



The fountains of Bergamo

GIANLUCA LICATA





The fountains of Bergamo

GIANLUCA LICATA

Edited by **Consorzio di Bonifica della Media Pianura Bergamasca**

Bergamo - April 2015 - Special edition dedicated to EXPO 2015

Contents

1-	Presentations	Pag. 5
2-	Foreword	Pag. 11
3-	Introduction	Pag. 13
4-	The city and the water: a historic path	Pag. 15
	The first settlements on the hill: Città Alta and its springs	Pag. 15
	The Romans and the construction of the aqueducts	Pag. 19
	The Acquedotto Magistrale	Pag. 25
	The three cisterns of Bergamo	Pag. 29
	Other aqueducts	Pag. 33
	The fountains of the Vicinie in the Middle Ages and in the Medieval Commune	Pag. 35
	The fountains of the sixteenth century	Pag. 47
	The watercourses and the canals	Pag. 53
	The fountains of the eighteenth century	Pag. 65
	The nineteenth century	Pag. 69
	The twentieth century	Pag. 77
	The monuments of the nineteenth and twentieth centuries	Pag. 81
5-	A guide to the images of the fountains	Pag. 89
	Bibliography	Pag. 209

Photography by Gianluca Licata

The historic drawings and photographs are taken from the Historic Diocesan Archive of Bergamo, from the archive of "Eco di Bergamo", "La Rivista di Bergamo", from the Bergamo Illustrata collection and the Gaffuri collection of the Biblioteca Civica Angelo Mai and from the books "Gli Acquedotti di Bergamo" by Giuseppe Mainoli and "Acqua e acquedotti nella storia di Bergamo" by Pino Capellini

Maps granted by Geoportale del Comune di Bergamo

With contributions to the texts by **Alessandro Secomandi**

Editing: **Michela Fertoni**

Iconographic and bibliographic revision: **Michela Fertoni**

© for the logo of the Consorzio di Bonifica della Media Pianura Bergamasca

© for the photography: Gianluca Licata

© 2015 by Mediatek Communication S.r.l.

ALL RIGHTS RESERVED. Any unauthorised reproduction of the material, even partial, by any means, including photocopy, is strictly prohibited.

Front cover:

The bas-reliefs of the "Zuccheriera" in Porta Nuova, produced in 1939 by the sculptor Leone Lodi (Biblioteca Civica Angelo Mai, La rivista di Bergamo - Ottobre Novembre Dicembre 1996)



1 - Presentations

The CBMPB believes that it is essential to raise awareness of the work that has been done over the years in order to preserve the territory, adapt the infrastructure to our ever evolving demands, and safeguard the existing patrimony.

It is our firm conviction that this awareness will only be possible through the work that our consortium has been carrying out since it was instituted and teaching the local people about the history of the territory. This is what led us to sponsor the publication of this volume. It is a book that outlines how we have used the local water sources from the time of the first settlements in the territory to the present day, identifying key moments that defined Bergamo as we know it today.

In addition to administering all water planning and management activities, the CBMPB constantly spearheads new initiatives that consolidate its bond with the Bergamascan community.

The face of the Bergamascan territory has changed enormously over the past century.

The population, agriculture and industry have grown and have had a significant impact on the environment and on the consumption and quality of the water. In this continuously evolving context, we have come to see that the management and quality of the water supply is essential to all human activity

This book aims to bring the reader closer to the story of how the water supply evolved in Bergamo, from the first settlements of the Orobii, strongly linked to the presence of this essential resource, to the earliest distribution systems, canals and irrigation ditches, which became necessary as the increasing demand for fresh water forced the people to tame the natural flow of water and transport it to where it was needed.

It is a journey that leads us right up to the present day and opens our eyes to how the face of the city has changed: almost always due to the continually evolving need to make the best possible use of the water.

The future will be no different.

President
Franco Gatti



The fact remains that [Armillia] has no walls, no ceilings, no floors: it has nothing that makes it seem a city except the water pipes that rise vertically where the houses should be and spread out horizontally where the floors should be: a forest of pipes that end in taps, showers, spouts, overflows.

Italo Calvino, Le Città Invisibili

Perhaps after many tireless months of work, also Gianluca Licata, the young author of this publication, began to confuse Bergamo with Armilla, Italo Calvino's imagined city of pipes. Or perhaps not, and despite the fatigue after the relentless dedication it must have taken to photograph all 240 fountains in this book, he remained lucid and never lost sight of the reality of the people and buildings around him.

The theme of water in cities remains one of the most fascinating aspects of urban planning and its history. Invisible networks, mysterious channels, tunnels, and sophisticated hydraulic mechanisms have allowed Bergamo, like other cities, to supply fresh water to its citizens for centuries. The modern aqueducts aren't all that different from those of the past: aside from the technology applied, they still trace out an invisible labyrinth of which we see only a tiny part. Like the proverbial tip

of the iceberg, the fountains and taps are nothing more than the last few centimetres of a network that covers hundreds of kilometres.

This publication is divided into two sections. The first briefly describes the history of the aqueducts, fountains, and canals, and includes the latest discoveries and hypotheses. The work then delves into its comprehensive and consolidated bibliography, thanks to which we now know so much about the springs and channels of Roman and medieval origin.

I had the pleasure of assisting Gianluca during some of his photographic excursions and I can testify that the real originality and substance of this "guide" lies, in my view, in the second section, where one can see the author's tireless determination to produce a comprehensive catalogue of every single water outlet in Bergamo. The result is a complete photographic catalogue of these "public amenities", a taxonomical and encyclopaedic work, reminiscent of the obstinate meticulousness of academics of days gone by in the classification of a reality so that others may learn about, discover, and remember it.

Councillor of the Pianificazione Territoriale
e alla Mobilità del Comune di Bergamo
Stefano Zenoni



Water is life! It might seem an obvious statement, but we often forget it. In fact, we only need to be a little dehydrated, lose just 1% of the water in our bodies, before we feel lethargic, unreactive, less able to work or study. We are all made mostly of water.

These few premises are enough to make us realise the importance of water to our existence. If we then consider in how many contexts water, in its broadest sense, conditions our lives, we can only applaud the promotion of an initiative that aims to raise awareness of it in the author's own territory.

As the president of UNIACQUE s.p.a., I have the honour of directing a company that manages, safeguards, and develops the integrated water cycle of the entire province of Bergamo: collection, quality, distribution, drainage, and purification.

Our company emerged from the unification of numerous corporations with more than ten years' experience in water management that, over time, has been consolidated and developed. This demonstrates that the culture of respectful and careful management of water is a common patrimony in the DNA of the citizens of Bergamo.

In this context, I have no doubt that this book will be greatly appreciated by the community, as it fills a gap in the historic-environmental story of the most precious resource in our province.

The section dedicated to the "fountains" offers glimpses of life in our territory alongside the precious monumental and architectural beauty that we must strive to preserve each and every day.

President of UniAcque
Paolo Franco



2 - Foreword

The absolute protagonist of this volume is water, the unarguably essential element that has conditioned the birth and development of human settlements for millennia. It influences their growth, when present, and influences changes when not. Whether there or not, water is a determining element.

In the first section of the work, the author investigates how this element has contributed to shaping the face of the territory as we know it today.

It's a journey through time that begins with the arrival of the Orobii culture on the hills of Bergamo, takes us through invasions, the construction of the first aqueducts and canals, and leads us to the present day, showing us step by step how the territory has changed.

It is clear and accessible not just for history buffs, but also for anyone curious about what happened over the centuries to give their city the aspect it has today.

In the pages that follow, you'll read how the

water resources were first used and about the first attempts to control and regulate them. The book recounts how the constantly increasing demand determined the development of new ideas to get the most out of the natural resources, and how human ingenuity made it possible to design and build a network of structures to distribute the water from the springs and rivers to where it was needed.

This work has an essential and clear approach, with a constant focus on the eternal relationship between man and water.

Bergamo, a city built on a hilltop far from the rivers, has always been connected to the element of water thanks to the skills and tireless work of man.

In this volume, the reader will understand how this close relationship between the city and its water has evolved.

The second part of the book completes the historical research, providing a complete list of every fountain in the city.

Happy reading

Director of the Consorzio
di Bonifica della Media Pianura Bergamasca
Mario Reduzzi

3 - Introduction

Realised with the sponsorship of the Consorzio di Bonifica della Media Pianura Bergamasca, this volume aims to trace a path through history, culture, and architecture to uncover the decisive contribution that water has made to the development of the city of Bergamo.

The presence of water has always been essential for human settlement. Every great civilisation in history has developed and expanded into territories with a water source.

We read that since the Iron Age (XII-V century B.C.) the inhabitants of the Bergamascan hills relied on the springs and other water sources (Raffaella Poggiani Keller, Bergamo dalle origini all'altomedioevo, Chapter Bergamo pre-protostorica, p. 61). The historic section that follows this introduction offers a panoramic perspective of the sequence of events and dynamics that brought about a strong connection between water and the development of the city:

from the earliest settlements of the Orobii, to the Roman aqueducts; from the medieval and renaissance fountains to the 19th Century epidemics caused by a shortage of running water, to finally arrive at the series of new aqueducts constructed in the 20th century.

The essential and comprehensive photographic material completes the work. Part of the visual documentation has been taken from the archives of "Eco di Bergamo" and "La Rivista di Bergamo", from the Bergamo Illustrata collection and Gaffuri collection of the Biblioteca Civica Angelo Mai. The remaining material is the work of the author.

The aim is to provide a comprehensive picture of the topic.

After the historic section, follows a schematic catalogue of all the fountains located in the territory and a map that will help orientate the reader in their rediscovery of water in Bergamo.

Gianluca Licata



4 - The city and the water: a historic path

The first settlements on the hill: Città Alta and its sources

The first traces of settlement on the hills of Bergamo date back to the 11th century B.C., when the Orobii people established themselves on the high ground that was easier to defend and near an abundant supply of water. Nevertheless, it was difficult, if not impossible at the time, to get the water from the vast waterways of the Serio and Brembo rivers to the hills.

The water sources were concentrated on the northern slopes of the hills of Città Alta, blanketed with woodland and meadows, and less exposed to the sun. The southern slopes, on the other hand, had fewer water sources. During the Iron Age, the settlers used these fertile southern slopes for cultivation as they enjoyed gre-

ater exposure to the sunlight.

The particular conformation of the first Orobii settlement, at the top of a hill, gave the prosperity of this culture longevity, as it made them difficult to attack. The invasions, first by the Gauls in the 4th century B.C. then by the Romans in the 2nd century B.C., finally brought an end to this culture that had thrived for almost five centuries.

The technical ability of the Roman architects allowed them to develop the urban systems of the earlier settlements: great aqueducts were constructed and water was distributed over an extensive territory.

The quantity of water used greatly exceeded that of the first settlers.

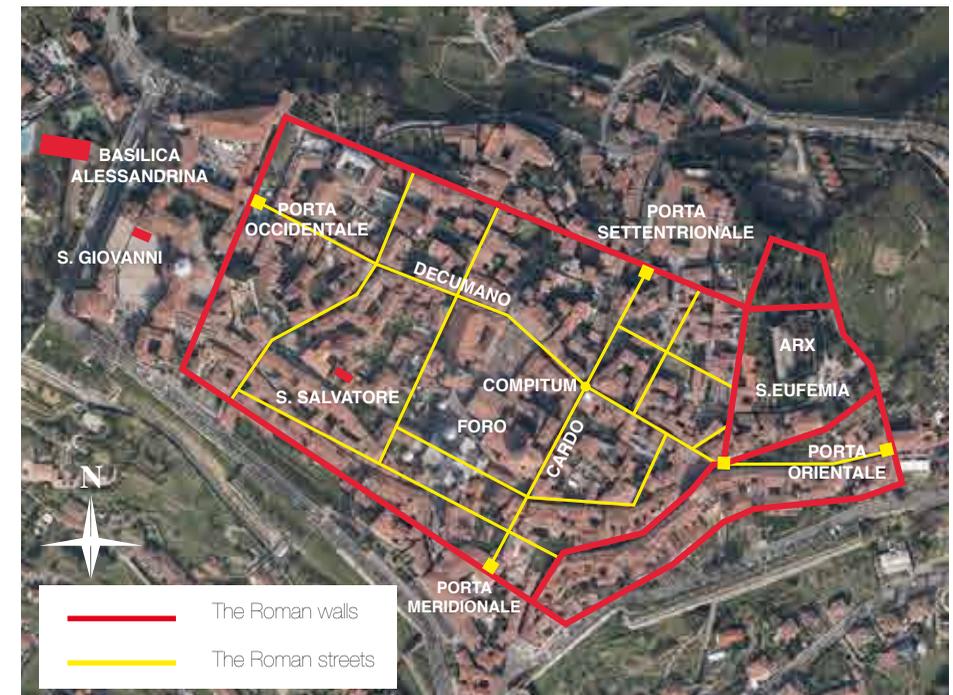


The map shows how the springs were mostly situated on the northern side of the areas called Colle Aperto (A), Boccola (B), S. Lorenzo (C) and Fara (D); there was a spring on the hill of the Rocca (E); the springs on the western hills were used to supply the Roman aqueducts; those on the southern side permitted the development of the districts of S. Tomaso (F), Pignolo (G) and Borgo Canale (H).

The Romans and the building of the aqueducts.

The way in which the city was supplied with water changed radically with the arrival of the Romans. Through the construction of the aqueducts and cisterns for collecting a reliable supply of water, the Romans made it possible to progressively build up the city. The Roman peo-

ple had developed innovative and proven architectural techniques and had inherited expertise from the Etruscans. Thus *Bergomum* was born, a thriving fortified municipality in which the urban system began to take the form that still characterises it today.



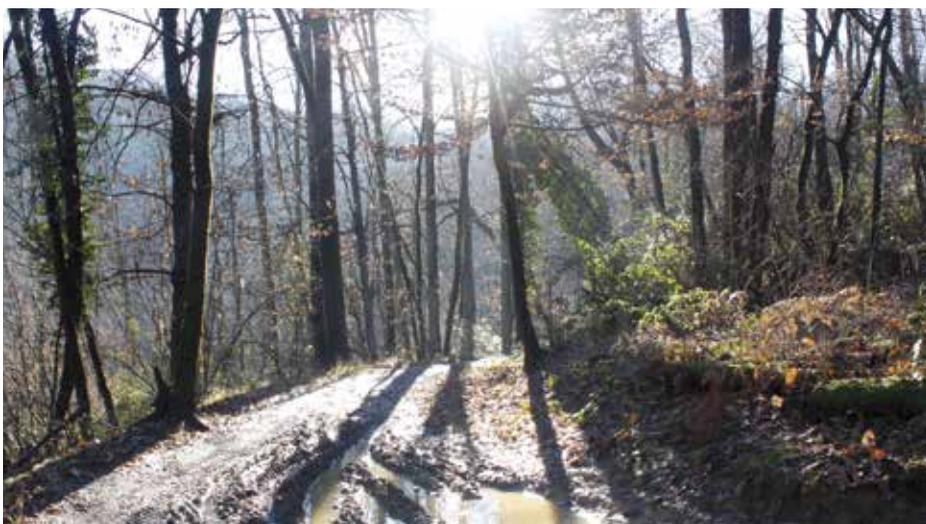
The map shows the development of the walls and streets of Roman Bergamo according to Sandro Angelini (1915-2001 Bergamascan architect and artist) (*Le Mura di Bergamo*, Azienda Autonoma di Turismo, pp. 225-226-227). The Romans designed the urban layout of the city as we see it today: the main streets were connected to the four gates located at the cardinal points. The Compitum, the intersection between the cardo and the decumano, was located near the Gombito tower. The Arx, the summit of the hill and a sacred place where temples were erected, now the site of the Rocca (a fortress the construction of which began in 1331 under John of Luxemburg and completed in 1336 under Azzone Visconti). The church of S. Giovanni and the Basilica Alessandrina, remain outside of the walls. These, along with many other buildings, were torn down by Sforza Pallavicino (1607-1667), prior to construction of the current Venetian walls (erected between 1561 and 1588).

The Vasi aqueduct, also known as the aqueduct of Castagneta, is the most historically significant, the longest and had the greatest capacity of all the ancient ducts. The source originates at an altitude of 435 meters above sea level, on the north-western edge of the hill system, below Mount Bastia. The presence of Opus Signinum, a mixture of earthenware, tiles and bricks crushed down and made into a paste with pure lime, used by the Romans for floors or coating cisterns, baths, and terraces, as well as other finds such as etchings and carved stones, allow us to date the construction of the aqueduct to the Roman period. The water gushes out of the Noce spring, which takes its name from the surrounding valley, Val di Noce, and flows from the fountain in Via Ramera down towards Bergamo Alta, intersecting the springs of Scudo, Gallo,

Bosco, Tavernella, and Carina, increasing its capacity.

Until the end of the 19th century, the city relied on this aqueduct as its main supply of water for drinking and washing. It was only replaced by the municipal aqueduct at the end of the century. There are no known drawings of this Roman aqueduct and the remains of the cisterns and ducts are not enough to allow an accurate reconstruction of its exact route. Furthermore, no Roman cistern has been found at the end of the two aqueducts of Castagneta and Sudorno.

The flow of water, in terms of speed and capacity, relied heavily on the integration of structural elements such as steps and chambers that allowed access for inspection and maintenance where the ducts were large enough for a person to enter.



The aqueduct of Via dei Vasi begins at the fountain in Via Ramera and follows a long route through the woods to reach the village of Gallina.



A second inspection chamber located in Via dei Vasi.

Thanks to numerous finds, we do know that there were two types of canal: the Canale Minore and the Canale Maggiore. The latter was big enough for the ancient engineers to enter and move along the length of the canal to carry out maintenance (cutting away roots that had grown down through the walls or clearing the channels of foreign bodies). It was often necessary to repair the structures where they had collapsed or were leaking water: when a leak was found, the flow of water was diverted at the maintenance chamber upstream, in order to repair the rupture while the duct was dry.

The people who maintained the canals had developed a system of *markers* that allowed them to identify points where they foresaw the need for maintenance and cleaning. The most common system was a two letter code, AQ (or simply A), etched into marker stones, walls, or the

corners of houses along the length of the aqueduct.

Studies carried out on the structure and the route of the aqueduct (Nevio Basezzi, Bruno Signorelli, Bergamascan speleological group "Le Nottole", *Gli antichi acquedotti di Bergamo*, pp. 100-101), have revealed that different materials were used and the route of the aqueduct was at times diverted. Having initially thought that materials had been applied incorrectly, or rather an application of obsolete construction techniques, after further investigation researchers Nevio Basezzi and Bruno Signorelli came to understand that what had seemed like imperfections in the construction (some stones being smoother than others, and certain sections of the ducts that narrowed) were actually implemented intentionally in order to improve the flow of the water.

236 Aqueduct of Via Sudorno or S. Gottardo

The *Sudorno aqueduct*, otherwise known as San Gottardo, originated along the southern slopes of mount Bastia and mount S. Vigilio, ran along Borgo Canale (the toponym of the street suggests that there has been a canal there since ancient times. Borgo Canale derives its very name from the presence of water. *Le vie di Bergamo: i loro nomi, le loro storie*, Paolo Guerini, p. 34) until after around 2km it reaches the Rampart of S. Alessandro, where as early as the 13th century it united with the second aqueduct flowing down from the northern slope. The aqueduct originated at

the *Acqua Morta* spring near the church of S. Sebastiano, and grew as it received water from the Gavazzolo spring (the fountain of Acqua Morta and that of the Gavazzolo spring are both of medieval construction and are testament to the long history of this duct. The former is still visible today in Via San Sebastiano, the latter is now located on private property). The aqueduct then continued towards the fountain of Scorlazzzone and the convent of S. Gottardo, before ending its journey in the centre of the city. Over the centuries, the route of this aqueduct has changed little.



The fountain at the Acqua Morta spring in Via S. Sebastiano, restored in 2014.

How the aqueducts entered the city

On the descent towards Colle Aperto from the Rampart of S. Giovanni, on the right where we now see the Venetian walls, was once *the Saliens* (Luigi Angelini, *Il volto di Bergamo nei secoli*, p. 15), a large water tank.

From several documents dating back to the 11th century (*Alcune indicazioni per servire alla topografia di Bergamo nei secoli IX e X*, Angelo Mazzi), we can gather that the name *Saliens*, or 'salient' in English, although mainly used in reference to the large cistern, was also sometimes used to indicate the *Vasi* aqueduct, the square in front of the Gate of Sant'Alessandro, and the street that connected this square to the Convent of San Gottardo.

The water supplied by the city's two main aqueducts, Castagneta and Sudorno, after its long journey from the sources was stored and then redistributed to the city via a channel called the *Acquedotto Magistrale*.

In the second half of the 16th century, in order to allow the construction of the Venetian walls, the urban layout underwent significant changes. The water distribution network was



The bridge of arches of the Sudorno aqueduct entered the Rampart of Sant'Alessandro to join the Vasi aqueduct. The drawing is by Luigi de Leidi, 1774-1853, Bergamascan painter known by his pseudonym of Nebbia for the way he uses colour with light tones and shades and for the prevalence of foggy landscapes in his paintings.

Reference: Civica Biblioteca Angelo Mai, Bergamo Illustrata collection, folder 71, image 26

equally affected and the Saliens tank was destroyed to make space for the band of wall we see today. After the tank had been removed, the water converged into a common channel inside the Rampart of Sant'Alessandro: water from the Sudorno aqueduct ran along three arches that bridged the ditch outside of the walls, while the water from the Castagneta aqueduct ran through the Gate of Sant'Alessandro. (*Gli antichi acquedotti di Bergamo*, Nevio Basezzi, Bruno Signorelli, gruppo speleologico bergamasco "Le Nottole", p. 21-22, 52-53, 70-74)



The diagram shows the convergence of the two aqueducts and the start of the Acquedotto Magistrale.

