have against the user of the installation of recharge (and/or against its agents).
2. Its liability shall however not be maintained in the event it can be proven that such a pollution would have occurred even in the absence of a recharge installation.
3. The responsibility of the French and Swiss communities or of third parties in the case of pollution of the waters of the aquifer resulting from acts or events occurring within the French and Swiss territories is withheld.

## EIGHTH CHAPTER

### Duration and Termination of the Convention

#### *Article 19 –*

1. The present Convention is concluded for a period of thirty years.
2. After the thirty years expiration, it can be renewed once only, with joint agreement for a period of three years.
3. Either party shall be entitled at any time to request the opening of negotiations with a view to modifying or supplementing the present Arrangement. Such negotiations shall initiate within six month from the date of the request at the latest.

## NINTH CHAPTER

### Applicable Law and Dispute Settlement



**Article 20 –**

1. Any matter relating to the interpretation of this Convention shall be resolved in accordance with Swiss Law.
2. Any dispute relating to the implementation of the present Arrangement shall be submitted for conciliation to the Franco-Genevese Regional Committee.
3. Failing settlement, the matter shall be referred to the Franco-Swiss Consultative Commission for Problems of Neighbourliness.

**TENTH CHAPTER**

**Final Provisions**

**Article 21 –**

A copy of the present Convention shall be provided to the Franco-Swiss Consultative Commission for Problems of Neighbourliness.

**Article 22 -**

The present Arrangement shall take effect on the 1st of January 2008.  
It repeals the 'Arrangement on the Protection and Recharge of the Franco-Swiss Genevois Aquifer of 9 June 1978 between the Republic State Council and Canton of Genève and the Prefect of Haute-Savoie' of June 9<sup>th</sup> 1978.

Done in Geneva, this 18<sup>th</sup> December 2007, in four originals, in French.

(signatures)

***(Annex omitted: inventory of recharge equipment and of existing extractions units – please see original at <http://www.waterlaw.org/regionaldocs/2008Franko-Swiss-Aquifer.pdf>)***