Acquedotto Magistrale

The *Acquedotto Magistrale* dates back to the medieval period and remained unaltered until the 19th century. This waterwork began at the point where the two aqueducts of Vasi and Sudorno converged and ended branching off to the public fountains that provided water to the *Vicinie* of the city (the *Vicinie* are the medieval districts of Bergamo Alta). The number of *Vicinie* varied from seventeen to twenty-two between the 12th and 16th century. (Angelo Mazzi, *Le Vicinie di Bergamo*, 1884)

Some sections of this branching network, expertly constructed in a way that provides an evenly distributed quantity and flow of water, date back to a very early period. The two ducts that passed beneath the nave of the Basilica of S. Maria Maggiore, for example, are pre-12th century since they must have been constructed before the church itself, work on which began in

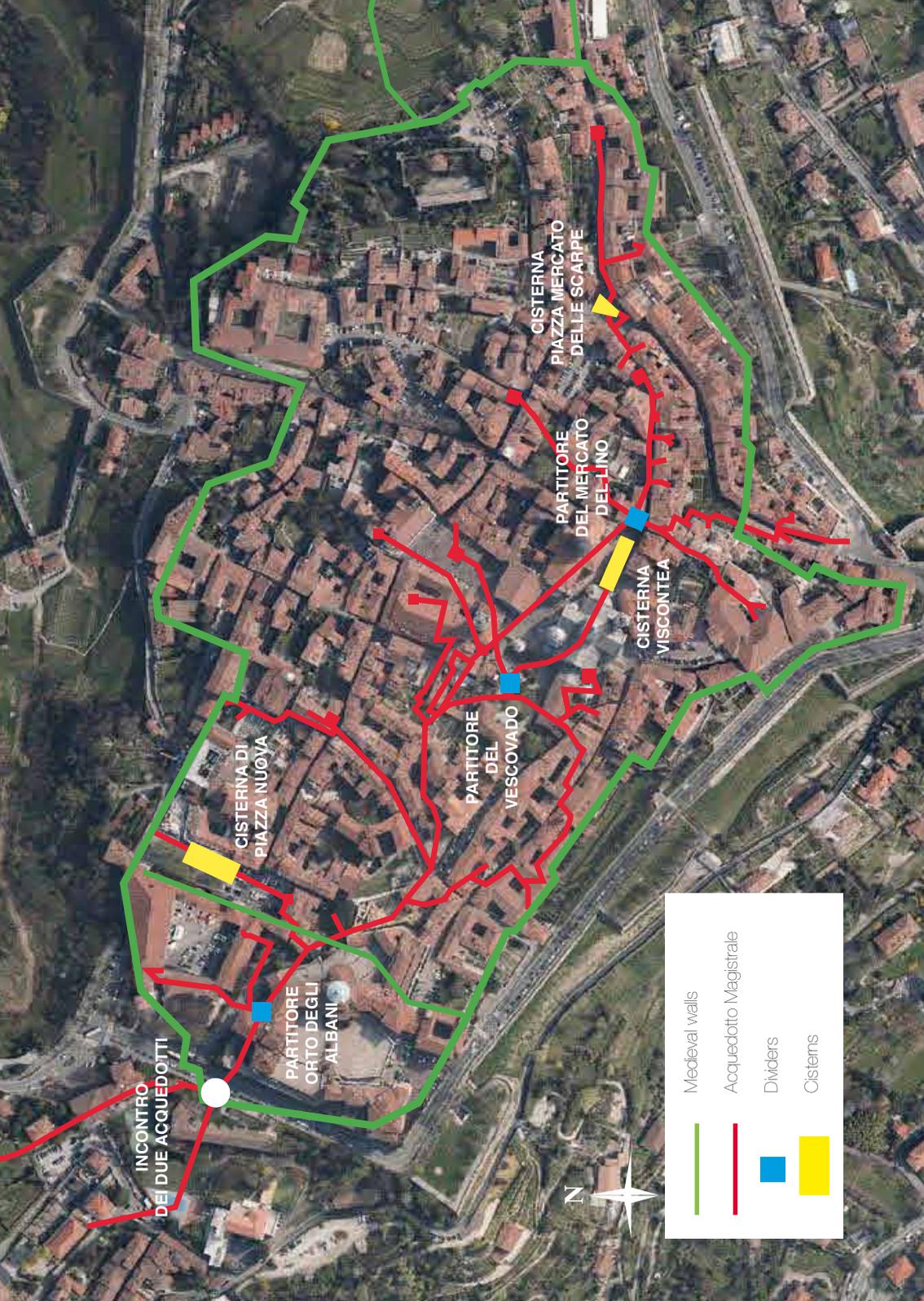
1137.

To share the water equally between the numerous fountains, there were three *dividers* ("small tanks" that divided into various channels for the principal supplies) which also allowed access for periodical inspections and repair work. These inspections were conducted both at the dividers and along the entire length of the aqueduct, accessing them underground where possible or digging and uncovering the canals.

Over the centuries, the water network of the Acquedotto Magistrale was expanded to supply not only public water but also private residences (regulated only after 1800, as prior to this connections to the network were unauthorised). Only at the end of the 19th century was the Acquedotto Magistrale substituted by modern aqueducts.



Restoration works carried out at the beginning of the 21st century have uncovered a section of aqueduct (the small wall in the bottom right) near the Chapel of Santa Croce in Piazza Rosate, which supplied the fountain in the *Vicina* of Antescolis.



The divider of the Albani gardens

After entering the channel beneath the Rampart of S. Alessandro from the two main aqueducts, the water ran just a few meters to the first divider, located in the vegetable garden of Albani (between the New Seminary and the Citadel). Branches of lower capacity transported the water to the citadel, while from other channels of the Acquedotto Magistrale coming from the Colleoni alley, took the water to Piazza Nuova (which later became Piazza Mascheroni), supplying the cistern. Today, no trace remains of this divider, since, as residents testify, it was destroyed to make space for the new seminary (*Gli antichi acquedotti di Bergamo*, Nevio Basezzi, Bruno Signorelli, gruppo speleologico bergamasco “Le Nottole”, p. 80).

The channel descended along Via Salvecchio keeping to the left, until the fountain of S. Agata, while another entered the monastery of S. Grata.

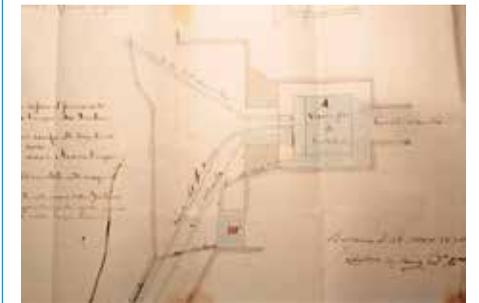
The Divider of the Episcopate

Having passed a small rise near San Salvatore, the aqueduct entered the second divider (known as the Vescovado, as it was located in the garden of the episcopal palace - ‘vescovile’).

This divider was the central fulcrum of water distribution in the city. It sent out channels first to the buildings where a water supply was essential, such as the prisons and the Palace of the Podestà, and subsequently to the fountain in Piazza Vecchia. From the same divider, another branch supplied water to S. Maria Maggiore and another sub-branch entered the Monastery of S. Grata. Two channels passed longitudinally beneath the Basilica of S. Maria Maggiore to supply the large cistern of the viscount (called the *Fontanone*) located beneath the Athenaeum.

This divider, which still exists in the garden of the Episcopal Curia, is the only one of the three that survives. Its main structure is still intact: the water from the Acquedotto Magistrale flowed from the first divider and along Via Salvecchio into this small chamber, which divided the water up for distribution. The divider compartment is accessible from a sort of ‘antechamber’, a room lined in stone

connected to the outside by the steps that emerged into the garden of the episcopate (now hidden behind the garden’s walls). Currently, it is possible to access the divider via a small tunnel that once connected the divider to the vegetable garden of the bishops. (source: Massimo Glanzer, researcher with the Speleological Group of Bergamo “Le Nottole”).



The divider of the episcopate in the plan of 1836 by Celestino Capitanio. The drawing shows the tank from above with numerous channels that branch out from it towards the city’s users. Reference: (Archivio Storico Diocesano di Bergamo, Fondo Mensa Vescovile, Amministrazione n° 7, fasc. 7)

The Divider of Mercato del Lino

Another channel, one of the two that ran beneath the basilica, reached a third divider, located in what is now Piazza Reginaldo Giuliani, then the Mercato del Pesce, and prior to the 18th century, Mercato del Lino. (Luigi Angelini, *Antiche fontane e portoni di Bergamo* p.13)

The final divider split the water between three branches: one descended along Via Lupo to supply the fountain of S. Pancrazio, one along Via Rosate to the fountain

of S. Giacomo, and the third branch to the fountain of S. Cassiano, descending Via Donizetti, continuing through Piazza Mercato delle Scarpe, and after supplying the cistern with its own fountain, continued along Via Porta Dipinta.

This divider has also disappeared. There are no sources recording the destruction of this divider, but it is no longer present in the square.

The three cisterns of Bergamo

Due to long periods of drought, Bergamo could remain without running water sources. To solve the problem, the Great Council elected two deputies to design a system of cisterns. Thanks to this initiative, they could guarantee a considerable reserve of water for the citizens in the seasons with little rainfall as well as in the event of a siege. The initial project envisaged five locations in which five cisterns would be constructed, destined for public use, located: in front of the episcopal palace, in front of the Carmine Church, in Piazza Mercato del Fieno (then Piazza de' Suardi), in Piazza Mercato delle Scarpe, and in Piazza S. Giacomo. Yet only a few of these planned cisterns were eventually built, and not necessarily in the places set out in the

initial plan. In chronological order, the first was the Fontanone in Piazza Mercato del Pesce (now Piazza Reginaldo Giuliani), the second was in Piazza Mercato delle Scarpe, and the third in Piazza Nuova (now Piazza Mascheroni). The three cisterns were constructed in different periods, with more than 100 years between them.

In 1568, a well was sunk beneath Piazza Vecchia, which fell into disuse in the 18th century, perhaps due to a lack of water and poor upkeep, despite the fact that the council regulated the use of the cisterns in order to prevent reckless use and the excessive accumulation of waste.

(Pino Capellini, *Acqua e acquedotti nella storia di Bergamo* p. 153)

38 The Fontanone

This large water tank, constructed at the time of the episcopal lordship in the year 1342 in Piazza del Lino (subsequently called Piazza Mercato del Pesce and still later renamed after Reginaldo Giuliani) was fed by the Acquedotto Magistrale, branching off from the divider of the episcopate. The structure, named the *Fontanone*, greatly exceeded the size of the earlier tanks. It had a capacity of up to 1800 cubic meters. The names of the builders, Giovanni and Luchino Visconti, of the episcopal lordship, are engraved on a stone located on the long side of the cistern, alongside the names of the architects Giovanni da Corteregia and Giacomo da Correggio. Of particular interest, are the three frames

with heraldic crests carved in the upper part of the stones: on the left is the crest of the city with six vertical stripes, in the centre is the tablet with the eagle alluding to Giovanni Visconti, Archbishop of Milan, and on the right, as the emblem of his brother Luchino, the sadly partly consumed figure of an eaglet clawing a wolf (or a boar). Above the level of the cistern, in 1769 a portico designed by the architect Galzoli was erected and after 1818, the year in which the Athenaeum was established, a neoclassical building designed by the architect Dalpino was constructed. (Luigi Angelini, *Antiche fontane e portoni di Bergamo* p. 16)



48 The cistern of Piazza Mercato delle Scarpe

The water tank located beneath Piazza Mercato delle Scarpe was constructed in 1486 at the behest of the Republic of Venice as a precaution: the lack of water in the event of a siege would have been a major disadvantage that could have defined the outcome of the stand-off. The large cistern could hold up to 1800 cubic meters of water. It was thus the same size as the cistern of Fontanone. Like that of Fontanone, the cistern of Piazza Mercato delle Scarpe was also fed by the Acquedotto Magistrale, after the remaining water filtered down from the fountain of San Cassiano along Via Donizetti. The system was designed by the architect Alessio Agliardi, who created an outlet that opened in the square from which water could be drawn. The outlet was replaced with the fountain we see today in 1795, to facilitate the passage of carts and carriages,

as the account of fountain maker Beretta of 29 October 1812 reports (Biblioteca Civica A. Mai, *Archivio comunale* 1800).

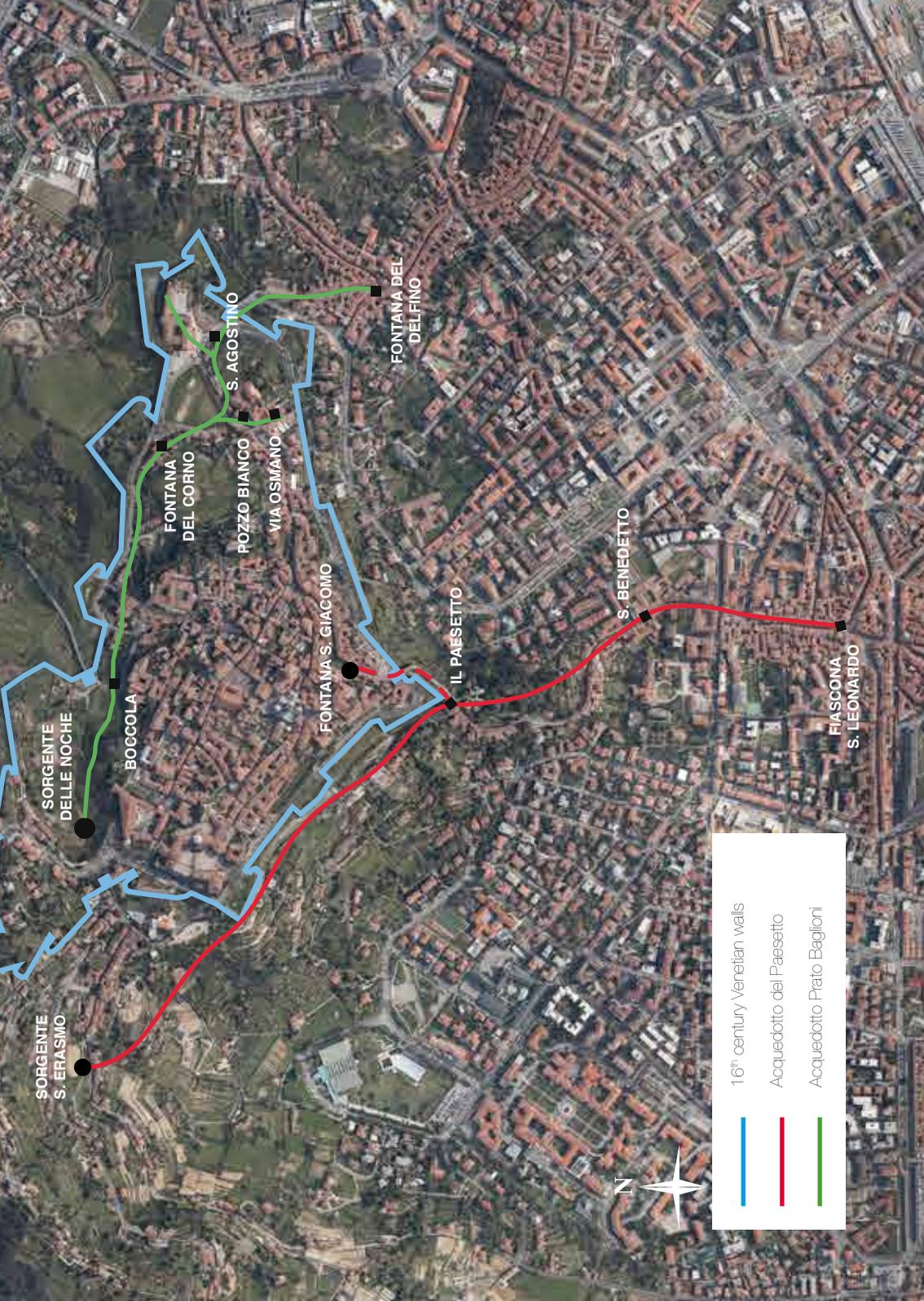


65 The cistern of Piazza Marscheroni

The third cistern in Piazza Mascheroni (once Piazza Nuova), below the “Campanella” of the Citadel, was constructed between 1605 and 1606 by Captain Andrea Paruta. Designed to be supplied by a source near the citadel and rain water, it was also connected to the Acquedotto Magistrale. The enormous chamber extended beneath the square for most of its width and held 800 cubic meters of water. The only visible sign of the third cistern is a rudimentary well, which structurally resembles the Venetian wells, located in the middle of two rows of trees that ran down the porphyry cobbles. The well was built in 1763 by order of prefect Marino Cavallo, as we can see from the inscription still

visible on the left of the well, which was transformed into a fountain in the 19th century after the installation of a piston pump.





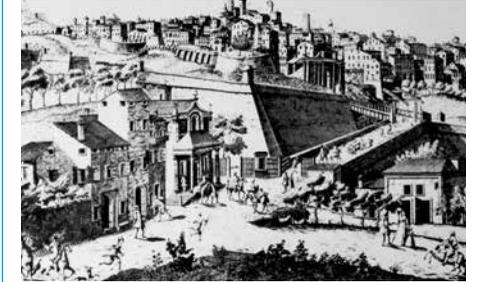
Other aqueducts

Acquedotto del Paesetto

The fountain of S. Erasmo in Borgo Canale had a large cistern which not only provided water for the local residents but also fed into a channel that supplied water to the Paesetto (a group of houses around the Monastery of S. Stefano, just outside of the Gate of S. Giacomo). The aqueduct descended from this group of houses to the fountain of S. Benedetto and, travelling along Via S. Alessandro, emerged in Piazza Fontana in Borgo S. Leonardo, at the *Fiascona* (the fountain in the square).

The channel of Sant'Erasmus was later interrupted, but the Paesetto had a supply of water from a channel that descended from the fountain of S. Giacomo. This fountain was fed by the Acquedotto Magistrale. During excavations in Via S. Alessandro in 1889, later known also as the *'contrada del mattume'* (district of rubble), traces of tiles were found (curved, slightly conical tiles used to cover roofs or construct channels) laying close or overlapping which da-

ted back to the medieval and Roman periods. (Pino Capellini, *Acqua e acquedotti nella storia di Bergamo* p. 148)



A drawing from around 1725 by Giorgio Fossati (Italian architect and engineer, 1705-1785) represents a scene from daily life in the Paesetto, a collection of houses outside of the Gate of S. Giacomo. Reference: Civica Biblioteca Angelo Mai, Gaffuri collection, album 6, image 051

Acquedotto Prato Baglioni

(Pino Capellini, *Acqua e acquedotti nella storia di Bergamo*, p. 151)

The old aqueduct of Prato Baglioni was rediscovered in the 1990's by the speleological group of Bergamo, while examining the Venetian walls between the Ramparts of Fara and Montagnetta.

This conduct began at the Noce spring in the valley below Colle Aperto and ended in Via Pignolo, after having travelled along the entire northern side of the hill, for 1500 meters from west to east. It was constructed before the Venetian walls and was subsequently preserved.

The aqueduct ran along Via della Boccola and between the Fara field and the hill of the Rocca, feeding the fountain of Corno. The channel forked into two branches on the

Fara hill, one of which continued towards Pozzo Bianco and finally arrived at the fountain in Via Osmano. (Biblioteca Civica Angelo Mai, *Relazione del fontanaro Carlo Milani*, 1728) The other branch went to supply the fountain of Sant'Agostino and after passing through the Gate, descended along Via Pignolo to Piazza del Delfino, surfacing in the fountain. (Elia Fornoni, *Studi sull'antica città di Bergamo*)

Piazza del Delfino also contains the Fonte Lux Morum, another fountain that was historically supplied by its own spring. The aqueduct, with verges on either side used for maintenance in the past, has been in disuse since the beginning of the 20th century.

The first fountains documented are those known as the fountains of Vagine, Boccola, Lantro and Corno. Their sources contributed to the construction of the first residential nucleus and several finds indicate that they were used as early as 1000 B.C.. The main structure of the four fountains dates back to the medieval period, as shown on page 35.

66 The Vagine fountain

According to Achille Muzio, a Bergamascan historian who lived in the 16th century, the name of this source derives from the term 'vagine' meaning to cry or wail, as the water was considered particularly salubrious and often new-born children were immersed in it as a blessing. Elia Fornoni (*Studi sull'antica città di Bergamo*, Elia Fornoni, 1891) hypothesises that the fountain was situated outside of the city, and believes it is possible that the fountain was connected to the city via deep tunnels, some of which seem to have led to Via Salvecchio or to a well in Via Colleoni. "Liber Pergaminus", a poem written by Mosè del Brolo between 1120 and 1130, makes a reference to this, and dates it to 955 A.D.. In the Roman period, this source was known as *fons opacinus*, source of the Tramontane, or northerly wind, due to its position facing the north. It seems that the source was renowned at the time and foreigners that visited the city came to admire it and its therapeutic qualities. The locals believed that it was able to cure any infirmity and provide relief for kidney problems. According to the description of Mosè del Brolo in *Liber Pergaminus*, elegantly translated into hendecasyllables by Giovanni Pesenti (Mosè del Brolo, *Liber Pergaminus: text, version, critical apparatus notes / critical edition* edited by Giovanni Pesenti, 1914, Bergamo, Bolis), its vaults, floor and walls were paved or lined with marble and it even had marble steps leading to it. Today there is no sign of these adornments. The fountain had a wash basin and a very large cistern, that not only the people but also their horses

could drink from. The drinking trough appears to have been located below the fountain to collect the overflow, while the water from the tap could only be collected for domestic use using the four copper buckets chained to the site.

Like the Boccola fountain, its run-off water was channelled to supply other fountains nearby.



The Vagine Fountain (in the arch at the centre of the photograph), is located at the intersection between Via della Boccola and Via del Vagine.

67 The Boccola Fountain

Access to this fountain is complicated by its position: it is situated beneath Via della Boccola, set into the wall near the steps of the Seminary's sports field. It is no longer functioning. Due to the construction of buildings such as the Seminary, it is no longer possible to identify the source upstream. Although it is difficult to study the history of this particular fountain, remains of the channels tell us certain details about the ancient structure. We also have numerous historic documents that describe this source: the statute of 1248 testifies that when the Vagine fountain was cleaned, the Boccola fountain became dirty, and if we consider the proximity of these two fountains, it is logical to assume that there was a channel that transported overflow water from the first fountain to the second (Biblioteca

Civica Angelo Mai, Sala ID 9.21, *Statutum vetus*, Collatio XV, .XIII. "...ubi leditur sive depurator aqua ipsius Bucchule, quando sguratur Sallientum seu Vasinum...") (Research carried out on the book "Lo statuto di Bergamo del 1331" by Claudia Storti Stocchi, Latin collection of the statutes of the 13th and 14th century).

According to some 17th century documents, the Boccola fountain had only one "wash basin", which seems to have been used for tanning animal skins. An intriguing order issued by the city council on 17 May 1504 prohibits harlots from washing at the Vagine fountain, but did concede them the use of the Boccola fountain, suggesting that the Vagine fountain had a more 'sacred' value than the Boccola.



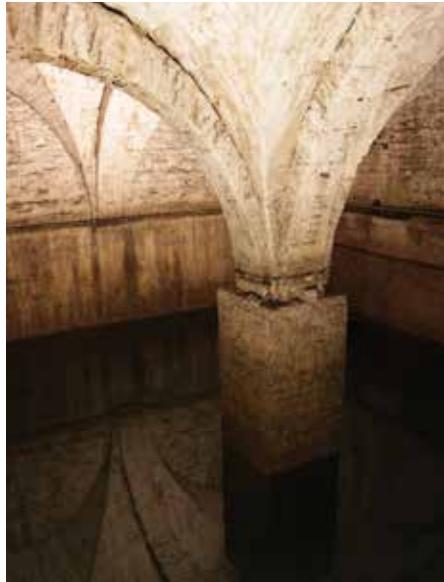
The Boccola Fountain is located in Via della Boccola. Its source can no longer be traced due to the construction of buildings such as the Seminary.

68 The Lantro or Later Fountain

This fountain, located below the Church of S. Lorenzo, was constructed at the end of the 19th century, but the structure seems to have remained unchanged since the 14th century: the Statute of Bergamo of 1248 mentions water being channelled into a system of tunnels, a cistern and drinking troughs. Its source had already been in use for centuries: the first documented references to the spring date back to 928 A.D., but as for the Vagine and Boccola fountains, they were probably also known to the Romans if not earlier. It was in this area, as well as at the Fara, that the first residential nucleus of the city arose around the year 1000 B.C.

The water of the Lantro Fountain originated at a spring located near the old gate of the medieval walls in Via S. Lorenzo, at the intersection with Via Tassis, which was torn down in 1830 (*Le mura di Bergamo*, Azienda Autonoma di Turismo, p. 240). The fountain drew water from a second spring that originated in the direction of the Convent of San Francesco (its precise location is unknown as it is no longer accessible). The presence of these springs, which still produce water at certain times of the year, was confirmed in the 1980's by the first explorations of the Bergamascan Speleological Group *Le Nottole*.*

In 1992 they were able to restore the hydraulic system used to dispose of inert material in the late 20th century to its original splendour. It was cleaned of mud using equipment provided by the fire department and the Acquedotti Civici di Bergamo. Thanks to the company Impresa Colosio Spa, a ramp and other facilities were installed to allow access to the site for tourists.



The Lantro Fountain has a central column that forms a base for the cloister vaults with round arches.

* The Speleological Group *Le Nottole*, active since 1969, merged with the Bergamascan Speleological Group in 1974 to create the Bergamascan Speleological Group *Le Nottole*. As well as exploring and studying the caves, the group carries out speleological studies of the artificial cavities. Interest in this area started in 1974 with the exploration of the military undergrounds of the Venetian walls. As a consequence, several gunnery positions were excavated and restored to permit visitors to see these lost monuments. After the walls, their attention turned to the castle of San Vigilio, the aqueducts (especially Vasi and Sudorno) and the cisterns, critical components of the "Fortress of Bergamo". More recent areas of interest include the air raid shelters of the Second World War, examples of which can be found in Città Alta and lower Bergamo.

53 The Corno or Pidocchi Fountain

The fountain of the area known as Fara, previously called the *Cornus* then *de' Peoggi*, still bears the date of its construction, 1220, carved in sandstone on one of the large stones above the fountain. It was built by Jacobo, Oberto, Martino and Alessandro della Torre, from Como, commissioned by the magistrate of Bergamo, Erpolino Da Cles. The original fountain is probably older than this and existed before the Romans arrived. In fact, as with the Boccola and Vagine fountains, one of the very first settlements emerged in this area. The Corno fountain was also known as "Fons de peogis", meaning fountain of the lice, perhaps because of the modest housing of the area. In the Statute of 1248, the council assigned the duty of ensuring that it was well maintained to the consuls of the neighbouring district of San Michele al Pozzo Bianco. (Biblioteca Civica Angelo Mai, Sala

ID 9.21, Statutum vetus, Collatio XV, .XVII., "...et in casa aque de Cornu per guardatorem ipsius aque et per consultes ipsius vicinie Sancti Michaelis de Puteo Albo...") (Research detailed in the book "*Lo statuto di Bergamo del 1331*" by Claudia Storti Stocchi, Latin collection of the Statutes of the 13th and 14th century)

The entrance to the water source lay beneath an arch, inside which another two brick arches were constructed, resting on large stones and partly walled. On the inner side, on the left, we can still see two human faces carved into the large stone, from which the water would have poured.

The fountain was fed by the Prato Bagliolii aqueduct and a source originating on the Rocca hill. In the 17th century, a building was erected that swallowed the fountain. It is not accessible to the public today as it lies on private property.



The historic fountain is now part of the stone arch within this private residence.

In addition to the fountains of Vagine, Boccola, Corno and Lantro, there were two more fountains in the city. In close proximity to one another, they were fed by a historic spring that originated on the Rocca hill.

49 The S. Rocco or Fontana Secca fountain

The S. Rocco Fountain, located in Piazza Mercato delle Scarpe, was built between the 12th and 13th centuries. It was fed by the spring on the Rocca hill, but its water reserve ran dry in the 18th century. It seems obvious then why the fountain became known at that time as *Fontana Secca* (Dry Fountain). With a large arch, it had an underground chamber accessible by a stairway, similar to the fountain in Via Osmano.

Today the fountain is closed off by safety barrier. It has however recently been used as a location for artistic installations by Contemporary Locus, "a project that involves contemporary artists in the interpretation of forgotten urban spaces".



50 The fountain of the Vicinia of S. Eufemia in Via Solata



This local fountain, constructed between the 12th and 13th centuries, is similar in structure to the other fountains of the medieval hydraulic system and belonged to the Vicinia of Sant'Eufemia. It was fed by the spring of the Rocca hill. This fountain was also abandoned after the spring on the hill ran dry.

On the floor of the fountain (restored in 2013) we can still see the old water run-off channels.

In addition to the fountains within the city walls, there were several spring-fed fountains outside of the city, which contributed to the growth of the districts of Pignolo, S. Tomaso and Borgo Canale.

26 "Fontes Lux Morum" in the Pignolo district and the Gozzi spring in S. Tomaso

Work on the fountain of Pignolo, opposite the Church of S. Alessandro della Croce, dates back to 3 February 1208. The original structure was modified in the 16th century, when a decorative arch was added with columns on either side. This fountain had its own source and was abandoned when it ran dry centuries ago (we know it was earlier than 1676, the year in which the *Effemeridi* by Father Donato Calvi was published, in which we read in volume 1, page 197, "the old fountain of Pignolo now disused, is without water").

Descending Via Masone, on the left of the fountain we can see an inscription in Longobardic characters. The inscription reads: *Anno currentis otto milleducentis. Fontes Lux Morum T. C. Pergamorum. Felici sine complet tuere rufine † In nomine XPI*. (translation: in the year twelve and eight. Fontes Lux Morum. T.C. Bergamo. Not content until its safe completion † In the name XPI) (IBCAA - Inventario dei Beni Culturali Ambientali e Archeologici del comune di Bergamo). Another water source outside of the city was the Gozzi spring in Via San Tomaso. Despite its limited supply, it was enough to provide for the neighbouring district of Pignolo when the Lux Morum spring ran out, at least until the construction of the Prato Baglioli aqueduct and the Delfino fountain. Today, the fountain no longer exists: it was located opposite the Accademia Carrara, near the old church of San Tomaso (built in the 10th century and demolished in 1868 to make space for the square).

(Tosca Rossi, *A volo d'uccello*, p. 207)



223 The Fountain of S. Erasmo in Borgo Canale

The fountain was located opposite the Church of Sant'Erasmo and had a large cistern. Almost all the residents of Borgo Canale relied on this fountain, with the exception of those at the very top of the street who used the Sudorno aqueduct. The water that flowed out of the fountain was then used to supply a channel which ran through the Paesetto district below the Gate of S. Giacomo and ended in the lower city supplying the districts of S. Alessandro and S. Leonardo (see p. 33). None of the sources that refer to the aqueduct of the Paesetto provide any clues as to when the fountain was installed.

With the evolution of the city's water network, the fountain was replaced by a wash house, which is now abandoned. Its current condition does not do justice to the fountain, which was once vital to the lives of the residents.



This drawing by Luigi de Leidi from the beginning of the 19th century shows the Fountain of S. Erasmo before it was replaced by the wash house in the 20th century.

Reference: Civica Biblioteca Angelo Mai, Bergamo Illustrata collection, folder 71, image 20

The fountains of the Vicinie of Città Alta that did not draw water directly from the springs were fed by the Acquedotto Magistrale or the aqueduct of Prato Baglioni

43 The Fountain of the Vicinìa of S. Agata in Via Colleoni



The fountain of Sant'Agata is a clear example of the medieval municipal arrangement of the fountains: they were aligned with the faces of the buildings of the street and set into a stone arch in the wall. This fountain dates back to the 13th century and was supplied by the Acquedotto Magistrale that ran down from Via Salvecchio after being distributed into branches by the divider of the Albani gardens. After years of disrepair, it was restored in 2009 and is currently home to a local business.

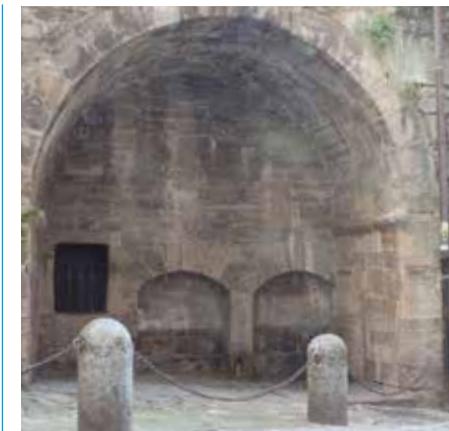
45 The Antescolis Fountain



The only one of the seventeen Vicinie declared in the Statute of 1251 that was not named after a church, was "Antescolis", located in front of the schools, municipal offices, and the three consuls of the district. A significant feature of the fountain of Antescolis, although on the whole structurally similar to the others, is that it is constructed with two arches at the front, connected by a third cross-arch, instead of just one. This fountain drew its water from the Acquedotto Magistrale, presumably through the channels recently discovered beneath the Chapel of S. Croce.

42 The Fountain of the Vicinìa of S. Cassiano

The fountain in Via Donizetti, constructed in the 13th century, was fed by the Acquedotto Magistrale, channelled to it from the second divider in Mercato del Lino. The channel then continued towards Piazza Mercato delle Scarpe to connect with the fountain of Porta Dipinta.



46 The Fountain of the Vicinìa of S. Giacomo

This fountain, built in the 13th century close to the street inside a house, was also fed by the Acquedotto Magistrale, channelled to it from the divider of Mercato del Lino. A channel then led from the fountain to supply water to the Paesetto district, the residential nucleus below the Gate of San Giacomo.

Important restoration works were carried out in 1932, which modified the original structure. They added the basin, the mask (previously located in the ex-prefecture) and the black headstone with the inscription FONS CIVITATIS to mark the ownership of the fountain located on private property. (Bernardino Calderola, *Acque in Città Alta*, on the website issuu.com)



52 The "Puteo Albo" in the Vicinìa of S. Michele



As we head down the street past the Church of San Michele, at the intersection with Via Osmano we find the fountain of Pozzo Bianco. The profile of the arch denotes a nineteenth century neoclassical character. Beneath this stone dressing, however, hides a much older construction, with a collection chamber at the rear typical of medieval fountains. Originally, white marble from Zandobbio was used to build the fountain, hence its nickname "Puteo Albo", or "White Well" (Luigi Angelini, *Antiche fontane e portali di Bergamo* p. 36). The fountain was fed by the aqueduct of Prato Baglioni.

51 The Porta Dipinta Fountain



On Via Porta Dipinta, near the fountain on the left as we descend from Piazza Mercato delle Scarpe, there once stood the eastern gate of the medieval walls: Porta Dipinta (Painted Gate). Demolished at the start of the 19th century, this gate owed its name to the exquisite frescoes painted by Bergamascan artists such as Simone da Averara and Bartolomeo Cabrini. Like the masonry arches and the cisterns behind the fountains of S. Agata, S. Cassiano and S. Giacomo, the fountain of Porta Dipinta bore a commemorative stone above it with an inscription of the name of the magistrate and the date of completion. These elements have now been lost. (Luigi Angelini, *Antiche fontane e portali di Bergamo* p. 8).

59 The Fountain of the Vicinìa of S. Michele in Via Osmano

The fountain in Via Osmano, fed by the aqueduct of Prato Baglioni while it was functional, had an enormous cistern behind it. Like many of the 13th century fountains, it

was set into a building and had an access archway and a chamber below street level, now closed to the public. Access was permitted by a stairway.



The fountains of the 1500's

The fountains constructed in the sixteenth century were quite different to those erected in the centuries before, both from an architectural perspective and in their positioning in the urban space. While the medieval fountains were located on the streets and built into the arches of the buildings, in the sixteenth century they were added to an already established urban context and adapted to the existing architecture and urban plan. The fountains of Delfino, S. Pancrazio and of S. Leonardo were integrated elements, placed in the centre of an already defined square. The fountain of S. Pancrazio is the best example of this type of integrated architecture: the base of the fountain is a mirror of the square shape of the existing piazza.

A distinctive example is that of the monumental fountain of Sant'Agostino, into which evidently much more money and effort was invested. An outstanding feature is how the structure reflects that of the gate in front of it. The fountain was adapted to the surroundings and yet at the same time featured an atypical design.

- Delfino fountain in Piazza del Delfino in the Pignolo district (Acquedotto di Prato Baglioni) (1526);
- Fountain known as the "Fiascona" in Piazza Fontana, now Largo Rezzara (Acquedotto del Paesetto) (1548);
- S. Pancrazio fountain in Piazzetta S. Pancrazio (Acquedotto Magistrale) (1548);
- S. Agostino fountain inside the walls at the Gate of S. Agostino (Acquedotto di Prato Baglioni) (1575).

25 The Delfino Fountain

(Luigi Angelini, *Antiche fontane e portali di Bergamo* p. 20)

At the intersection of five streets, the picturesque square of Pignolo has interesting architectural characteristics. On the corner of Via San Tomaso, the house with the overhanging upper floor recalls the buildings of historic Bologna. In this hidden corner of the city, admired by Italian and foreign artists, the Delfino fountain has an immediate visual impact, the name was officialised as the local denomination became common use. Erected in 1526, the fountain was fed by the aqueduct of Prato Baglioni, and by the municipal aqueduct from the beginning of the twentieth century. It consists of a central stele, made of Zandobbio marble, a square base with curved corners holding up the figure of a Triton with two fish tails sitting on a dolphin (delfino). At one time, a jet of water squirted from the mouth of the dolphin. The sculpture is surrounded by a basin, enclosed by an oval parapet built on a raised step and

enclosed by a circle of marble pillars. On the sides of the stele are two faces of marine deities, with leaves for hair, spurting jets of water from their mouths. A large pine cone is sculpted on the face of the fountain, the symbol of the district of Pignolo (district of Mugazzone in the Middle Ages), which seems to have been referred to as such since the 9th century (Tosca Rossi, *A volo d'uccello*, Capitolo sui Borghi) after the many evergreen trees that populated the streets of Pelabrocco and Osmano before the Venetian walls were constructed. The fountain is of notable elegance and size and was evidently made by a skilled sculptor: the Triton's apparent movement on the animal, in the expert rendering of an unimaginable three-tailed dolphin, is striking and effective from every angle, a remarkable talent that only few 16th century artists possessed. The name of this artist, however, is totally unknown.



34 The Fiascona in Borgo S. Leonardo

(Pino Capellini, *Acqua e acquedotti nella storia di Bergamo*)

The oldest monumental fountain in lower Bergamo, which derives the name *Fiascona* (big flask) from its shape, supplied water to the densely populated district of Borgo San Leonardo, which was the central hub of artisan businesses and industries on the flat part of the city. Until the new aqueduct of Bondo Petello was built in 1881, the Fiascona was the only fountain in the district apart from the fountain of San Benedetto, which required a climb up Via Sant'Alessandro. It was fed by the channel of the Paesetto that ran from Borgo Canale in Città Alta down to the lower part of the city.

Testament to its importance, several documents report that the *Fiascona* was used as a kind of public notice board, where notices and protests against the Austrian government were posted. (Biblioteca Civica Angelo Mai, *Eco di Bergamo*, 1963, 8 November, p.3) Built in 1548, it was located in Piazza Fontana, now Largo Rezzara, and was demolished at the end of the nineteenth century to make way for the tram of Piazza Pontida (historically Piazza della Legna), which ran along Via XX Settembre. The remains of the fountain, which were held in storage for some time, have now been lost.

The square then remained without a central monument until 2001, when the new fountain was installed, designed by the Milanese artist, Alberto Garutti.

On Shrove Tuesday during the carnival of 2003, the Duchy of Piazza Pontida placed a statue of Harlequin on top of the fountain to celebrate the mask of Bergamo. This embellishment, realised by the Bergamascan artist Mario Gotti, was removed in 2004 and, after a long series of transfers from one site to another, was definitively relocated to Piazza degli Alpini in 2013.



The Fiascona in Borgo S. Leonardo in a photograph taken in the late nineteenth century, before it was removed to make way for the tram.

Reference: Civica Biblioteca Angelo Mai, collection Bergamo Illustrata, folder 10, image 146



41 The Fountain of the Vicinìa of S. Pancrazio

When the Council of Bergamo decreed in 1548 that a fountain for public use was to be erected in the space in front of the Church of San Pancrazio, the small square was already defined in the same layout we see today.

Around the square stand buildings erected in the 15th century, including the church, which was begun in 1450 and consecrated in 1474 (Luigi Angelini, *Antiche fontane e portali di Bergamo* p. 24). The artist commissioned for this work was the architect Pietro Isabello (known as Abano). Already known for other works in the city, he began designing this fountain by drawing a square base to match the layout of the square.

Perhaps due to the advanced age of the artist, or perhaps because his son Leonardo had shown great promise working alongside

his father in the Palazzo della Ragione (1538 to 1543), the council entrusted the task of producing a monument for this square to both father and son.

The construction consists of a square basin and a circular basin above, held up by a stele decorated with sculpted leaves. The parapets of the basin at the base are decorated with Zandobbio marble and bear four eighteenth century crests, added later. The circular basin is embellished on the lower surface by four masks with protruding eyes, which squirt four jets of water into the lower basin from their mouths. A second stele rises from the circular basin, which holds up a smaller bath.

The fountain was fed by the Acquedotto Magistrale, via a branch that came from the divider in Mercate del Lino.



56 The Fountain of S. Agostino

Located in front of the Gate of S. Agostino, providing an elegant ornament that greeted visitors as they entered the gate, the fountain was constructed in 1575 during the construction of the walls, and was fed by the aqueduct of Prato Baglioni.

We have records of the substantial funds invested by the Council and the generous contributions of citizens, thanks to the notes of Father Donato Calvi in the *Effemeridi*.

The materials used in its construction were grey sandstone for the structure and white Zandobbio marble for the decorations. It was probably designed by one of the two

architects Paolo Berlendis and Pietro Ragnolo, who under Count Sforza Pallavicino, collaborated in the construction of the walls (1561-1580). The name of the artist who produced the sculptures is not known. On either side of the construction, carved into the marble medallions above, we read the names of Francesco Longo and Marc'Antonio Memo, Rectors of the city during the construction of the walls (Luigi Angelini, *Antiche fontane e portali di Bergamo* p. 28).

The fountain underwent restoration works in 2012 and 2013 and by 2014 was again functioning, in all its magnificence.



The watercourses and the canals

(Bergamo *Lineamenti e dinamiche della città* di Lelio Pagani and from *Acqua e territorio per un progetto di valorizzazione* dell'Università degli studi di Bergamo)

Bergamo Alta has no significant natural watercourses. All Bergamo's rivers pass through the lower city and in cut across the province towards the Po. There are some important natural streams such as the Quisa, which originates in the valley of Ponteranica below Canto Alto; the Tremana, which begins in Monterosso below the Maresana hill; and the Morla, which flows from the Brembana valley and contours the western side of the hill of Città Alta. The Morla follows an irregular path, and is therefore of little practical use, unsuitable for providing for primary needs. Its considerable capacity, however, affect the delineation of the *Forma Urbis*: districts such as S. Caterina, S. Tomaso, Contrada della Rocchetta, and Borgo Palazzo were established along this generous stream and hugged its path. The drains had an important function in the sub-districts of Matris Domini, S. Lucia di Astino, Valmarina, and Borgo Canale, channelling the rain water towards the plain.

In Bergamo then, as in other cities, the induction of water via canals represented key moments in the evolution and prosperity of the city.



During the Middle Ages, engineers began to study which river could be regulated to this end. The Adda and Oglio were dismissed as the city was located too high above them. The Brembo was not taken into consideration due to its sheer banks unsuitable for any kind of canalisation.

It was decided that the Serio was the only river with suitable access for a canal system. And so it was this river that acted as the water supply for all artificial canals dug from the Middle Ages onwards.

It was thanks to the Peace of Constance (25 June 1183) that the communes obtained the right to use the river's water freely.

While previously there were some agricultural channels at the junction of the valleys that had been dug to irrigate small areas of flat land, with the Peace of Constance it became possible to channel water right up to the land beneath the hill. The benefits were undoubtedly enormous for the urban fabric of the city.

The most intense development in the history of the canals came in the age of the Medieval Communes. Later, in the 15th century, at the behest of Captain Bartolomeo Colleoni (a 15th century Italian condottiero from Bergamo), significant new canal building projects began, inspired by the examples of Milan and Venice.

While the springs and aqueducts largely supplied the water for Città Alta, the water of the canals only flowed on the plain.

The 13th century saw the digging of the first Rogge. (Roggia is the name given in northern Italy to artificial canals of a moderate capacity, generally channelled from a larger watercourse. Rogge were mainly used to supply water to mills, small electric plants, and for irrigation.)

Roggia Serio

The largest and most historically important artificial canal is the Roggia Serio.

The first documented accounts of this canal date back to the 12th century (E. Malara e G. Radice - *La fontana delle Rogge*). The Serio canal was among the largest used at the time to irrigate the fields by the Brembo. The canal first drew water from the Serio river near S. Faustino di Nembro, but at the end of the 15th century a heavy rainfall and swollen river destroyed the inlet, which was then moved to near the Roman bridge of Albino. (Elia Fornoni, *Manoscritti Fornoni, Storia di Bergamo*,

volume III, p. 436). From the inlet, the canal continued to the village known as "Prato del Brembo" in the commune of Treviolo, having travelled up and down various slopes for 18.5 km with an average width of 8 meters.

This canal enabled the development of many economic activities in the city. Starting in the 18th century, mills, presses, factories, spinning wheels, heavy hydro-powered machinery and other industries were constructed along its banks. Up to the 19th century, the Roggia Serio marked the border of the commune's territory.



The Serio canal in Longuelo.

Roggia Morla

(Francesco Radino, *Le vie d'acqua: rogge, navigli e canali*, Chapter La Roggia Morlana).

The Roggia Morlana drew water from the Serio river and travelled for 12 km from the inlet in Nembro to Casalino, in Bergamo. Over the centuries, numerous factories arose along the banks of the Morlana canal, some of which were still operating until a few years ago.

Having descended from the Seriana Valley, it passes through Gorle, Bergamo in Via Daste e Spalenga, turning towards Borgo Palazzo and coming to an end near the Convento dei Cappuccini and the Casalino.

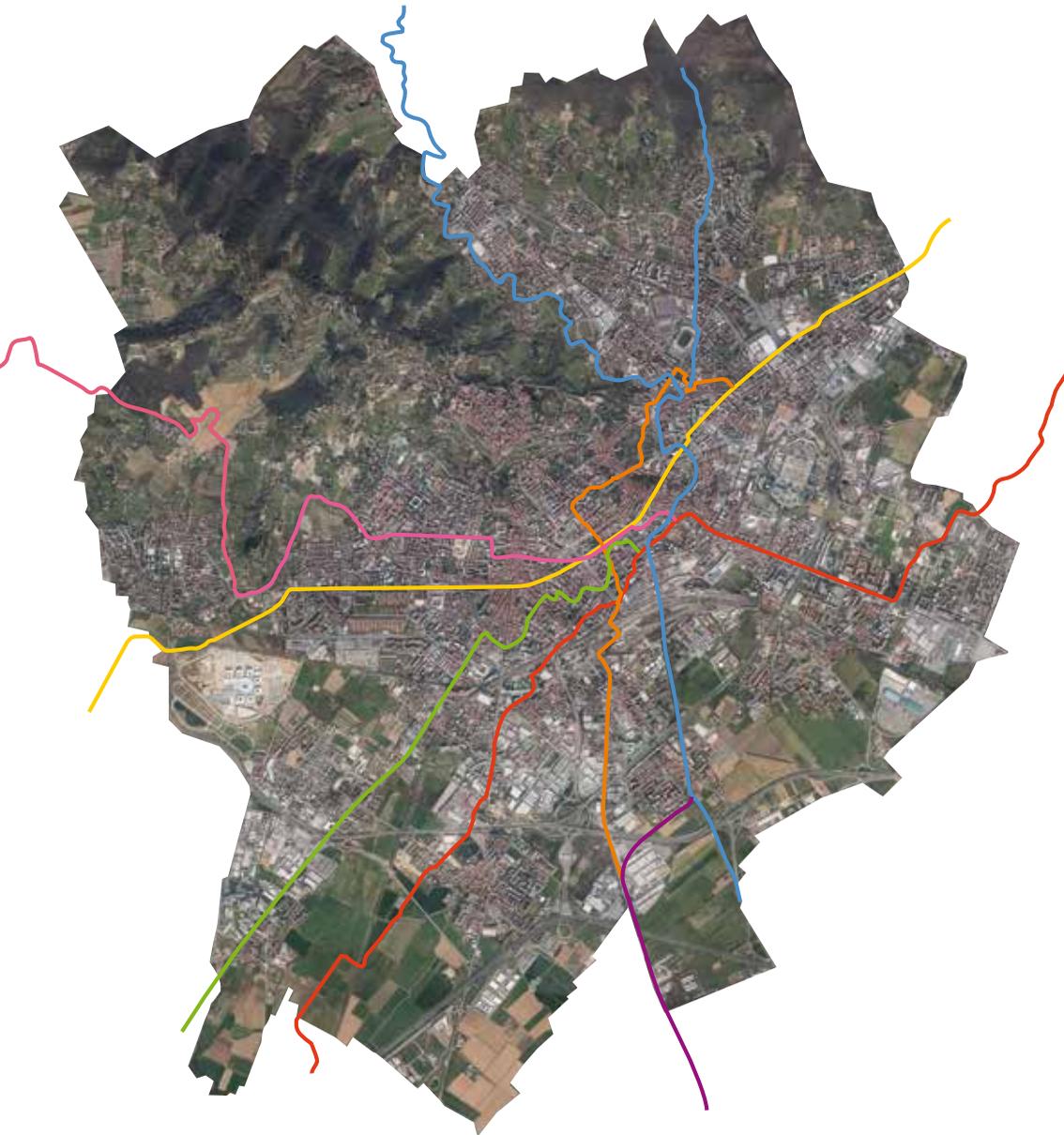
Constructed in the same period as the Roggia Serio, the flow of the Roggia Morlana was increased in the late 15th century by Colleoni. It maintained the original inlet in Nembro until 1975, when the Consorzio di Bonifica della Media Pianura Bergamasca unified the inlets of the canals that drew water from the Serio, with the aim of making the intake of water more efficient by concentrating on a single inlet.

The agricultural land that uses the water of the canal extends for 150 hectares in 9 different communes in the province.



The Morla canal in Via Daste e Spalenga in Bergamo.

A map of the canals and streams in the Commune of Bergamo



The offshoots of the major canals

In addition to the Morla stream, and the Serio and Morlana canals, several offshoots crossed the Communal territory.

The Roggia Nuova is an offshoot of the Roggia Serio; the Curna and Colleonesca canals are offshoots of the Roggia Morlana; the Roggia Morla is an offshoot of the Morla stream.

Most of these canals run close to each other, at times intersecting in the area between Borgo S. Caterina and Borgo S. Lorenzo (see map on p.57).

The Serio canal, as was already mentioned, had a central role as the feature that

marked the boundary of the city limit. One section constituted the trench of the fifteenth century Muraine (the outer defensive walls of the city). If we look at the map, we can clearly see how the Serio canal followed a much straighter course in the area below the hill, whereas the other canals followed more erratic paths.

We can also see how the canals mainly passed through the peripheral areas of the city, with the exception of the Roggia Nuova and Roggia Curna, which entered the muraine for long stretches, following the urban landscape rigorously.

Roggia Nuova and the Plorzano modules

The Roggia Nuova branches off from the Roggia Serio in Santa Caterina.

To create this offshoot, in the 15th or 16th century, a stone monolith was placed perpendicular to the flow of the main canal: the block contained rectangular holes called *modules*, later the moduli di Plorziano, which allowed the flow of water to be regulated as needed

The stone artefact, however, slowed the flow of water during heavy downfalls, and was removed in 2003. The Bergamo Council and the Consorzio di Bonifica della Media Pianura Bergamasca, transformed it into a fountain located in Parco Suardi (2006).



The Roggia Nuova along the road to Zanica.

Roggia Morla

The Morla canal dates back to 1236 and draws water from the Morla stream, from which it branches off near Campagnola. Instead of travelling towards the city, its path turns south and passes through the suburbs and provincial towns: Azzano S. Paolo, Zanica, and finally Comunuoovo, where it rejoins the original stream.

Roggia Colleonesca

The Roggia Colleonesca separates from the Morlana canal near the Casalino. It heads around the district of San Lorenzo, delineating what was once the southern boundary of the city, and then follows the road towards Lallio and flows into the Brembo river.



The inlet system that channels water into the Roggia Serio.

Roggia Curna

(Biblioteca Civica Angelo Mai,
La rivista di Bergamo Luglio-Agosto-Settembre 1995)

Branching off from the Morlana canal near the Convento of the Cappuccini, the Roggia Curna heads towards the Chiesa delle Grazie, and then enters the Muraine inside the Prato della Fiera di Sant'Alessandro. In this point, both the Curna and Nuova canals brought about great improvements to the historic industries: a water supply for raising livestock and hydraulic energy that could be harnessed by water mills.

The canal then continued along its route, passing through the districts of S. Orsola and S. Alessandro and, having exited the walls, headed towards Longuelo, then to Valle d'Astino and finally to Treviolo.

20 The Rogge Fountain

The Rogge Fountain was built by the Comune di Bergamo, in collaboration with the Consorzio di Bonifica della Media Pianura Bergamasca, in 2006. It was installed in Parco Suardi, with the aim of celebrating the city's canals (Rogge). Below the photograph, is the translation of the text engraved on the plaque on the side of the fountain.

Consisting of a monolith that was removed from the Serio Grande canal in Bergamo and its dividing mechanism that channelled water into the Roggia Nuova, the fountain is activated by the water that pours from the

vertical wall, recreating the flow towards the four openings cut into the granite monolith, regulated by iron sluices, that once directed it into the minor channel. A triangular pool completes the composition and the movements of the water. With its boarders and pool bottoms lined with other stones recovered from the canal, the fountain recreated the modulu di Plorzano designed in the 15th century, bringing to life Leonardo da Vinci's observation: in rivers, the water that you touch is the last of what has passed and the first of that which comes; so with present time.



Before it was a fountain, this monument was a monolith 8.5 meters long, with a cross section of 77x54 centimetres, which fed water into the Roggia Nuova through the moduli di Plorzano.

The relationship between the canals and the walled city

Bergamo at the turn of the nineteenth century: Fiera di S. Alessandro (1) in centre of the lower city, near the Hospital of S. Antonio (2). Around the Fiera are the churches of S. Bartolomeo (3), S. Lucia (4) and the cloister of S. Marta (5). Within the fifteenth century walls, were the districts of S. Leonardo (6), S. Alessandro (7), S. Benedetto (8), Mugazone (Pignolo) (9) and S. Tomaso (10). The Chiesa delle Grazie (11), was just outside the Muraine, as were Borgo Palazzo (12), Galgario (13), Borgo di Plorzano (S. Caterina) (14) and the Lazzaretto (15). Below the sixteen century walls, were the Defensive Fort (16) and the Church of S. Maria Mater Domini (17) and within the Venetian walls, Città Alta with the Citadel (18), the Duomo (19), the Convent of S. Francesco (20) and the Convent of S. Agostino (21).

(map shown on p. 29 of the book *Il volto di Bergamo nei secoli* by Luigi Angelini)

The map plots the paths of the walls of the city and the canals as they criss-cross throughout the city, and the locations of Bergamo's historic buildings in the early nineteenth century, when the residential areas of the lower city had already established a lot of the spaces and infrastructure that we would recognise today. The canals significantly influenced the evolution of the urban conglomerate, defining the location of administration and service facilities within the walls, and the locations of factories and industrial spaces outside.

Particularly symbolic of this function is the Roggia, which also acted as a defensive line providing a moat. The canal ran along the outside of the fifteenth century walls (Muraine) and only entered the city in the section in Via San Lazzaro in the district of San Leonardo. Thanks to the canal, this district was nicknamed "Little Venice" (Pino Capellini, *Acqua e acquedotti nella storia di Bergamo* p. 46).

It is interesting to note how the path of the Morla stream delineated the north-eastern boundary of the city, constituting not only a precious opportunity for development, but also an obstacle for urban expansion. Extensive works were required in order to make it flow regularly.

The only canals that entered the walls were the Roggia Nuova and the Roggia Curna, which until the turn of the 20th century represented an important resource for the area of Fiera.

The Morlana and Colleonesca canals remain outside of the walls, the latter providing a defensive moat around the stretch of the Muraine belonging to the S. Leonardo district.

-  Sixteenth century walls
-  Fifteenth century walls
-  Historic buildings present at the turn of the nineteenth century
-  Tremana and Morla
-  Roggia Serio
-  Roggia Morlana
-  Roggia Nuova
-  Roggia Curna
-  Roggia Colleonesca

The covering of the canals

The role of the canals, as we have already seen, was significant. The water network was not just a defensive feature or a source of hydraulic energy for the manufacturing and other industries, but also strongly influenced the confines of the city's different districts. In general, the entire city as we know it today would be very different from a historic, architectural, and industrial perspective without the system of

canals which first began to emerge in the thirteenth century. In the post-war period, the visual deterioration of the system and urban expansion lead to most of the canals being covered over, piped, or hidden from sight, as they were by now considered useless from an urbanistic perspective. Considered as superfluous sources of pollution and health risks, they were covered over with cement and then asphalt.



The Galgario Tower is one of the few parts of the Muraine still standing. I was built between 1430 and 1450.

This photograph taken in 1927 immortalises the Roggia Serio, which has now been covered over and lies beneath the road.

Reference: Civica Biblioteca Angelo Mai, Gaffuri collection, album 3, image 084.

The eighteenth century fountains

28 The fountain of the Fiera di Sant'Alessandro

This elegant fountain was erected in 1734 to embellish the centre of the original "Fabbrica della Fiera" or Factory of the Fair, in which apartments had been built to accommodate the large and lively summer market of Sant'Alessandro, renowned throughout Italy. (Luigi Angelini, *Il volto di Bergamo nei secoli*)

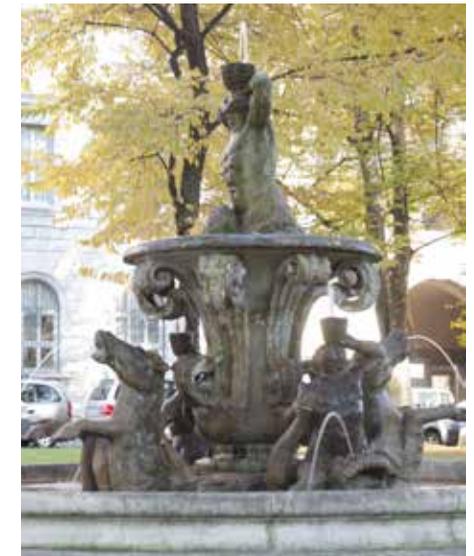
We owe the design of the fountain to the same architect responsible for the impressive building works, Bergamascan Gianbattista Caniana (1671-1754). Not being a sculptor however, he assigned the realization of the practical side of the project to someone with the technical skill and technique. For this reason, he selected one of the most appreciated sculptors of his time: Anton Maria Pirovano, born in Sforzatica and son of an artist.

The fountain features a central cup held by eight arms, and a triton from which a jet of water shoots upwards. At the base of the structure, immersed in the circular basin, are a pair of horses and a pair of dolphins with two more tritons riding them as the animals spurt water from their mouths or nostrils.

Over the years, damage due to weathering and corrosion of the marble, the monument required much repair work, which in places significantly modified the original structure. In 2010, heavy restoration work returned the fountain to the characteristic splendour of Caniana's eighteenth century design. The jets of the dolphins and the shells were reactivated, and the legs of the horses restored. We can now admire this fountain in all its historic and natural elegance. (Luigi Angelini, *Antiche fontane e portali di Bergamo* p. 32)



The restoration work of 2009-2010 repaired many parts of the fountain (including the legs of the horses in the photo) and reactivated several jets of water that had ceased to function.



37 The Contarini Fountain

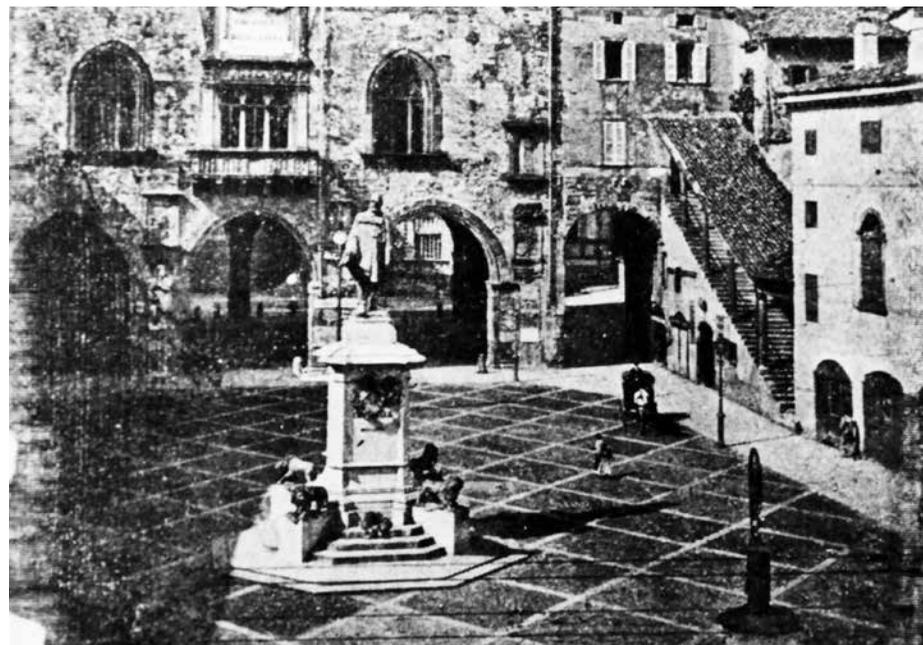
In December 1746, Alvise Contarini of Venice came to Bergamo for the first time, as captain of the city. During his first mandate, he proved to be a capable leader, settling numerous disputes between the communes, abolishing habitual unlawful concessions, and contributing notably to the maintenance of the roads. After a period away from Bergamo, which lasted several years, Captain Contarini returned in 1779. During this second period of residence he ordered the construction of the fountain we can still admire today in Piazza Vecchia.

Removed in the last twenty years of the nineteenth century and replaced by a monument to Garibaldi, the fountain was stored in a courtyard at Santa Maria Maggiore, and reassembled in Piazza Vecchia by Ciro Caversazzi in 1922. On this occasion, the Communal Council gave approval for the monument to Garibaldi to be moved to its current

location, at the centre of the Rotonda dei Mille. (Pietro Pesenti, *La rivista di Bergamo*, anno 2, gennaio 1923, Le fontane di Bergamo, pp. 627-633)

The work was constructed at the end of 1780 using white Zandobbio marble. It has three jets of water: one that shoots from the central basin, and two more from the sphinxes with the faces of women on either side. The sphinxes are flanked by two serpents in the shape of the caduceus. The fountain is surrounded by four lions forming a ring around it. The chains that pass through the mouths of the serpents and lions are original.

There are no known documents to tell us who the artists were that produced this fountain, but according to secondo Luigi Angelini in *Antiche fontane e portali di Bergamo*, we can presume they were Venetian.



Testimony to the presence of the Monument to Garibaldi in Piazza Vecchia. The monument was moved to the Rotonda dei Mille in 1922. Reference: Civica Biblioteca Angelo Mai, Gaffuri collection, album 2, image 051.

The Nineteenth Century

(Pino Capellini, *Acqua e acquedotti nella storia di Bergamo* and by Giuseppe Mainoli, *Gli acquedotti della città di Bergamo*)

Crisis, cholera and drought

At the turn of the nineteenth century, Bergamo counted just over 15,000 inhabitants, around 7000 of which lived within the city walls. In Città Bassa, the people were amassed in Borghi, small villages around the city, the largest of which was San Leonardo, the centre of commercial activity, with its Piazza della Legna, what is now Piazza Pontida. Outside of the Muraine, were Borgo Palazzo and Borgo Santa Caterina, where the residents used the energy of the water of the canals that passed through them.

After the French Revolution, Bergamo lost its role as a crossroads for commercial traffic between Milan and Venice, and struggled to find other sources of revenue. It was a period of great crisis and economic stagnation for the city: Switzerland and Germany also stopped the flow of business they had maintained with the Republic of Venice. Città Alta fell into a state of total disrepair and the homes, ageing and infested with mould, were damp and foul smelling, and citizens were exposed to terrible sanitary conditions. The drains were unsuitable to cope with the waste of the expanding city at the start of the nineteenth century: epidemics of particularly devastating diseases erupted, such as cholera which hit the city at that time.

There was no way of controlling the outbreaks, and cholera broke out six times in just fifty years, feeding a climate of fear of contamination and collective hysteria.

When Cholera struck, more than half of cases were fatal: between 1835 and 1836

around 900 of 1400 people affected died and in 1849 they counted around 600 victims out of 1100 people infected. Despite this, the council seems to have been too irresolute in their attempts to contain the wave of death and illness: official bodies merely declared, naively, that a good diet and wholesome lifestyle were the best cure. (Biblioteca Angelo Mai, *Istruzioni speciali nella presente epidemia di colera*, 1867, Prefetto Cons. Deleg. Vitelli) They relied on quarantine as the only means of stemming the spread of the disease. Prevention was limited to blocking, or at least impeding, the trade of fabrics and tools in general believed to be the main cause of the infection. The people seemed not to have taken even the most elementary of precautions: in several documents of the period, investigations into the deaths revealed that in many cases the bodies were cleaned using the water of the canals. In some cases, the contaminated water was even drunk. Data indicates that most of the victims lived near the canals or in districts without drinking fountains.

It was only after this scandal that the city's water supply became a heated public debate. The first concrete measures, however, were only taken in the second half of the nineteenth century. (Pino Capellini, *Acqua e Acquedotti nella storia di Bergamo*, Chapter: *L'ottocento tra siccità e colera*).

As well as cholera, Bergamo was hit by a severe drought in the same period: water therefore was not only contaminated,

but also in short supply. Between 1820 and 1825 the council was forced to suspend all use of the water by private homes in order to guarantee the supply to the public fountains as many as four times. The mayor Pietro Moroni in 1834 had a notice put up in the streets urging the citizens to avoid any wastage, and forbidding washing and allowing animals to drink at all fountains except the Lantro and Boccola, both located on the outskirts of the city.

Public cisterns and tanks were kept under constant observation and in 1861, the year in which the water shortage reached its peak (to the point where the water level in the Fontanone fell to the worrying level of 70 centimetres in a chamber 8 meters high) Bergamo began to seek out an alternative solution for its water supply.

(Pino Capellini, *Acqua e Acquedotti nella storia di Bergamo* p. 29)

The aqueduct project

(Pino Capellini, *Acqua e Acquedotti nella storia di Bergamo*, Chapter: Verso un moderno acquedotto)

The first important project for the construction of the Bondo Petello aqueduct dates back to 1867. The citizens had demanded its realization following the death of around 550 victims of cholera in the previous year alone. Victims were obviously of the lower classes, especially the poor labourers of the Osio district (now Via Moroni). They designed an aqueduct that would transport water to Bergamo from the springs of Bondo Petello, a village to the north-west of Albino. The plan involved immense labour and investment as it required the construction of a channel that ran for 14 km. It was however a concrete solution for providing the amount

of water needed for the growing urban conglomerate. The initial project presented the estimated cost of around 300,000 Lira, a considerable sum at the time, which could be paid off gradually thanks to the support of private contributors, who requested in return a regular and private supply of water. This triggered a fiery debate at the assembly of the Communal Council: some believed that the project was economically, functionally and politically controversial. It seems that the Mayor G.B. Camozzi Vertova had asked the new Italian Government for a subsidy to support the construction of the aqueduct, with no reply.



The problems that preceded the construction of the Bondo Petello aqueduct in Bergamo were depicted in this satirical cartoon.

Image from the book *Gli acquedotti della città di Bergamo*, 1934, by Giuseppe Mainoli.

A turning point: Galopin Sue Jacob & C.

(Pino Capellini, *Acqua e Acquedotti nella storia di Bergamo* p. 65)

While the council played for time, in 1872 a group of influential citizens entered the scene with a project that would cater to the city's economic situation: it proposed a plan to draw water from the Serio River, which offered a reliable source.

The idea was reviewed by the newly formed Consiglio delle Acque. The problems remained however of the muddying of the water following heavy rainfalls, the naturally rising and falling water levels, and the seasonal cleaning of the river bed. For these reasons, the project was ditched and the committee reverted to the original plan: the aqueduct of Bondo Petello.

The years went by and the funds still did not arrive. The aqueduct remained the most widely debated public issue and many came to understand that it could represent

the solution not only to the recurring epidemics that broke out in Bergamo, but also to the various inconveniences caused by the nineteenth-century urban expansion of the city. 1880 was a turning point: an agreement was signed with Galopin Sue Jacob & C., a Franco-Swiss firm specialised in the construction of water and gas conduits, who would bear the full cost of the construction on the condition that it would have free use of it for 40 years and receive a share of the proceeds that would come out of the sale of the system to private parties.

During the works, Galopin Sue Jacob & C was replaced by Compagnie Generale des Eaux pur l'Etranger (CGEE), an Anglo-French company established in 1879, which completed the works in 1881.

57

The inauguration of the aqueduct

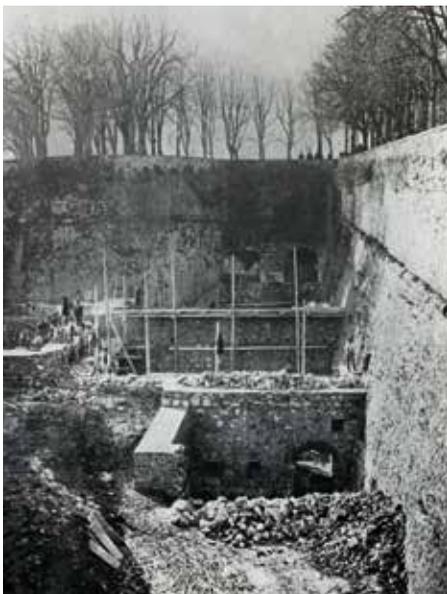
(Pino Capellini, *Acqua e Acquedotti nella storia di Bergamo* p. 66)

The first stone of the S. Agostino storage tank, an enormous construction outside of the walls that would hold the water supplied by the Bondo Petello springs, was laid on 14 October 1880. The aqueduct began its path at the collection chamber around the springs, at an altitude of 369 meters above sea level, and travelled for 13,275 meters to the tank of S. Agostino at 297 meters above sea level. A network of cast iron pipes covering 12,375 meters were laid around the city and a series of 16 new fountains and 40 outlets for fire hydrants were installed. In all, the system could deliver 3,628,000 litres of water a day, equal to 125 litres for every inhabitant (the population was now around 28,000).

On 5 November 1881, work on the aqueduct was completed, little more than a year after it had begun. The most challenging part of the project was the work on the tank of S. Agostino: during the construction, modifications had to be made to the Venetian walls, such as the covering over of part of the Rampart of San Michele and its cannon positions. The difference in altitude between the sources in Val Seriana and the storage chamber determined the right flow of water, at the same time the position of the tank in S. Agostino above the lower city made it quick and easy to distribute.



Public notice promoting the aqueduct of Bondo Petello. The fountain shown was activated by pressing a button to avoid the wastage of a constantly flowing fountain. Image from the book *Acqua e acquedotti nella storia di Bergamo*, 1990, by Pino Capellini.



Work on the tank of S. Agostino in photograph from 1880.



The building today.

The urgency of Città Alta and the two solutions

(Pino Capellini, *Acqua e Acquedotti nella storia di Bergamo* p. 75)

Paradoxically, the new reserve was not initially connected to the hydraulic network of Città Alta, which still relied on the old and by now insufficient aqueducts. While Città Bassa received water from the new project and enjoyed significant benefits for hygiene and sanitation (just 7 deaths from cholera were reported in 1886), the situation in Città Alta was still critical and the water was becoming ever scarcer in the face of increasing demand. The cisterns were no longer a reliable source of water, and neither were the springs, wells and the old aqueducts. The flow of water from the Vasi and Sudorno aqueducts was constantly decreasing and the historic aqueduct of Prato Baglioni was definitively closed due to pollution and unsanitary conditions. There were two possible solutions: replace the aqueduct of Castagneta, Città Al-

ta's main conduit, with cement pipes, a purification system at the source and a new cistern with greater capacity; or alternatively, as proposed in 1888 by the company that realised the Bondo Petello aqueduct, construct a pump that could push 26,000 litres of water per hour from the tank at S. Agostino up to the city, guaranteeing 32 litres a day for each of the 8,000 inhabitants living within the walls, in Borgo Canale and Valverde. The implementation of this design would also relieve Città Alta of the seasonal fluctuations that the supply of water from the aqueducts of the hills was subject to. In the meantime, the Compagnia delle acque continued to work efficiently in the lower city, extending the distribution network towards the districts of Daste and Longuelo, and increasing the number of public fountains to 40.



The pumping system now located above the tank of S. Agostino could pump 26,000 litres an hour up to the tank of La Rocca.

The new pump for Città Alta

(Pino Capellini, *Acqua e Acquedotti nella storia di Bergamo* p. 87)

In December 1889, the pump was activated, which distributed water from the tank of S. Agostino to Città Alta. The photograph on page 75 shows the small building that housed the mechanical pumping system. The water was forced up to the Rocca by a system of turbines and pumps, where a new reserve had been constructed that could count on two different tanks, one of 400 cubic meters and another of 600 cubic meters. A third tank was installed beneath the seminary to ensure a reliable supply to the highest buildings, including those between Colle Aperto and Via Salvecchio.

Despite the anticipation of the citizens, there was no public inauguration. This was probably due to the fact that before the new aqueduct could be used, the engineers had to run an enormous amount of water through it to clear it of intolerable and unsanitary odours of tar.

Having resolved the situation in Città Alta, attention turned to the neighbouring hills: here the fountains were few and the water poorly distributed. The old aqueduct of Sudorno was no longer reliable due to infiltration and a lack of water during droughts. In 1891, the Compagnia delle Acque proposed a new project that proposed a plan to renovate the collection chambers of the sources of the aqueduct, the fountain of Acqua Morta and the Gavazzolo spring, and to deliver the water to the seminary via new cast iron pipes. This solution would be able to collect the water during the night and redistribute it during the day, while in periods of drought they would be able to direct the water from the aqueduct of Bondo Petello to the hills by sending it along the same channel in reverse.

The project was realised in August 1892 and inaugurated shortly after on 10 December of the same year.



A view of Bergamo Alta seen from the hills. The profile of the seminary stands out among the other buildings. Mount Misma is visible beyond.

The twentieth century

(Pino Capellini, *Acqua e acquedotti nella storia di Bergamo* and by Giuseppe Mainoli, *Gli acquedotti della città di Bergamo*)

7 The Algua aqueduct

(Pino Capellini, *Acqua e acquedotti nella storia di Bergamo*, Chapter: da Algua alla Municipalizzazione)

Twenty years after the inauguration of the Bondo Petello aqueduct, water again began to become scarce. They realised that the water capacity would not meet the demand of a population in continual demographic growth: the network became insufficient even with regular and ample rainfall.

Aside from the technical problems, the situation was aggravated by the discord that arose between the Compagnia delle acque and the council. The company could no longer support the problems the water network continually presented and even attempted to increase the capacity of water to keep control of the sources to the detriment of the public supply. But the clock was ticking for the creation of a real publicly owned aqueduct. The two companies rowed for several years, making do and laying claim to numerous springs. Yet in 1905, the Compagnia delle acque was forced to cede ground and declared that it could no longer guarantee the regularity of its service.

The solution that the council decided to adopt in 1905 was ambitious and farsighted: to use the Algua spring, located in Val Serina. They not only decided upon the construction of the new aqueduct, but even the purchase of the Bondo Petello system in order to unite the two systems

and construct a vast single network for the entire city. The council began with the acquisition of the Algua spring in 1906 and two years later requested a loan of almost two million Lira to cover the expenses of the channel. The sacrifices of the city during the construction period were considerable. Yet the citizens finally celebrated on 15 June 1912 when the water first surged forth from the fountain of Algua in front of the train station. A new phase in Bergamo's water supply was thus inaugurated. At the same time, the unification of the two large aqueducts was also completed. Thanks to the acquisition of the Bondo Petello system, previously owned by the Compagnia delle Acque, for a sum of 1,850,000 Lira, the council was able to transport the water of the new Algua source to the cistern of S. Agostino and use the existing distribution network with four times as much water.

The water supply reached 190 litres per second: this permitted the council to introduce a number of substantial modifications to the urban infrastructure, contributing in particular to the repopulation of Città Alta. Finally, a new cistern was constructed in the open space of the Fara, with new and more modern conduits that lead to the settlements of the lower city, where numerous new wash facilities were installed.

The water of Alqua

(Giuseppe Mainoli, *Gli acquedotti della città di Bergamo*)

The aqueduct of Alqua originated at the springs of Val Serina, near the town of Zogno. It arrived at the reserve of S. Agostino via a conduit that ran for 23 km, consisting of a cast iron pipe with a diameter of 45 cm, buried 1.5 meters below the ground. It passed through Brembilla, Botta, Villa d'Almè, Brughiera and Pontesecco before entering Bergamo. After passing the Morla stream in Valtesse, it rose past the Castle of Medolago along the walls to connect with the tank at S. Agostino.

The originates at an altitude of 438 meters above sea level, and by the time it reaches S. Agostino, has descended to 297 meters. From there, a new specially designed pump distributed water to the entire city, reaching Borgo Canale and Mount Bastia, previously

excluded from the network. The repopulation of Città Alta would not have been possible without this new system. The capacity varied according to the collection tank, reaching peaks of 15 litres depending on when it converged with the flow from Castagneta, Rocca, and the seminary. The seminary is worth a mention above all because it distributed water to an area previously ignored by the network, the district of Torni.

The total cost of the network, of about two and a half million Lira, meant that Bergamo saw some of the highest investment in the hydraulic network of any Italian city at the start of the twentieth century. This is even more astonishing if we consider that the city counted only 60,000 inhabitants at the time.

The municipalisation of the service

(Pino Capellini, *Acqua e acquedotti nella storia di Bergamo* p. 105)

In order to make all of this possible, the council had to purchase the Bondo Petello aqueduct, which belonged to the Compagnia Generale delle acque, who in 1906 demanded the extortionate sum of two and a half million Lira. The council, stunned by the cost, suspended the negotiations. Shortly after, in 1908, it was decided that the main objective must be the municipalisation of the entire water network and the construction of the Alqua aqueduct, and so in 1911 negotiations were resumed and concluded: the Compagnia Generale delle acque accepted 1,850,000

Lira, a figure that greatly exceeded the value of the aqueduct. The final act of municipalisation was the referendum, required by law, of 10 June 1912: of 2038 votes, only 52 were against municipalisation, and so the service finally belonged to the council. In 1912, along with the new Alqua aqueduct, the l'Azienda Municipalizzata Acquedotti Civici was born, a public company which worked to serve the community (in the 1990s, AMAC merged with AMNU, Azienda Municipalizzata Nettesza Urbana, to become Bergamo Ambiente e Servizi SPA).

The "set-backs" for the Alqua

(Pino Capellini, *Acqua e acquedotti nella storia di Bergamo* p. 113)

In 1913, a year after the inauguration of the new aqueduct, the first problems arose in the form of pipes broken by the deformation of the cast iron, produced crudely and therefore with significant differences in thickness. The changes in pressure as well as the phenomenon known as "water hammer" (pockets of air that with no outlet reach immense pressures and break the pipes) compromised the resistance of the conduits. When in 1916, engineers began attempts to increase the power of the collection chambers, increasing capacity from 190 to 220 litres per second, they encountered frequent ruptures in the aqueduct. The only active aqueduct remaining was Bondo Petello, which was insufficient to supply the entire city alone. Between 1924 and 1928, due to continual burst pipes between Zogno and

Ambria, Bergamo was left with rationed water on three occasions, and the council was burdened with enormous costs for repairs and forced to carry out massive engineering works. The pipes subject to deterioration had to be replaced with a free surface channel that increased capacity to 250 litres per second. Further demographic growth made the water situation even worse. In the 1930s the council was forced to reactivate some of the cisterns in Città Alta and sought out new sources to increase the capacity of the Bondo Petello aqueduct. Of note, was the munificent Rio-Rè spring that originated in Albino. Despite the interventions, the original water capacity was never completely restored. Even the attempt in 1935 to increase the Alqua channel's capacity to 450 litres per second had minimal results.



The photograph is from 1912, when the water service was municipalised and the Alqua aqueduct was inaugurated. Here we can see the fountain in Piazza Marconi in front of the station.

Reference: Civica Biblioteca Angelo Mai, Bergamo Illustrata collection, folder 33, image 010

An efficient system: the aqueduct of Costone

When during the Second World War demographic growth and industrial development came to a standstill in Bergamo, the water supply sufficed for a brief period.

With the economic boom of the 1950s however, in 1952 AMAC was forced to increase the capacity of the Alqua aqueduct to 600 litres per second to provide for the increase in population and housing. Another improvised project emerged: an initial permanent solution was only proposed in 1954, when the foundations were laid for the construction of a new aqueduct

in Val Seriana. This new channel would have served the city from springs located in the commune of Casnigo, not far from the Costone Bridge. The project also involved the construction of a water tank at the start of the valley in Torre Boldone.

The Costone system was opened in 1959: with an overall capacity of 600 litres per second, it ensured the city had all the water it required throughout the rapid development of the 1960s.

The second hydraulic network of Bergamo is still operating today.

The Nossana spring

On the way up Val Seriana, before Clusone, is the village of Ponte Nossana, located in the verdant Nossana Valley. An old road follows the valley bottom, Via dei Magli, known for the iron works. Since long ago, this basin has been known for the numerous springs that still surface here and flow into the Nossana stream, combining to produce an overall capacity of 12,000 litres per second. The Costone aqueduct had resolved many of the water problems of the city and its suburbs, yet the water company decided a new hydraulic network was needed, realized between 1971 and 1975. Using the Nossana source, the innovative network relied on a 30 km pipeline that had a diameter of 90 centimetres and could convey 1000 litres per second. The new aqueduct guaranteed almost double the supply of water, which was also of excellent quality.

These two great systems still supply the city's water today: the contribution of the Nossana was and still is the most important development in the city's water quality.



The Nossana spring runs through Val Nossana. It originates at Pizzo Arera, and after 7 km flows into the Serio from its west bank at Ponte Nossana. The photograph shows the water collection system that supplies Bergamo.

The Monuments of the Nineteenth and Twentieth Century

40

The Washhouse of Via Lupo

(Bernardino Calderola, AQ - Acque in Città Alta, on the website issuu.com)

The construction of this washhouse was ordered by the Comune di Bergamo towards the end of the nineteenth century, as were the Lantro washhouse in Via della Boccia and another in Borgo Canale, with the aim of providing Città Alta with facilities that would compensate for the lack of running water in the homes. The washhouse was designed around the same time as the pump installed in 1889, described earlier.

The Via Lupo Washhouse is still an admiral design model, with the adduction of the water, the drainage system, and the channel that collected the water during

while in use. In 1890, a cistern was installed beneath the structure, which could hold 300 cubic meters of water.

It was inaugurated in 1891, as we read on an embossed decoration on the elegant cast iron roof. The basin, ingeniously divided into several compartments, is made of Zandobbio marble. Water was supplied to the washhouse by the Bondo Petello aqueduct and was used up to the 1950s. In 1993, it underwent a complete restoration by the Comune of Bergamo and although no longer in use, it can still be admired in its original location.



3 The monument to Donizetti

(territorio.comune.bergamo.it, IBCAA - Inventario dei Beni Culturali Ambientali e Archeologici del comune di Bergamo)

In the centre of the garden of Piazza Cavour, next to the Donizetti theatre, stands a monument dedicated to the great Bergamascan composer. It was constructed in 1897 by Francesco Jerace: instead of the traditional relationship between the base and the statue, the artist opted for a more organic solution, so that the steps that formed the base of the monument took on an aesthetic function. The steps, the two statues, and the pond seem to represent a whole in which the water element complements the sculptures. In the sculpted scene, Maestro Donizetti sitting in a solemn but natural pose, gazes transfixed at a Muse, a recurring theme in Jerace's work. The white marble monument evolves in a circular

motion, drawn by the exedra of the divan that features floral motifs, mirroring the beauty of the surrounding square.



2 The "Zuccheriera" of Porta Nuova

In the 1830s, Giuseppe Pellegrini (in charge of fuel distribution for the Province of Bergamo) received authorisation to construct a small petrol filling station in front of Porta Nuova. This concession was met with rage and indignation by numerous citizens, who thought that the construction of the petrol station in front of the monumental Porta Nuova was in bad taste. Therefore Pellegrini decided to involve the help of a friend, the architect Alzira Bergonzo, to create a monument that was pleasing to the eye and would to some extent 'hide' the controversial filling station. The monument that emerged was a fountain that also functioned as a kiosk for the filling station at the rear. It was inaugurated in 1939. In the 1950s the petrol pump was deactivated. The exterior, in Zandobbio marble, is the exquisite work of the sculptor Leone Lodi, and is decorated with bas-reliefs

depicting mythological scenes.

A testimony to this curious past, a small door remains behind the fountain that once allowed access to the interior, a space which once served as the tiny office of the petrol station.

Paradoxically, this work which came about from the most humble of intentions, has become one of the most recognisable and loved fountains in the city, and has been affectionately nicknamed the "Zuccheriera" or sugar bowl.



33 The statue of Ruggeri da Stabello

The bust of Pietro Ruggeri (1797-1858) was realised in 1933, commissioned by the Duchy of Piazza Pontida in honour of the poet from Val Brembana who "sung the soul of the people in vernacular rhyme", as we read in the inscription on the column under the piazza's porticos).

From the article of *Eco di Bergamo*, 27 December 1963, Emilio Pedroni:

If we look carefully beneath the arches of the southern porticos, we find the herma of Pietro Ruggeri, the vernacular poet, to whom a small fountain is dedicated. The

sculptor has produced a truly worthy piece. Unable to indulge his whims in gestures and poses, he captured his subject in the expression of the face. A look of great nobility, veiled in I cannot say what caprine or sardonic semblance that he appears to be laughing to himself with contented pride, as though the last joke was his. And it is so: denied pride of place at the centre of the square, he is not part of the spectacle, but remains a spectator at the edge of the square where he can critique the fickle scene of city life.



27 The Post Office building

This building, designed by Angiolo Mazzoni in 1929 and inaugurated in 1932, was designed from the start to house the headquarters of the postal service, and was admired for the avant-garde architecture. (Biblioteca Angelo mai, *Emporium: rivista mensile illustrata d'arte e cultura*, Vol. 78, n. 465). It features lavish decorations, including the doors with frames of wood and alabaster, blown glass lamp shades and decor by Paolo Venini (1895-1959; Italian designer who lived and worked in the early twentieth century known above all for his works in Murano glass).

Outside of the building is an enormous pool lined with light blue glass mosaic, filled with water spurting from a sinuous bronze dolphin with its snout pointing down. The pool stands on an austere and imposing structure with columns and five statues, two of which (shown in the photograph on the right), were created by Nino Galizzi (1891-1975; Bergamascan sculptor, author of numerous public works, in Italy and abroad). The fountain is not regularly in

operation today, although the pool almost always contains water. During the summer it is still possible to see the water shoot from the nostrils of the dolphin.

According to some local residents, the capacious pool was originally designed to provide an emergency water supply in the event the post office caught fire. The scarcity of official documents on this matter makes it difficult to authenticate this rumour.



222 The Fountain of S. Gottardo

The fountain takes its name from the oldest of Bergamo's aqueducts, the San Gottardo or Sudorno. Originally, the steps of San Gottardo, which still lead from the Church of Santa Grata to Via Sudorno, led down to the church without forking off as it now does. In 1955, when the council decided to widen the churchyard due to the increasing traffic on the street, they worked on the fountain in the newly created space. For the water outlet they installed a sixteenth-century artefact describing the face of a lion. The ornament probably came from inside the church itself. The marble basin was added in the 1960s.



36 The monument to Locatelli

(Bernardino Calderola, AQ - Acque in Città Alta, on the website issuu.com)



In 1956, twenty years after the death of Antonio Locatelli, a monument was erected in his honour: the work by the architect Aldo Piantanida consists of a large wall covered by a series of rectangular protrusions. The bronze statue portraying the Bergamascan hero, created in 1935 by Antonio Berti (1904-1990; Florentine sculptor) is a copy of the original now preserved in Palazzo Frizzoni. On either side of the column that holds the bust, two cascades pour water into a rectangular pool. The monument was cleaned in 2013, restoring the brightness of the marble, and with it the magnificence of the commemorative bust.

Antonio Locatelli was born in Bergamo on 17 April 1895. During the First World War, his heroic exploits as a military aviator elevated him to legendary status. Subsequently taken prisoner by the enemy, he managed to escape dressed as an Austrian soldier. In the post-war years, he became the first to fly over the Andes and made an attempt to cross the Atlantic by sea plane, but due to engine failure was forced to set down in the middle of the ocean. Some years after his return to Italy, he was elected to parliament and between 1933-34 was the Podestà of Bergamo. He died on 9 June 1936 in Ethiopia.

4 The monument to the Alpini

Standing in front of the Vittorio Emanuele II Institute, in Piazzale degli Alpini, work began on the monument's construction on 31 January 1960. It was inaugurated on 18 March 1962, on the occasion of the 35th National Gathering of the Alpini, hosted in Bergamo that year. It was an extravagant expense, the total cost amounting to around 45 million Lira. The realisation of the project required substantial contributions from the council and generous donations on the part of the Alpini Bergamaschi. The designer-architect was selected by a committee, which awarded the project to the Bolognese sculptor Peppino Marzot, in collaboration with the architect Nevio Parmeggiani and two Bergamascan colleagues, Giuseppe Gambirasio and Aurelio Cortesi. The construction was entrusted to the Gherardi brothers of Ponteranica. The monument consists of a stone base with two columns that converge at the summit at twenty meters above the ground. Between the two columns, 2.35 meters apart, is a bronze Alpino soldier depicted in a futurist style, free climbing the structure with a bag, a pickaxe and his characteristic hat. The arrangement represents the sheer faces of the high mountains. At the base of the structure, a row of water jets spurt into two pools: lights play with the water creating a spectacular effect at night. The floors of the pools are made up of mosaics depicting scenes of the life of the Alpine soldiers.

The monument was cleaned and restored for the 73rd National Gathering of the Alpini in 2010.



1 The Vedovella of the Sentierone

The green fountains installed throughout Lombardy in the nineteenth century became known as the '*vedovelle*', literally translated as '*little widows*'.

The *Vedovella del Sentierone* (the main

high street in Bergamo) was installed in the nineteenth century, and many more green fountains are distributed throughout the city for public use.



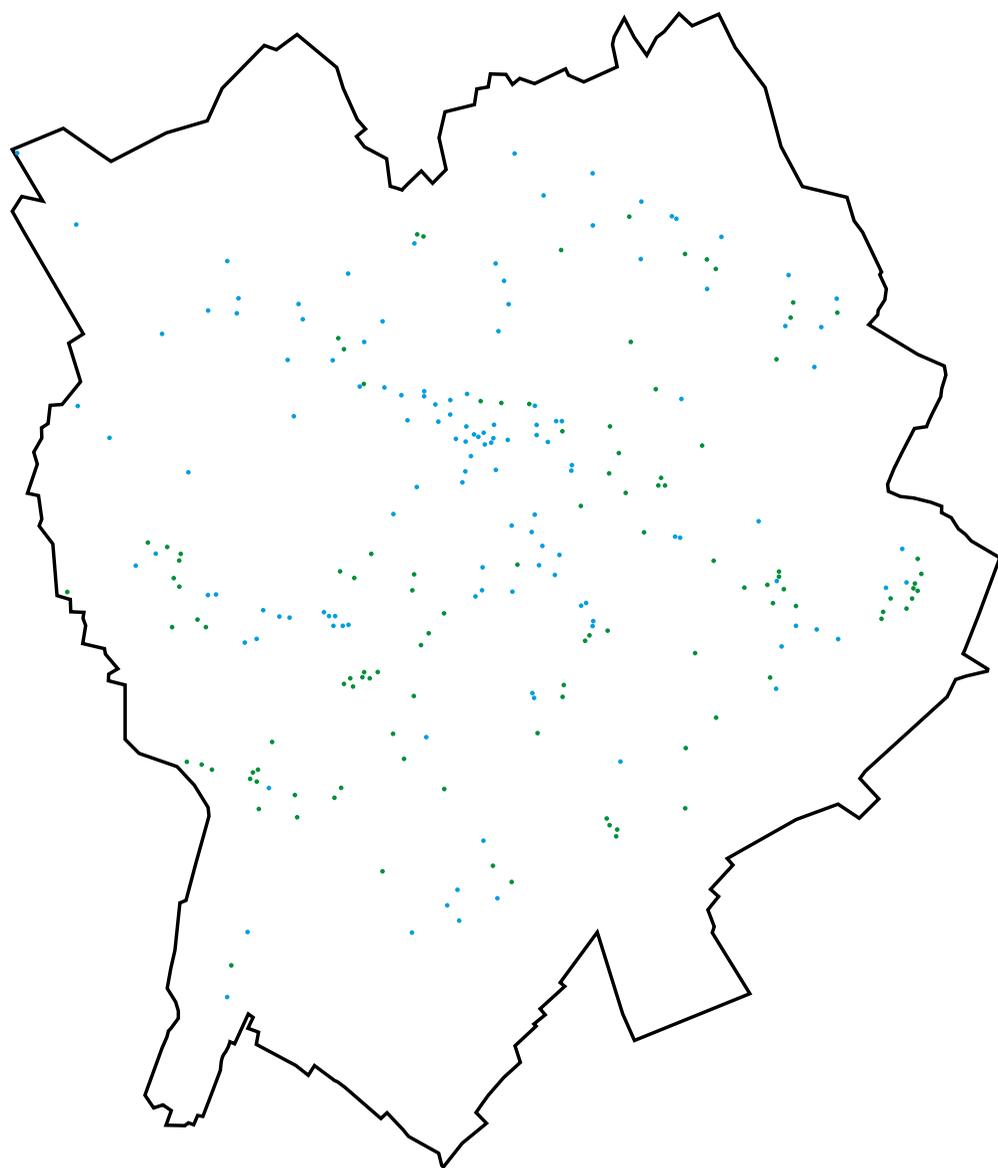
5 - A guide to the images of the fountains

What follows is a photographic catalogue of all the water fountains in the city.

This work was designed to benefit anyone who wants to visit the city with an alternative guide in hand, which proposes unconventional

points of interest, beyond traditional touristic and cultural itineraries.

The map indicates the locations of the fountains and their positions in the urban space.

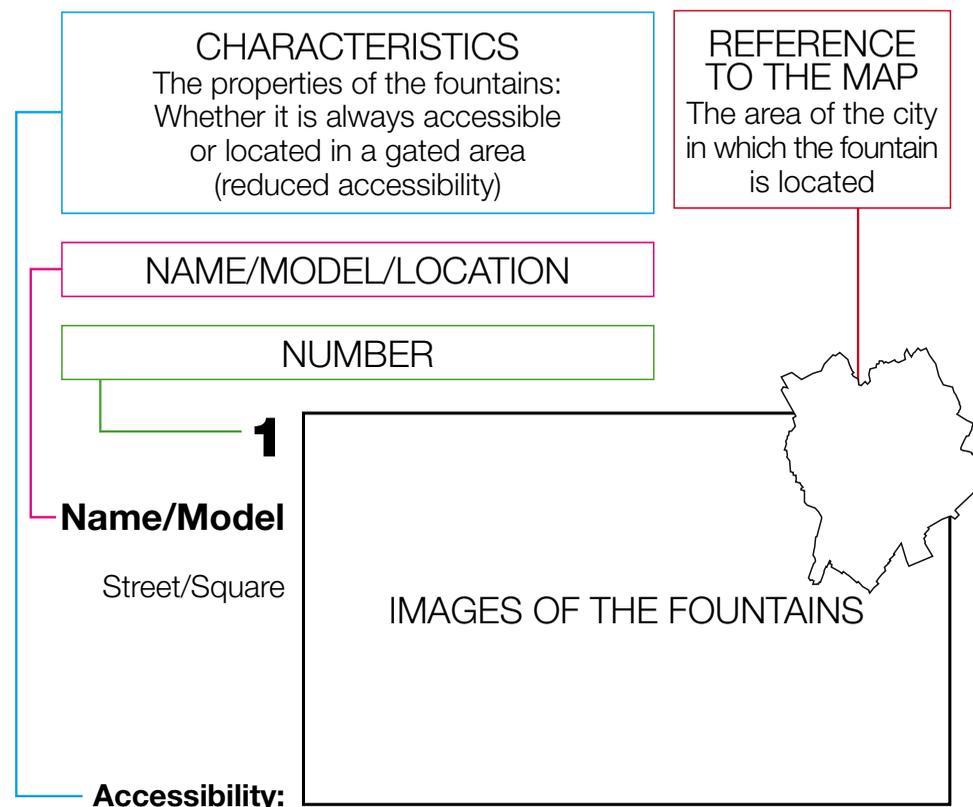


HOW TO READ THIS GUIDE

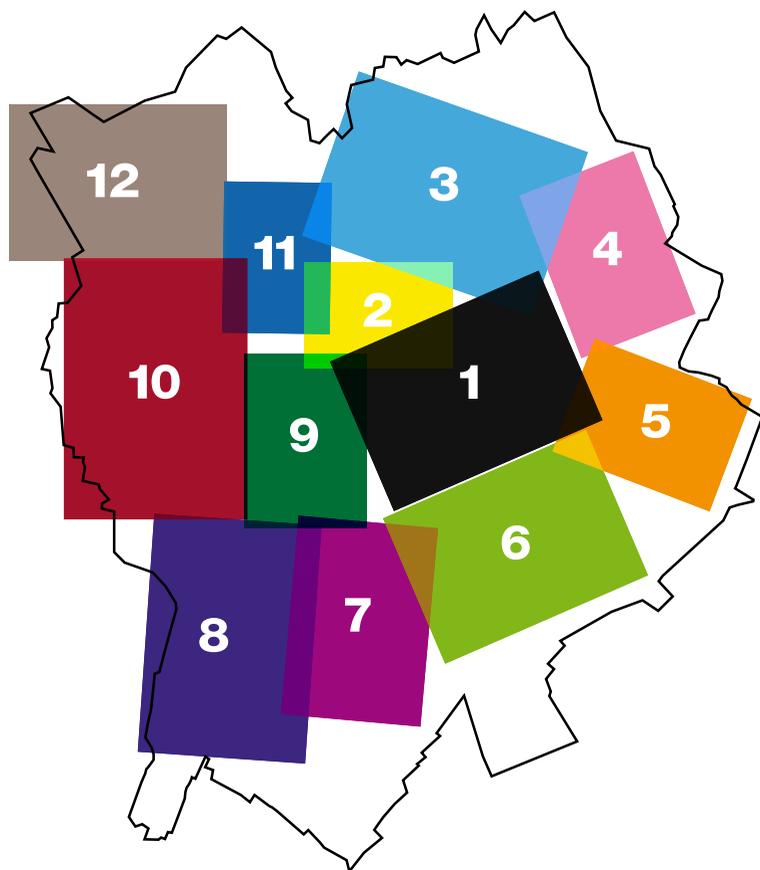
The fountains numbered in the maps are catalogued based on their accessibility and functionality. The categories are as follows:

- 
BLUE CIRCLE
 Fountains located on the street or in a permanently accessible place

- 
GREEN CIRCLE
 Fountains located in a park or a gated space, subject to opening and closing times



MAP INDEX



1 **Map 1:**
Centro;
From number 1 to number 36

2 **Map 2:**
Città Alta;
From number 37 to number 68

3 **Map 3:**
Valverde, Valtesse, Monterosso;
From number 69 to number 92

4 **Map 4:**
Redona;
From number 93 to number 101

5 **Map 5:**
Borgo Palazzo, Celadina;
From number 102 to number 126

6 **Map 6:**
Boccaleone, Campagnola, Malpensata;
From number 127 to number 143

7 **Map 7:**
S. Bernardino, Colognola;
From number 144 to number 155

8 **Map 8:**
Grumello al Piano, Villaggio degli Sposi;
From number 156 to number 173

9 **Map 9:**
Loreto, S. Paolo, S. Lucia;
From number 174 to number 198

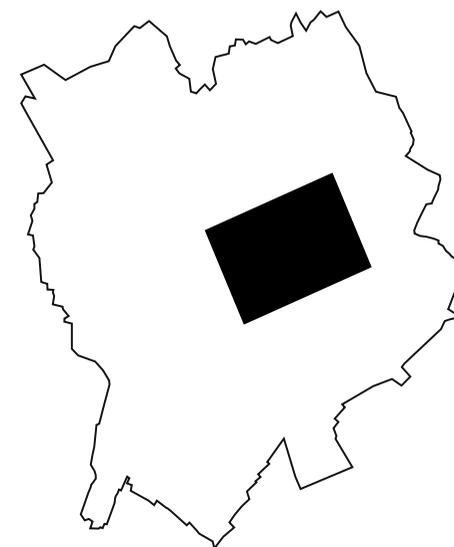
10 **Map 10:**
Longuelo, Madonna del Bosco;
From number 199 to number 219

11 **Map 11:**
Borgo Canale, S. Vigilio, Castagneta;
From number 220 to number 233

12 **Map 12:**
Fontana, Madonna della Castagna;
From number 234 to number 240

MAP 1: CENTRO From number 1 to number 36

- 36 Fountains
- 25 Always accessible
- 11 Limited access



1	●	13	●	25	●
2	●	14	●	26	●
3	●	15	●	27	●
4	●	16	●	28	●
5	●	17	●	29	●
6	●	18	●	30	●
7	●	19	●	31	●
8	●	20	●	32	●
9	●	21	●	33	●
10	●	22	●	34	●
11	●	23	●	35	●
12	●	24	●	36	●

1

**Vedovella
3 bocche**

Piazza Vittorio Veneto,
Sentierone

Accessibility:
on the street



4

**Monumento
degli Alpini**

Piazza degli Alpini

Accessibility:
on the street

2

Zuccheriera

Largo Porta Nuova

Accessibility:
on the street



5

**Vedovella
1 bocca**

Piazza Alpini

Accessibility:
in the square

3

**Monumento
Donizetti**

Piazza Cavour

Accessibility:
open green area



6

**Vedovella
3 bocche**

Piazza Marconi

Accessibility:
in the square

7 Fontana inaugurale acquedotto di Algua

Piazza Marconi

Accessibility:
in the square



10 Colonna in muratura

Piazza Marconi,
binario 2 stazione

Accessibility:
within the station

8 Vedovella 1 bocca

Piazza Marconi,
binario 1 stazione

Accessibility:
within the station



11 Vedovella 1 bocca

Via dei Cappuccini,
Via Madonna della Neve

Accessibility:
reserved for the elementary
school

9 Colonna in muratura

Piazza Marconi,
binario 2 stazione

Accessibility:
within the station



12 Vedovella 3 bocche

Via Borgo Palazzo

Accessibility:
in a car park

13

**Vedovella
3 bocche**

Piazza S. Anna

Accessibility:
in the square



16

**Vedovella
1 bocca**

Via Codussi,
Via Amadeo

Accessibility:
Via Codussi Garden

14

**Fontana
di Piazza S. Anna**

Piazza S. Anna

Accessibility:
in the square



17

**Vedovella
1 bocca**

Via del Galgaro

Accessibility:
Parco del Galgaro

15

**Vedovella
3 bocche**

Via Borgo S. Caterina

Accessibility:
in the square



18

**Vedovella
1 bocca**

Via del Galgaro

Accessibility:
Parco del Galgaro

19

**Vedovella
1 bocca**

Via del Galgario



Accessibility:
Parco del Galgario

22

**Vedovella
2 bocche**

Via Frizzon



Accessibility:
Parco Marenzi

20

**Fontana
delle Rogge**

Via Cesare Battisti,
Via S. Giovanni



Accessibility:
Parco Suardi
at the gate in Via Battisti

23

**Vedovella
2 bocche**

Via Torquato Tasso,
Via Verdi



Accessibility:
Parco Caprotti

21

**Vaschetta
2 bocche**

Via Cesare Battisti,
Via S. Giovanni



Accessibility:
Parco Suardi
at the gate in Via S. Giovanni

24

**Vedovella
3 bocche**

Via S. Tomaso civ. 88



Accessibility:
on the street

25

Fontana del Delfino

Piazzetta del Delfino



Accessibility:
in the square

28

Fontana della Fiera di S. Alessandro

Piazza Dante



Accessibility:
in the square

26

Fonte Lux Morum

Via Pignolo



Accessibility:
on the street

29

Fontana di Piazza della Libertà

Piazza della Libertà



Accessibility:
in the square

27

Fontana delle Poste

Via Masone,
Via Locatelli



Accessibility:
on the street

30

Vedovella 1 bocca

Piazza Matteotti



Accessibility:
Garden within Palazzo Frizzoni

31

**Vedovella
3 bocche**

P.le della Repubblica,
Via Vittorio Emanuele II

Accessibility:
on the street



34

**Fontana celebrativa
dell'antica Fiascona**

Piazza Rezzara

Accessibility:
in the square

32

**Colonna
con vasca**

Largo Medaglie d'Oro,
Via XX settembre

Accessibility:
in the square



35

**Vedovella
3 bocche**

Via s. Alessandro,
Chiesa parrocchiale

Accessibility:
on the street

33

**Monumento
a Ruggeri da Stabello**

Piazza Pontida

Accessibility:
in the square



36

**Monumento
a Locatelli**

Viale Vittorio Emanuele II

Accessibility:
on the street

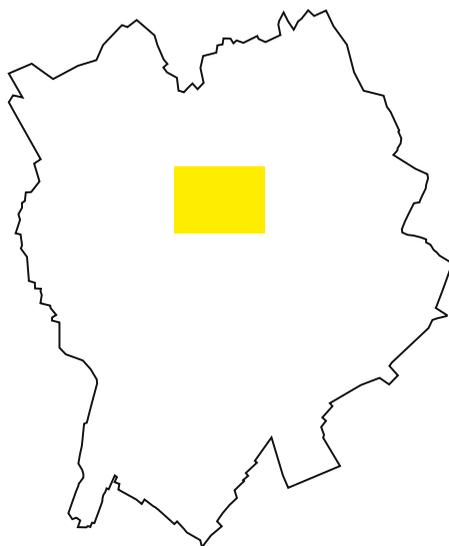
MAP 2:
CITTÀ ALTA

From number 37 to number 68

32 Fountains

● 28 Always accessible

● 4 Limited access



- | | | |
|------|------|------|
| 37 ● | 49 ● | 61 ● |
| 38 ● | 50 ● | 62 ● |
| 39 ● | 51 ● | 63 ● |
| 40 ● | 52 ● | 64 ● |
| 41 ● | 53 ● | 65 ● |
| 42 ● | 54 ● | 66 ● |
| 43 ● | 55 ● | 67 ● |
| 44 ● | 56 ● | 68 ● |
| 45 ● | 57 ● | |
| 46 ● | 58 ● | |
| 47 ● | 59 ● | |
| 48 ● | 60 ● | |



37

Fontana Contarini

Piazza Vecchia

Accessibility:
in the square



40

Lavatoio

Via Lupo

Accessibility:
on the street

38

Il Fontanone

Piazza Duomo

Accessibility:
in the square



41

Fontana di S. Pancrazio

Piazzetta S. Pancrazio

Accessibility:
in the square

39

**Vedovella
1 bocca**

Via Lupo

Accessibility:
on the street



42

Fontana di S. Cassiano

Via Donizetti

Accessibility:
on the street

43

Fontana di S. Agata

Via Colleoni,
Vicolo carceri di S. Agata

Accessibility:
on the street



46

Fontana di S. Giacomo

Via S. Giacomo civ. 9

Accessibility:
on the street

44

Vedovella 1 bocca

Via Salvecchio,
Via S. Salvatore

Accessibility:
on the street



47

Vaschetta conchiglia

Via alla Rocca

Accessibility:
Parco delle Rimembranze

45

Fontana di Antescolis

Piazza Rosate

Accessibility:
in the square



48

Fontana della Cisterna

Piazza Mercato delle Scarpe

Accessibility:
in the square

49

**Fontana di S. Rocco
o Fontana Secca**

P.za Mercato d.le Scarpe

Accessibility:
in the square



52

**Fontana
del Pozzo Bianco**

Via Porta Dipinta civ. 36

Accessibility:
on the street

50

**Fontana
di S. Eufemia**

Via Solata

Accessibility:
on the street



53

**Fonte del Corno
o Fons de Peogis**

Viale Mura della Fara

Accessibility:
In a private residence

51

**Fontana
di Porta Dipinta**

Via Porta Dipinta civ. 29

Accessibility:
on the street



54

**Vedovella
3 bocche**

Viale delle Mura,
della Fara

Accessibility:
on the street

55

**Vedovella
3 bocche**

Piazzetta S. Agostino,
Viale delle Mura

Accessibility:
on the street



58

**Vedovella
3 bocche**

Viale delle Mura,
Baluardo S. Michele

Accessibility:
on the street

56

**Fontana
di S. Agostino**

Piazzetta S. Agostino,
Viale delle Mura

Accessibility:
on the street



59

**Fontana
di S. Michele**

Via Osmano

Accessibility:
on the street

57

**Serbatoio
di S. Agostino**

Viale delle Mura,
Baluardo S. Michele

Accessibility:
Closed to the public



60

**Vedovella
3 bocche**

Viale delle Mura,
Porta S. Giacomo

Accessibility:
on the street

61

**Vedovella
1 bocca**

Via S. Alessandro,
Via Tre Armi

Accessibility:
on the street



64

**Fontana
della Cittadella**

Piazza Cittadella

Accessibility:
in the square



62

**Vasca pietra
2 bocche**

Viale delle Mura,
Baluardo di S. Giovanni

Accessibility:
on the street



65

**Fontana
della Cisterna**

Piazza Mascheroni

Accessibility:
in the square



63

**Vedovella
3 bocche**

Colle Aperto

Accessibility:
on the street



66

**Fontana
del Vàgine**

Via del Vàgine

Accessibility:
on the street



67

Fontana della Boccola

Via della Boccola

Accessibility:
Below street-level



68

Fontana del Lantro

Via della Boccola

Accessibility:
Free entrance
on weekends and bank holidays

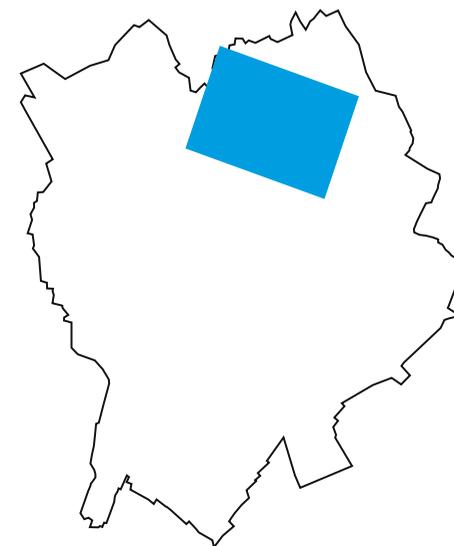


MAP 3:
VALVERDE - VALTESSE - MONTEROSSO
From number 69 to number 92

24 Fountains

● 15 Always accessible

● 9 Limited access



- | | | | |
|----|---|----|---|
| 69 | ● | 81 | ● |
| 70 | ● | 82 | ● |
| 71 | ● | 83 | ● |
| 72 | ● | 84 | ● |
| 73 | ● | 85 | ● |
| 74 | ● | 86 | ● |
| 75 | ● | 87 | ● |
| 76 | ● | 88 | ● |
| 77 | ● | 89 | ● |
| 78 | ● | 90 | ● |
| 79 | ● | 91 | ● |
| 80 | ● | 92 | ● |

69

**Vedovella
1 bocca**

Via Maironi da Ponte,
Chiesa

Accessibility:
on the street



72

**Monumento
ai Caduti**

Via Ruggeri da Stabello,
Via Maironi da Ponte

Accessibility:
on the street

70

**Vedovella
1 bocca**

Via Maironi da Ponte,
Pista ciclabile Valtesse

Accessibility:
open green area



73

**Vedovella
3 bocche**

Via Solari

Accessibility:
Parco Solari

71

**Vedovella
1 bocca**

Via Maironi da Ponte civ.47

Accessibility:
on the street



74

**Vedovella
1 bocca**

Via Solari

Accessibility:
Parco Solari

75

**Vedovella
1 bocca**

Via Valverde,
Pista ciclabile Valtesse

Accessibility:
on the street



78

**Vedovella
1 bocca**

Via S. Colombano

Accessibility:
on the street



76

**Vedovella
1 bocca**

Via Alcaini,
Via Raboni

Accessibility:
on the street



79

**Vedovella
1 bocca**

Via Zarda,
Via Quintino Alto

Accessibility:
on the street



77

**Vedovella
1 bocca**

Via Alcaini,
Via S. Colombano

Accessibility:
on the street



80

**Vedovella
3 bocche**

Via Toniolo,
Via Aquaderni

Accessibility:
open green area



81

**Vedovella
1 bocca**

Via Rosolino Pilo



Accessibility:
Rosolino Pilo Sports Facility



84

**Vedovella
1 bocca**

Piazza Pacati

Accessibility:
in the square

82

**Vedovella
1 bocca**

Via Quintino Basso,
Via Righi



Accessibility:
Parco del Quintino



85

**Vasca
in cemento**

Piazza Pacati

Accessibility:
in the square

83

**Vedovella
1 bocca**

Via Quintino Basso civ.17



Accessibility:
on the street



86

**Vedovella
1 bocca**

Via Giulio Cesare,
Via Tremana

Accessibility:
Adriano Sana Park gate
in Via Giulio Cesare

87

**Vedovella
1 bocca**

Via Goisis

Accessibility:
on the street



90

**Colonna
1 bocca**

Via Giulio Cesare,
Rotonda di Monterosso

Accessibility:
Outside of the dog area

88

**Vedovella
1 bocca**

Via Goisis,
Via Giulio Cesare

Accessibility:
Parco Goisis
at the gate in via Goisis



91

**Vedovella
3 bocche**

Via del Lazzaretto

Accessibility:
in a Lazzaretto

89

**Vedovella
1 bocca**

Via Goisis,
Via Giulio Cesare

Accessibility:
Parco Goisis
at the gate in Via Giulio Cesare



92

**Vedovella
1 bocca**

Via Giulio Cesare,
Via dei Celestini

Accessibility:
Parco Rosselli

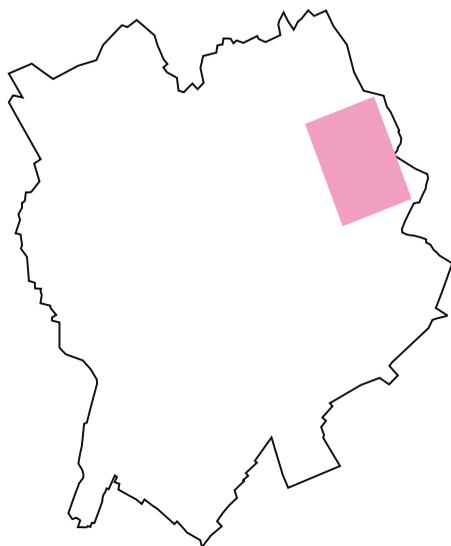
MAP 4:
REDONA

From number 93 to number 101

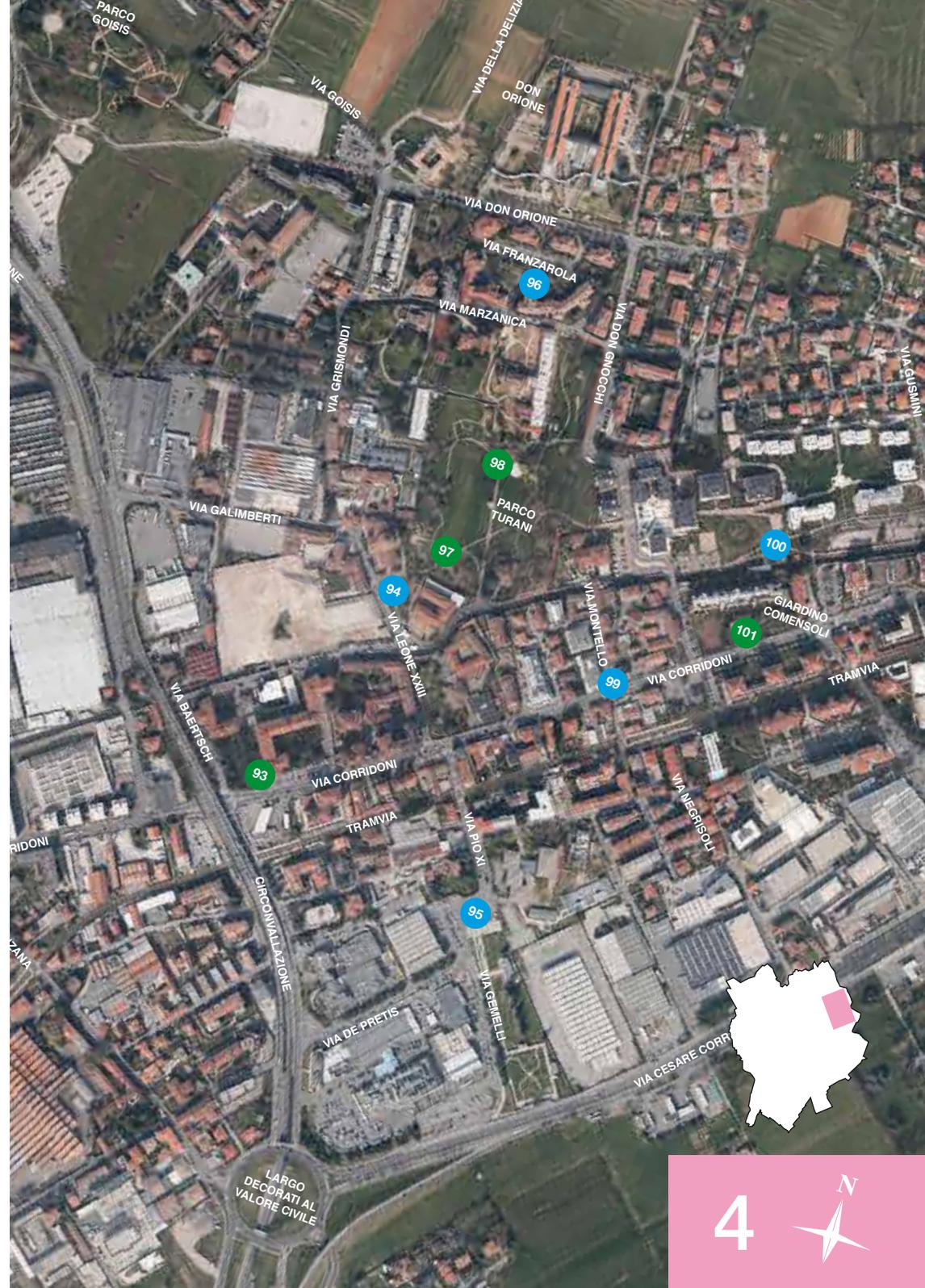
9 Fountains

5 Always accessible

4 Limited access



- 93 ●
- 94 ●
- 95 ●
- 96 ●
- 97 ●
- 98 ●
- 99 ●
- 100 ●
- 101 ●



93

**Vedovella
1 bocca**

Via Corridoni,
Via Baertsch

Accessibility:
Giardini Baertsch



96

**Vedovella
1 bocca**

Via Franzarola

Accessibility:
open green area



94

**Colonna
4 bocche**

Via Leone XIII

Accessibility:
on the street



97

**Colonna
2 bocche**

Via Leone XIII,
Via don Gnocchi

Accessibility:
Parco Turani
at the gate in Via Leone XIII



95

**Colonnina
1 bocca**

Via Gemelli

Accessibility:
on the street



98

**Colonna
1 bocca**

Via Leone XIII,
Via don Gnocchi

Accessibility:
Parco Turani
at the gate in Via don Gnocchi



99

**Vedovella
1 bocca**

Via Corridoni,
Via Montello

Accessibility:
on the street



100

**Vedovella
1 bocca**

Via Gusmini,
Pista ciclabile Redona

Accessibility:
open green area



101

**Vedovella
1 bocca**

Via Corridoni

Accessibility:
Parco Geltrude Comensoli

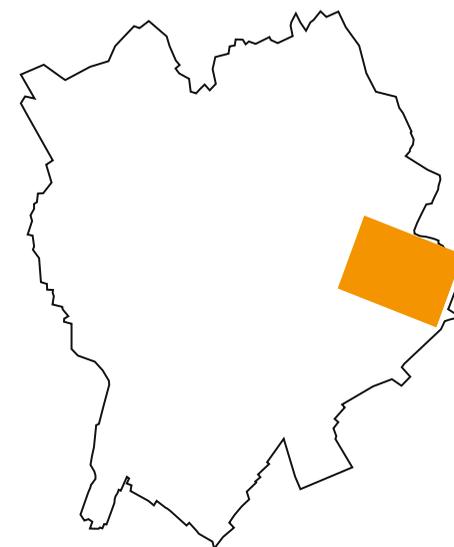


MAP 5:
BORG PALAZZO - CELADINA
From number 102 to number 126

25 Fountains

● 7 Always accessible

● 18 Limited access



- | | | |
|-------|-------|-------|
| 102 ● | 114 ● | 126 ● |
| 103 ● | 115 ● | |
| 104 ● | 116 ● | |
| 105 ● | 117 ● | |
| 106 ● | 118 ● | |
| 107 ● | 119 ● | |
| 108 ● | 120 ● | |
| 109 ● | 121 ● | |
| 110 ● | 122 ● | |
| 111 ● | 123 ● | |
| 112 ● | 124 ● | |
| 113 ● | 125 ● | |



102

**Vedovella
1 bocca**

Piazzale del Cimitero

Accessibility:
in the square



103

**Vedovella
1 bocca**

Via Borgo Palazzo

Accessibility:
on the street



104

**Vedovella
1 bocca**

Via Borgo Palazzo

Accessibility:
Parco del Civico 116



105

**Vedovella
1 bocca**

Via Borgo Palazzo

Accessibility:
Parco del Civico 116



108

**Vedovella
1 bocca**

Via Borgo Palazzo,
Via Clementina

Accessibility:
Parco Clementina

106

**Vedovella
3 bocche**

Via Pelandi,
Via Borgo Palazzo

Accessibility:
Garden between buildings



109

**Vedovella
1 bocca**

Via Borgo Palazzo,
Via Clementina

Accessibility:
Parco Clementina

107

**Vedovella
1 bocca**

Via Gritti,
Via Pelandi

Accessibility:
Garden between buildings



110

**Fontana
condominiale**

Via Borgo Palazzo,
Via Clementina

Accessibility:
Private residential complex

111

Lavatoio

Via Tolstoj



Accessibility:
on the street



114

**Vedovella
1 bocca**

Via Borgo Palazzo,
Via G. da Verrazzano

Accessibility:
Park of Via Verrazzano

112

**Vedovella
1 bocca**

Via Ghandi,
Via M.te Cornaghera



Accessibility:
open green area



115

**Vedovella
1 bocca**

Via Borgo Palazzo,
Via G. da Verrazzano

Accessibility:
Park of Via Verrazzano

113

**Vedovella
1 bocca**

Via Pizzo Recastello



Accessibility:
open green area



116

**Vedovella
1 bocca**

Via Borgo Palazzo,
Via G. da Verrezzano

Accessibility:
Park of Via Verrazzano

117

**Vedovella
1 bocca**

Via Giovanni da Verrazzano

Accessibility:
on the street



120

**Vedovella
1 bocca**

Via Daste e Spalenga,
Via M.te Gleno

Accessibility:
Park of Via Daste and
Spalenga

118

**Vedovella
1 bocca**

Via Daste e Spalenga

Accessibility:
on the street



121

**Vedovella
1 bocca**

Via Pizzo Scais,
Via G. da Verrazzano

Accessibility:
Parco Baden Powell

119

**Colonnina
1 bocca**

Via Pizzo Scais,
Via M.te Gleno

Accessibility:
Park of Via Pizzo Scais



122

Stagnetto

Via Pizzo Scais,
Via G. da Verrazzano

Accessibility:
Parco Baden Powell

123

**Vedovella
1 bocca**

Via Pizzo Scais,
Via G. da Verrazzano

Accessibility:
Parco Baden Powell



126

**Vedovella
3 bocche**

Via Caboto,
Via G. da Verrazzano

Accessibility:
Parco Baden Powell

124

**Vedovella
1 bocca**

Via Pizzo Scais,
Via G. da Verrazzano

Accessibility:
Parco Baden Powell,
the dog area



125

**Vedovella
1 bocca**

Via Caboto,
Via G. da Verrazzano

Accessibility:
Parco Baden Powell





143
142

VIA CARNOVALI

VIA GAVAZZENI

VIA GAVAZZENI

VIA EUROPA

POLO
STUDENTESCO

FERROVIA

VIA ROVELLI

SOVRAPPASSO
BOCCALEONE

127

VIA GABRIELE ROSA

PIAZZA S. PIETRO
E PAOLO

VIA ISABELLO

129

128

VIA POLACK

VIA GASPARINI

VIA BOCCALEONE

130

CIRCONVALLAZIONE

VIA AMBIVERI

137

VIA F. DELL'ORTO

VIA GASPARINI

131

CIRCONVALLAZIONE

VIA CAMPAGNOLA

133

134

135

136

VIA QUASINODO

VIA UNGARETTI

VIA PER ORO

132



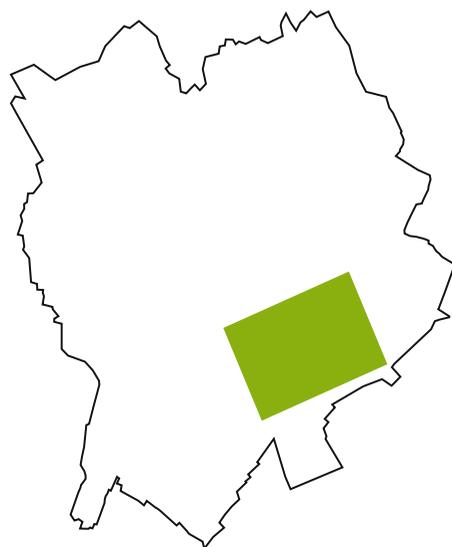
6

MAP 6:
BOCCALEONE - CAMPAGNOLA - MALPENSATA
From number 127 to number 143

17 Fountains

● 5 Always accessible

● 12 Limited access



- | | |
|-------|-------|
| 127 ● | 139 ● |
| 128 ● | 140 ● |
| 129 ● | 141 ● |
| 130 ● | 142 ● |
| 131 ● | 143 ● |
| 132 ● | |
| 133 ● | |
| 134 ● | |
| 135 ● | |
| 136 ● | |
| 137 ● | |
| 138 ● | |



127

Vedovella
1 bocca

Via Gabriele Rosa,
fuori dal Sovrappasso

Accessibility:
on the street



128

Vedovella
1 bocca

Via Pollack,
Via Gasparini

Accessibility:
on the street



129

Vedovella
1 bocca

Via Gasparini,
Via Isabello

Accessibility:
Park near to the Oratory
of Boccaleone

130

**Vedovella
1 bocca**

Via Boccaleone,
Via Gasparini

Accessibility:
Parco delle Rane



133

**Vedovella
1 bocca**

Via Quasimodo,
Via Campagnola

Accessibility:
Parco Campagnola

131

**Vedovella
1 bocca**

Via Gasparini

Accessibility:
Park near sports fields



134

**Vedovella
1 bocca**

Via Quasimodo,
Via Campagnola

Accessibility:
Parco Campagnola

132

**Vedovella
1 bocca**

Via per Orio

Accessibility:
Garden for Orio



135

**Vedovella
1 bocca**

Via Quasimodo,
Via Campagnola

Accessibility:
Parco Campagnola

136

**Vedovella
1 bocca**

Via Quasimodo,
Via Campagnola

Accessibility:
Parco Campagnola



139

**Vedovella
2 bocche**

Via Carnovali,
Via San Giovanni Bosco

Accessibility:
Parco Malpensata

137

**Vedovella
3 bocche**

Via Ambiveri,
Circonvallazione

Accessibility:
on the street



140

**Vedovella
1 bocca**

Via Lolmi

Accessibility:
Park of via Lolmi

138

**Vedovella
1 bocca**

Via Carnovali,
Via San Giovanni Bosco

Accessibility:
Parco Malpensata



141

**Vedovella
1 bocca**

Via Europa

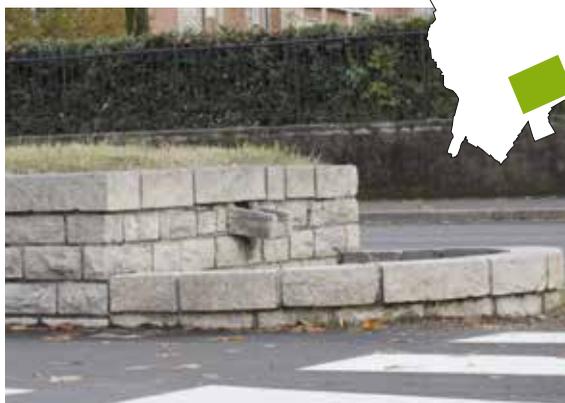
Accessibility:
In the Natta Institute

142

**Fontana d'ingresso
alla città
dall'Autostrada**

Via Carnovali

Accessibility:
on the street



MAP 7:

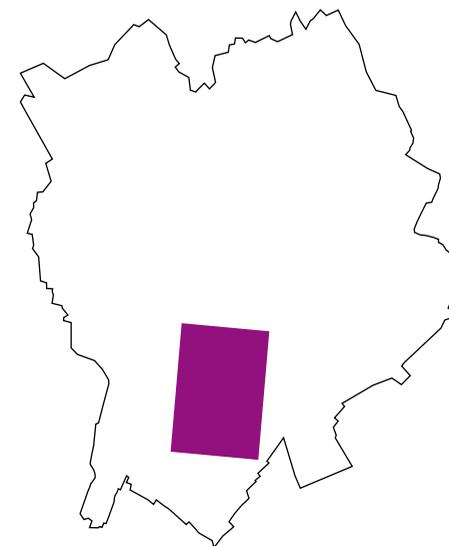
S. BERNARDINO - COLOGNOLA

From number 144 to number 155

12 Fountains

● 7 Always accessible

● 5 Limited access



143

**Fontana d'ingresso
alla città
dall'Autostrada**

Via Carnovali

Accessibility:
on the street



144 ●

145 ●

146 ●

147 ●

148 ●

149 ●

150 ●

151 ●

152 ●

153 ●

154 ●

155 ●

147

**Vedovella
1 bocca**

Strada di Sisto Vecchio

Accessibility:
Colognola ai Colli park (open)



150

**Vedovella
1 bocca**

Via Azzanella

Accessibility:
on the street



148

**Vedovella
3 bocche**

Piazza Emanuele
Filiberto

Accessibility:
on the street



151

**Vedovella
3 bocche**

Via Einstein
Via Linneo

Accessibility:
open green area



149

**Vedovella
1 bocca**

Via Azzanella

Accessibility:
Parco Azzanella



152

**Vedovella
3 bocche**

Via Costantina
Via Muzio

Accessibility:
open green area



153
Fontana della Vittoria

Via della Vittoria

Accessibility:
on the street



154
Vedovella
1 bocca

Via Rampinelli

Accessibility:
Parco delle Fragole



155
Vedovella
1 bocca

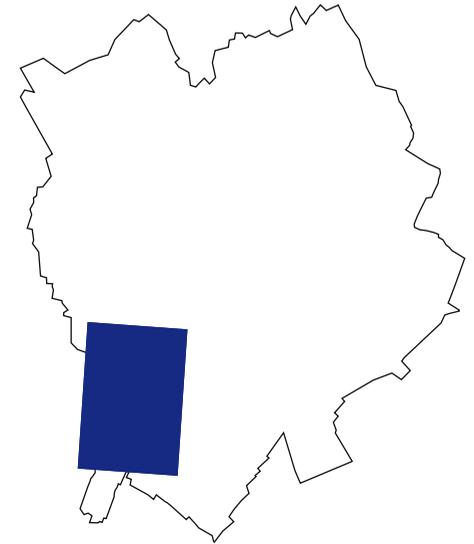
Via Minali

Accessibility:
on the street



MAP 8:
GRUMELLO AL PIANO - PROMESSI SPOSI
From number 156 to number 173

- 18 Fountains
- 3 Always accessible
- 15 Limited access



- | | |
|-------|-------|
| 156 ● | 168 ● |
| 157 ● | 169 ● |
| 158 ● | 170 ● |
| 159 ● | 171 ● |
| 160 ● | 172 ● |
| 161 ● | 173 ● |
| 162 ● | |
| 163 ● | |
| 164 ● | |
| 165 ● | |
| 166 ● | |
| 167 ● | |

156

**Vedovella
1 bocca**

Piazza Aquileia
Via Madonna dei Campi

Accessibility:
on the street



159

**Fontana
del laghetto
della Trucca**

Strada alla Trucca

Accessibility:
Parco alla Trucca

157

**Vedovella
3 bocche**

Via Morali

Accessibility:
Parco Via Morali



160

**Vedovella
1 bocca**

Strada alla Trucca

Accessibility:
Parco alla Trucca

158

**Vedovella
1 bocca**

Via Giovanelli
Via Tadino

Accessibility:
on the street



161

**Vedovella
1 bocca**

Strada alla Trucca

Accessibility:
Parco alla Trucca

162

**Vedovella
1 bocca**

Via Cavalli
Via delle Cave

Accessibility:
Parco Via Cavalli



165

**Colonnina
1 bocca**

Via Cavalli
Via delle Cave

Accessibility:
Parco Via Cavalli

163

**Colonnina
1 bocca**

Via Cavalli
Via delle Cave

Accessibility:
Parco Via Cavalli



166

**Vedovella
3 bocche**

Piazzale Visconti

Accessibility:
open green area

164

**Colonnina
1 bocca**

Via Cavalli
Via delle Cave

Accessibility:
Parco Via Cavalli



167

**Vedovella
3 bocche**

Via Promessi Sposi
Via Cantù

Accessibility:
Parco Promessi Sposi

168

**Vedovella
1 bocca**

Via S. Ambrogio

Accessibility:
Parco S. Ambrogio



171

**Vedovella
1 bocca**

Via Guerrazzi
Via Promessi Sposi

Accessibility:
Parco Via Guerrazzi

169

**Colonnina
1 bocca**

Via per Curnasco
Via Pelliccioli

Accessibility:
Parco Via per Curasco



172

**Vedovella
1 bocca**

Via delle Cave

Accessibility:
Parco Via delle Cave

170

**Vedovella
1 bocca**

Via Guerrazzi
Via Promessi Sposi

Accessibility:
Parco Via Guerrazzi



173

**Colonnina
1 bocca**

Via Moroni

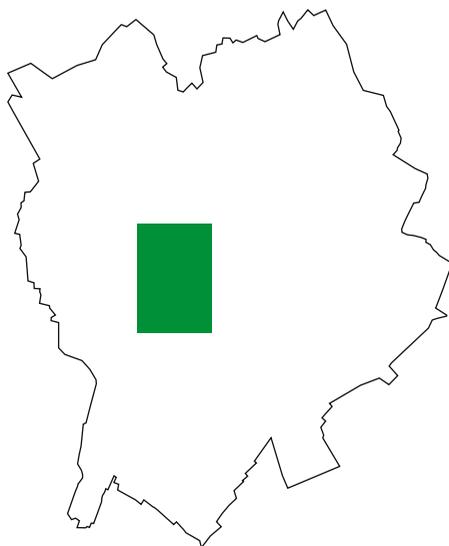
Accessibility:
the dog area

MAP 9:
S. LUCIA - S. PAOLO - LORETO
From number 174 to number 198

24 Fountains

● 9 Always accessible

● 15 Limited access



174	●	186	●
175	●	187	●
176	●	188	●
177	●	189	●
178	●	190	●
179	●	191	●
180	●	192	●
181	●	193	●
182	●	194	●
183	●	195	●
184	●	196	●
185	●	197	●



174

**Vedovella
1 bocca**

Via Cerasoli
Via Moroni

Accessibility:
Parco Ardens



177

**Colonna
in cemento**

Via Ceresa

Accessibility:
Playground open

175

Vedovella

Via Palma il Vecchio
Via S. Lazzaro

Accessibility:
Triangolo Garden



178

**Vedovella
1 bocca**

Via Leopardi
Via Monti

Accessibility:
Garden 8 marzo

176

**Vedovella
1 bocca**

Via Ronzoni
Via Ceresa

Accessibility:
Park of via Ronzoni



179

**Vedovella
1 bocca**

Via Leopardi
Via Monti

Accessibility:
Garden 8 marzo

180

**Vedovella
1 bocca**

Via Leopardi
Via Monti

Accessibility:
Garden 8 marzo



183

**Vedovella
1 bocca**

Via Leopardi
Via Monti

Accessibility:
Garden 8 marzo



181

**Vedovella
1 bocca**

Via Leopardi
Via Monti

Accessibility:
Garden 8 marzo



184

**Vedovella
1 bocca**

Via Leopardi
Via Monti

Accessibility:
Garden 8 marzo



182

**Vedovella
1 bocca**

Via Leopardi
Via Monti

Accessibility:
Garden 8 marzo



185

**Vedovella
1 bocca**

Via Goethe
Viale Corpo Italiano

Accessibility:
Parco Scattini (open)



186

**Vedovella
1 bocca**

Via Goethe
Viale Corpo Italiano

Accessibility:
Parco Scattini (open)



189

**Vedovella
3 bocche**

Via Coghetti

Accessibility:
Open area between residential
buildings

187

**Vedovella
1 bocca**

Via Goethe
Viale Corpo Italiano

Accessibility:
Parco Scattini (open)



190

**Vedovella
3 bocche**

Via Coghetti

Accessibility:
Open area between residential
buildings

188

**Vedovella
3 bocche**

Via Coghetti

Accessibility:
Open area between residential
buildings



191

**Vedovella
1 bocca**

Via XXIV Maggio
Via Broseta

Accessibility:
Parco Paul Harris

192

**Vedovella
1 bocca**

Via Diaz
Via Broseta

Accessibility:
Parco Paul Harris



195

**Vedovella
3 bocche**

Via Diaz
Via Broseta

Accessibility:
Parco Locatelli

193

**Vedovella
1 bocca**

Via Mazzini
Via Diaz

Accessibility:
Parco Via Mazzini



196

**Vaschetta
in pietra**

Rotonda di S. Lucia
Scaletta S. Luci

Accessibility:
on the street

194

**Vedovella
2 bocche**

Via Diaz
Via Broseta

Accessibility:
Parco Locatelli



197

**Vedovella
1 bocca**

Via Statuto
Via S. Lucia

Accessibility:
on the street



PIEGNA

VIA LAVADERO

VIA ASTINO

VIA TORMI

TEMPIO
DEI CADUTI

VIA S. PIETRO
CARRI

VIA S. MARTINO DELLA
PIAZZA

VIA GUIDO SYLVA

PIAZZA
VARGAVIA

VIA BROSETTA

VIA S. PIETRO
CARRI

VIA PASTEUR

VIA MIEUCCI

VIA BRIANTEA

VIA MARTINO LU
HER KING

ASTINO

VIA ASTINO

VIA RIPA PASQUALINA

VIA S. MARTINO DELLA
PIAZZA

BENVAGLIA

PORTONE
S. MATTEO

VIA LOCHIS

PARCO
DI LORETO

POLARESCO

VIA BRIANTEA

VIA ASTINO

VIA DEL CELTRO

VIA LONGUELO

VIA LONGUELO

VIA MATTIOLI

VIA DEL POLARESCO

VIA BRIANTEA

PIEGNA

VIA DONNA
DEL BOSCO

VIA ASTINO

VIA ASTINO

VIA ASTINO

VIA LONGUELO

VIA LONGUELO

VIA FELI ROTA

VIA MATTIOLI

VIA DEL POLARESCO

VIA BERGAMO

VIA BRIANTEA

CONVALLAZIONE

219

218

217

215

212

214

211

210

209

208

216

205

206

204

207

203

201

202

199

200

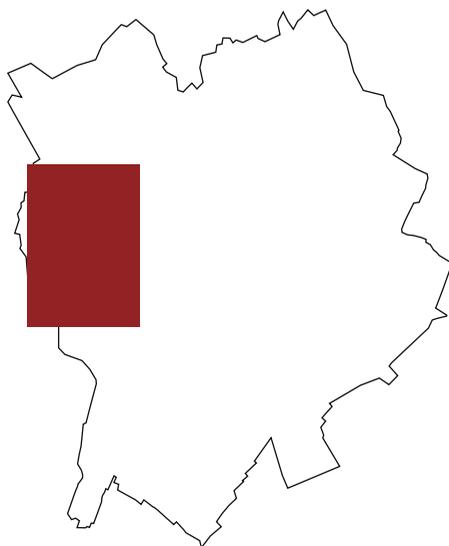
198

MAP 10:
 LONGUELO - MADONNA DEL BOSCO
 From number 198 to number 219

22 Fountains

● 12 Always accessible

● 10 Limited access



- | | |
|-------|-------|
| 198 ● | 210 ● |
| 199 ● | 211 ● |
| 200 ● | 212 ● |
| 201 ● | 213 ● |
| 202 ● | 214 ● |
| 203 ● | 215 ● |
| 204 ● | 216 ● |
| 205 ● | 217 ● |
| 206 ● | 218 ● |
| 207 ● | 219 ● |
| 208 ● | |
| 209 ● | |



198
Vedovella
1 bocca

Via Curie
 Via Meucci

Accessibility:
 open green area



199
Colonnina
Fervet

Via Curie
 Area condominiale 167

Accessibility:
 Open area between residential buildings



200
Colonnina
Fervet

Via Curie
 Area condominiale 167

Accessibility:
 Open area between residential buildings

201

Colonnina Fervet

Via Meucci
Area condominiale 167

Accessibility:
Open area between residential buildings



204

Vedovella 3 bocche

Via Lochis
Largo Fabre

Accessibility:
Parco Beata Cittadini
(ex Loreto)



202

Colonnina Fervet

Via Meucci
Area condominiale 167

Accessibility:
Open area between residential buildings



205

Vedovella 1 bocca

Portone di S. Matteo
Via Strada Vecchia

Accessibility:
on the street



203

Vedovella 2 bocche

Via Lochis
Largo Fabre

Accessibility:
Parco Beata Cittadini
(ex Loreto)



206

Muretto in pietra

Scaletta Bellavista

Accessibility:
on the street



207

**Vedovella
1 bocca**

Via del Polaresco

Accessibility:

In the Polaresco park



210

**Vedovella
1 bocca**

Via Lochis
Via Longuelo

Accessibility:

Parco Carlo Leidi
at the gate in Via Lochis

208

**Vedovella
1 bocca**

Via Lochis
Via Longuelo

Accessibility:

Parco Carlo Leidi
at the gate in Via Lochis



211

**Vedovella
1 bocca**

Via Lochis
Via Longuelo

Accessibility:

Parco Carlo Leidi
at the gate in Via Lochis

209

**Vedovella
1 bocca**

Via Lochis
Via Longuelo

Accessibility:

Parco Carlo Leidi
at the gate in Via Lochis



212

**Lavatoio
di Longuelo**

Via Longuelo

Accessibility:

In the courtyard of a residential
building

213

**Colonnina
1 bocca**

Via Bellini
Via F.lli Rota

Accessibility:
in the square



216

**Vedovella
1 bocca**

Via Perosi

Accessibility:
Park of via Perosi

214

**Vedovella
1 bocca**

Via Lochis

Accessibility:
on the street



217

**Vedovella
1 bocca**

Via del Celtro
Via Ripa Pasqualina

Accessibility:
on the street

215

**Vedovella
1 bocca**

Via Longuelo
Via Gozzi

Accessibility:
Park of Via Gozzi



218

**Vaschetta
in cemento**

Via Madonna del Bosco
Via Castel Presati

Accessibility:
on the street

219

Pietrame

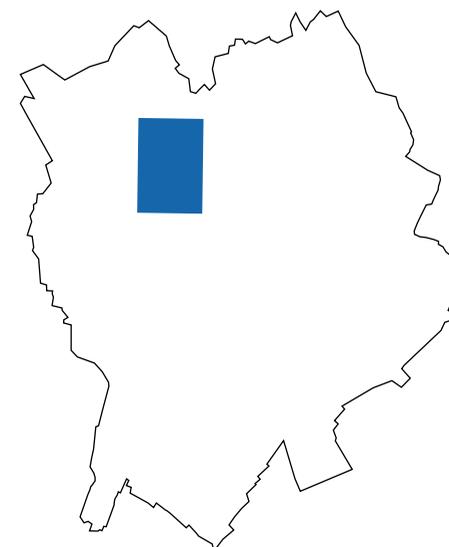
Via Madonna del Bosco
Tornanti

Accessibility:
on the street

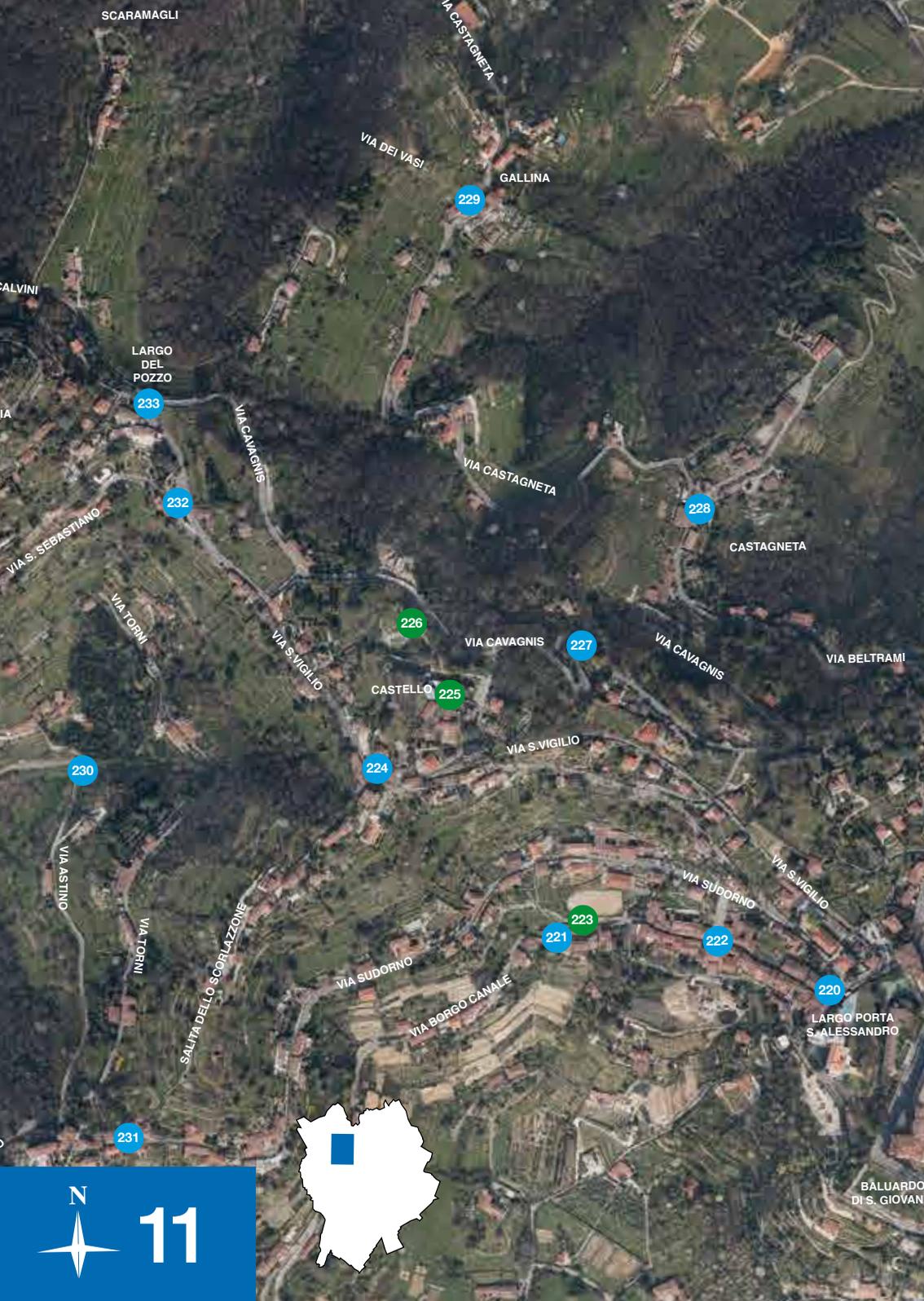


MAP 11:
BORGO CANALE - S. VIGILIO - CASTAGNETA
From number 220 to number 233

- 14 Fountains
- 11 Always accessible
- 3 Limited access



- | | |
|-------|-------|
| 220 ● | 232 ● |
| 221 ● | 233 ● |
| 222 ● | |
| 223 ● | |
| 224 ● | |
| 225 ● | |
| 226 ● | |
| 227 ● | |
| 228 ● | |
| 229 ● | |
| 230 ● | |
| 231 ● | |



220

**Piastra
in ghisa**

Largo Porta
S. Alessandro

Accessibility:
on the street



221

**Piastra
in ghisa**

Via Borgo Canale

Accessibility:
on the street



222

**Fontana
di S. Gottardo**

Via Borgo Canale
Sagrato chiesa

Accessibility:
on the street

223

**Lavatoio
di S. Erasmo**

Via Borgo Canale



Accessibility:
Behind a gate

224

**Vedovella
1 bocca**

Via S. Vigilio
Via al Castello



Accessibility:
on the street

225

**Vaschetta
in cemento**

Via al Castello



Accessibility:
In the Castle entering the steps
on the left

226

**Fontana
del Castello
di S. Vigilio**

Via al Castello



Accessibility:
Parco del Castello di S. Vigilio

227

**Vedovella
1 bocca**

Via Cavagnis
Tornanti



Accessibility:
on the street

228

**Vedovella
1 bocca**

Via Castagneta
P.za chiesa S. Rocco



Accessibility:
on the street

229

**Vedovella
1 bocca**

Via Castagneta
Via dei Vasi

Accessibility:
on the street



232

**Vaschetta
in cemento**

Via S. Vigilio

Accessibility:
On the panoramic terrace (open)

230

**Piastra
in ghisa**

Via Astino
Via Lavaderio

Accessibility:
on the street



233

**Piastra
in ghisa**

Largo del Pozzo

Accessibility:
on the street

231

**Piastra
in ghisa**

Via Sudorn,
Salita dello Scorlazzone

Accessibility:
on the street





MADONNA DELLA CASTAGNA

240

VIA MADONNA DELLA CASTAGNA

239

FONTANA

VIA COLLE DEI ROCCOLI

VIA RAMERA

VIA DEI VASI

VIA RAMERA

238

VIA ORSAROLA

VIA ORSAROLA

236

235

VIA S. SEBASTIANO

VIA TORRI

237

VIA S. SEBASTIANO

VIA PASCOLO DEI TEDESCHI

234

VIA MARIENI

VIA PASCOLO DEI TEDESCHI

VIA SOMBRENO



MAP 12:

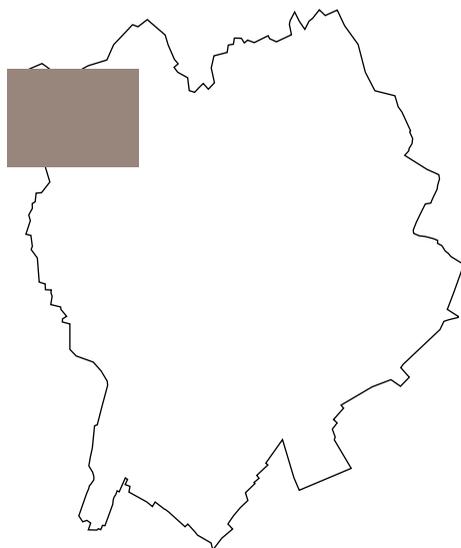
MADONNA DELLA CASTAGNA - FONTANA

From number 234 to number 240

7 Fountains

● 7 Always accessible

● 0 Limited access



234 ●

235 ●

236 ●

237 ●

238 ●

239 ●

240 ●



234

Vaschetta in pietra

Via Marieni
Via S. Sebastiano

Accessibility:
on the street



235

Piastra in ghisa

Via Torni civ. 15

Accessibility:
on the street



236

Fontana della sorgente dell'Acqua Morta

Via S. Sebastiano

Accessibility:
on the street

237

**Vedovella
3 bocche**

Via S. Sebastiano

Accessibility:
on the street



240

**Vedovella
1 bocca**

Via Madonna della
Castagna, Santuario

Accessibility:
on the street

238

**Fontanino
dell'acquedotto
dei Vasi**

Via Ramera
Via dei Vas

Accessibility:
on the street



239

**Vedovella
1 bocca**

Via Fontana
Via Madonna della Cast.

Accessibility:
on the street



INDEX OF THE FOUNTAINS

● Always accessible ● Limited access

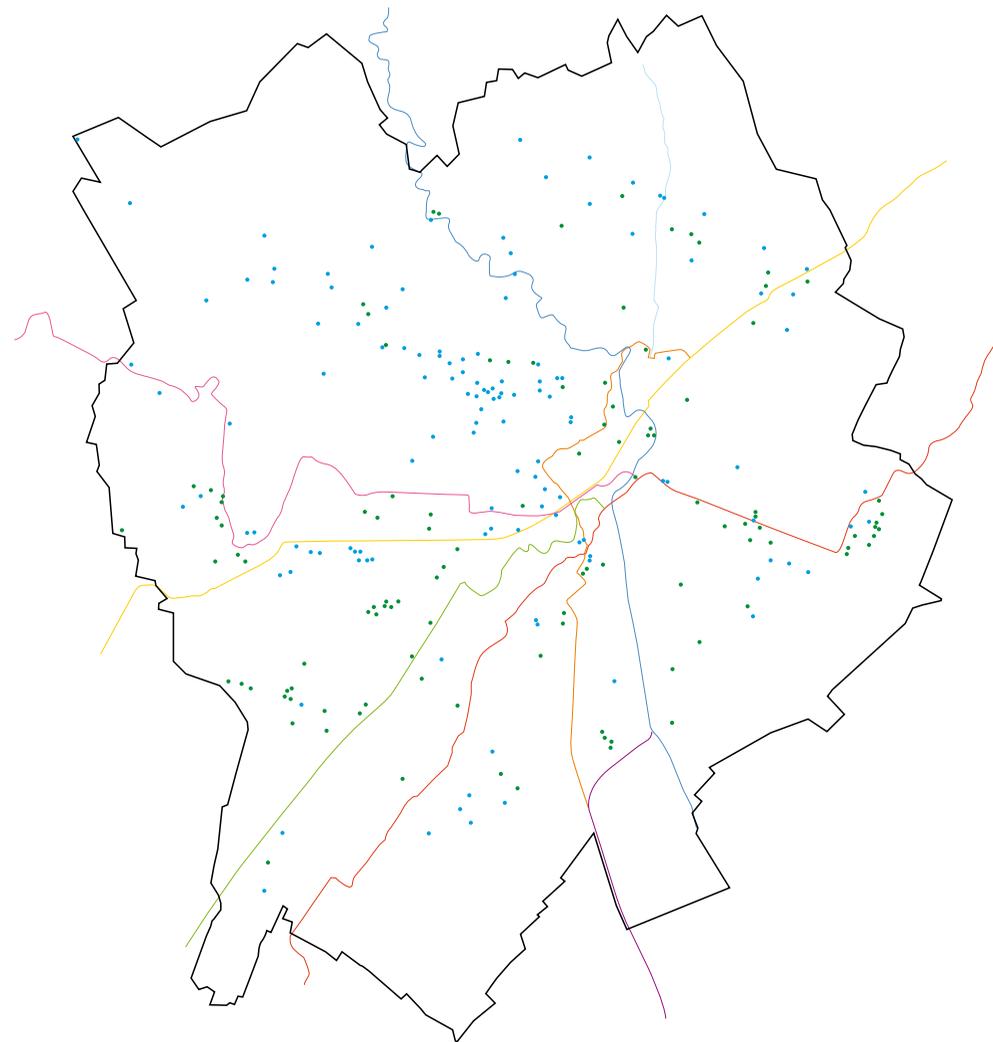
1	●	32	●	63	●	94	●	125	●	156	●	187	●	218	●
2	●	33	●	64	●	95	●	126	●	157	●	188	●	219	●
3	●	34	●	65	●	96	●	127	●	158	●	189	●	220	●
4	●	35	●	66	●	97	●	128	●	159	●	190	●	221	●
5	●	36	●	67	●	98	●	129	●	160	●	191	●	222	●
6	●	37	●	68	●	99	●	130	●	161	●	192	●	223	●
7	●	38	●	69	●	100	●	131	●	162	●	193	●	224	●
8	●	39	●	70	●	101	●	132	●	163	●	194	●	225	●
9	●	40	●	71	●	102	●	133	●	164	●	195	●	226	●
10	●	41	●	72	●	103	●	134	●	165	●	196	●	227	●
11	●	42	●	73	●	104	●	135	●	166	●	197	●	228	●
12	●	43	●	74	●	105	●	136	●	167	●	198	●	229	●
13	●	44	●	75	●	106	●	137	●	168	●	199	●	230	●
14	●	45	●	76	●	107	●	138	●	169	●	200	●	231	●
15	●	46	●	77	●	108	●	139	●	170	●	201	●	232	●
16	●	47	●	78	●	109	●	140	●	171	●	202	●	233	●
17	●	48	●	79	●	110	●	141	●	172	●	203	●	234	●
18	●	49	●	80	●	111	●	142	●	173	●	204	●	235	●
19	●	50	●	81	●	112	●	143	●	174	●	205	●	236	●
20	●	51	●	82	●	113	●	144	●	175	●	206	●	237	●
21	●	52	●	83	●	114	●	145	●	176	●	207	●	238	●
22	●	53	●	84	●	115	●	146	●	177	●	208	●	239	●
23	●	54	●	85	●	116	●	147	●	178	●	209	●	240	●
24	●	55	●	86	●	117	●	148	●	179	●	210	●		
25	●	56	●	87	●	118	●	149	●	180	●	211	●		
26	●	57	●	88	●	119	●	150	●	181	●	212	●		
27	●	58	●	89	●	120	●	151	●	182	●	213	●		
28	●	59	●	90	●	121	●	152	●	183	●	214	●		
29	●	60	●	91	●	122	●	153	●	184	●	215	●		
30	●	61	●	92	●	123	●	154	●	185	●	216	●		
31	●	62	●	93	●	124	●	155	●	186	●	217	●		

BIBLIOGRAFIA

- Celestino Colleoni, *Historia quadripartita di Bergamo*, 1617-1618;
- Padre D. Calvi, *Effemeride sacro profana di quanto di memorabile sia successo in Bergamo*, 1676, Milano;
- Angelo Mazzi, *Alcune indicazioni per servire alla topografia di Bergamo nei secoli IX e X*, 1870, tipografia Pagnoncelli;
- Angelo Mazzi, *Le Vicinie di Bergamo*, 1884;
- Elia Fornoni, *Manoscritti Fornoni, La storia di Bergamo*, Bergamo, inedito;
- Elia Fornoni, *Le fortificazioni di Bergamo sotto la Repubblica Veneta*, 1981, Bergamo, Tipografia S. Alessandro;
- Elia Fornoni, *Studi sull'antica città di Bergamo*, 1891, Bergamo, Cattaneo;
- Elia Fornoni, *Le Vicinie cittadine*, 1905, Bergamo, Bolis;
- Mosè del Brolo, *Liber Pergaminus*: testo, versione, apparato critico, note / edizione critica a cura di Giovanni Pesenti, 1914, Bergamo, Bolis;
- Pietro Pesenti, *La rivista di Bergamo*, anno 2, gennaio 1923, Le fontane di Bergamo, pagina 627-633;
- Mainoli Giuseppe, *Gli acquedotti della città di Bergamo*, 1934, Bergamo, Anonima Bolis;
- Luigi Angelini, *Il volto di Bergamo nei secoli*, 1952, Bergamo, Poligrafiche Bolis;
- Luigi Angelini, schizzi di Trento Longaretti: *Antiche fontane e portali di Bergamo*, 1964, Bergamo, Conti;
- Sandro Angelini, *Bergamo d'altri tempi*, 1969, Bergamo, Istituto Italiano d'Arti Grafiche;
- Azienda Autonoma di Turismo, *Le mura di Bergamo*, 1977, Bergamo;
- Claudia Storti Storchi, *Lo statuto di Bergamo del 1331*, 1986, Milano, Giuffrè editore;
- Raffaella Poggiani Keller, *Bergamo dalle origini all'altomedioevo*, 1986, Modena, Edizioni Panini;
- Paolo Guerini, *Le vie di Bergamo: i loro nomi, le loro storie*, 1988, Bergamo, Arnoldi;
- Sandro Angelini, Leonardo Angelini, *Bergamo: Città Alta una vicenda urbana*, 1989, Bergamo, comune di Bergamo;
- Pino Capellini, *Acqua e acquedotti nella storia di Bergamo*, 1990, Bergamo, Arnoldi;
- Nevio Basezzi, Bruno Signorelli, gruppo speleologico bergamasco "Le Nottole", *Gli antichi acquedotti di Bergamo*, 1992, Bergamo, Signorelli, Bruno;

- Lelio Pagani, *Bergamo Lineamenti e dinamiche della città*, 2000, Bergamo, University press, Sestante;
- Francesco Radino, *Le vie d'acqua: rogge, navigli e canali*, 2000, Milano, Electa;
- Provincia di Bergamo, Università degli studi di Bergamo, *Acqua e territorio per un progetto di valorizzazione*, 2004, Bergamo, Stamperia Stefanoni;
- Tosca Rossi, *A volo d'uccello*, 2012, Bergamo, Litostampa Istituto Grafico;
- Bernardino Calderola, AQ - *Acque in Città Alta*;
- E. Malara, G. Radice, *La fontana delle Rogge*, Parco Suardi, 2008, Bergamo;
- *Le acque nella bergamasca*, a cura del Consorzio di bonifica della media pianura bergamasca, 2001;
- Mario Di Fido, *Il Consorzio di bonifica bergamasco e la sua storia*, 2005 (1ª edizione), 2009 (2ª edizione)

- Archivio 1800/1900 del Comune di Bergamo, Faldone acque;
- *Raccolta Gaffuri e raccolta Bergamo Illustrata* della Biblioteca Civica Angelo Mai;
- Dalla sezione periodici della biblioteca Angelo Mai: *La rivista di Bergamo*; *L'Eco di Bergamo*.



Gianluca Licata

Is a student at the Accademia Carrara di Bergamo.

He began his study of the fountains in 2012 and two years later published this new edition in collaboration with the Consorzio di Bonifica della Media Pianura Bergamasca. In 2013 he published two editions independently: *Le fontanelle di Bergamo* and *Le fontanelle di Bergamo: seconda edizione*.

This publication elaborates on the historic profile of the city and its relationship with the water sources that defined its evolution. The story accompanies the reader from the first springs of the Iron Age to the present day. The aim is to provide a clear overview of the distribution of the fountains and highlight how this essential element of urban development is fundamentally entwined with the history of the places and the people that live here.

Graphics, layout, and printing
by Mediatek Communication S.r.l.

2nd Edition
A special dedication to EXPO 2015

Printed
on April 22, 2015
recurrence of S. Caio



Consorzio di Bonifica della Media Pianura Bergamasca

Via Gritti, 21/25 - 24125 - BERGAMO

Ph. +39 035 4222.111 - Fax + 39 035 422.7774

info@cbbg.it - www.cbonificabergamo.lombardia.it