

area of Canaan land. The neighbourhood is one of the less dense in the area where just 3,000 people live there. The houses are spread all over Sources Puantes and are interconnected through secondary streets. The open spaces are abandoned and open the possibility for further development in the neighbourhood.

UN-Habitat followed the similar participatory approach as for the rest of the neighborhoods. The process begins with mapping the existing reality of the neighborhood. The proposal for each neighbourhood, is based on the input of the community, stakeholders and residents which is involved in the different phases of the evolving planning and design process.

- 1. Mapping the existing situation
- 2. Mapping proposed interventions
- 3. Community workshops

- 4. New proposals draft
- 5. Selected interventions map
- 6. Neighbourhood assemblies

- 7. Draft of land use plan
- 8. Charrette and implementation

Fig. 164: Hautes Sources Puantes: participatory planning process

A. STREET NETWORK

The street network is not well structure and does not have a hierarchy. The number of secondary streets is really low leading to congestion in the future if the growth remains the same. Most of the existing roads lead to a dead-end. Appropriate measures for the roads in steep areas were been elaborated in the mobility report.

The new street network suggest in having an arterial road that crosses the neighbourhood from the South-East to the North-west of Sources Puantes. This road holds economic potentialities and will increase the accessibility to new employment opportunities. The steep slopes limit the con-

struction of roads, and therefore only one main road is proposed in the South where the topography is moderate. Inside the neighbourhood, the area will be interconnected by secondary roads. Different width for the different types of roads are defined (A and B, see below). It is not only suggested to propose new roads, but the upgrading of the existing ones is highly recommended. The street network of Sources Puantes will witness an increase of 17.5%.

Existing situation

Streets percentage UN-Habitat: 30%

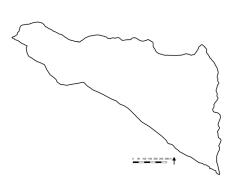
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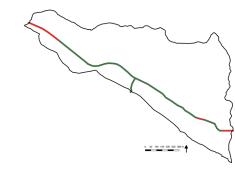
Streets km/sq.km UN-Habitat: 18 km/sq.km

9.4 km/sq.km

Fig. 165: Sources puantes: existing street network

Layers of the proposed street network







Proposed street network

23.3% - Option A

- Option B

Streets percentage

Arterial road: 24m Main roads: 18m

Arterial road: 18m

Secondary streets: 9m

Main roads: 12m

Secondary streets: 12m

National road

Arterial road

Main roads

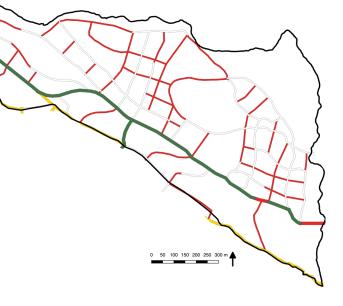
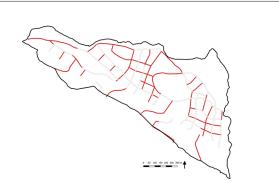


Fig. 166: Sources puantes Proposed street network



Secondary streets Fig. 167: Sources puantes: Layers of the proposed street network

B. PUBLIC SPACES



Fig. 168: Sources Puantes: Existing Public spaces

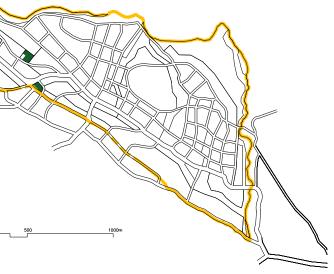
Fig. 169: Sources puantes: Public spaces proposed by the community

Fig. 170: Sources puantes: Public spaces proposed by UN-Habitat LAB

#	PUBLIC SPACE IN HAUTES SOURCES PUANTES	STATUS	NAME	m2	%
	Neighbourhood area			1,230,994	100%
1	Soccer field	Existing		7,500	
				7,500	0,61
2	Public space	Proposed by the community		3,900	
				3,900	0,32
3	Public space	Proposed by the LAB		1,835	
4	Public space	Proposed by the LAB		2,700	
5	Public space	Proposed by the LAB		1,684	
				6,219	0,51
. –			то	TAL: 17,619	1.43%

During the neighbourhood assemblies, a new space of 3,900 m2 was designated as a public space but the total percentage remained low. UN-Habitat therefore allocated three other spaces in the northern part to ensure an equitable repartition. Adding the proposals of the community to the Lab's ones, the percentage of public spaces will increase of 1HA.

Table 31. Sources puantes: Percentage of public spaces



Proposed by UN-Habitat LAB

There is only one existing public space in Sources Puantes. Since the current football court only occupy 0.61%, more public spaces should be considered in the new plan in order to reach UN-Habitat's recommendations. It is then essential to preserve vacant lands for the purpose of developing public usages.

The area on both side of the ravines presents a high environmental risks. The risk of flooding is very high and therefore a distance of 30 metres from both sides will be designated as a protection buffer zone. These areas were designed with the potential of becoming public spaces in off-rainy seasons. If the proposals are put in place, the total number of open spaces will reach 17.6%.

PUBLIC SPACE IN SOURCES PUANTES	STATUS	NAME	m²	На	%
Neighbourhood area			1,230,994	123	100%
Public spaces			17.619	0,018	1,43%
Buffer areas next to ravine	Proposed by the LAB		27,300	0.027	
Buffer areas next to ravine	Proposed by the LAB		42,592	0.042	
Buffer areas next to ravine	Proposed by the LAB		130,210	0.13	
		Total:	200,102	0.2	16,26%
al open public space	s:	217,721	21,7	17,69%	
	SOURCES PUANTES Neighbourhood area Public spaces Buffer areas next to ravine Buffer areas next to ravine Buffer areas next to ravine	SOURCES PUANTESSTATUSNeighbourhood areaPublic spacesBuffer areas next to ravineProposed by the LABBuffer areas next to ravineProposed by the LABBuffer areas next to ravineProposed by the LAB	SOURCES PUANTESSTATUSNAMENeighbourhood areaPublic spacesProposed by the LABBuffer areas next to ravineProposed by the LABProposed by the LABBuffer areas next to ravineProposed by the LABTotal:	SOURCES PUANTESSTATUSNAMEm2Neighbourhood area1,230,994Public spaces17.619Buffer areas next to ravineProposed by the LAB27,300Buffer areas next to ravineProposed by the LAB42,592Buffer areas next to ravineProposed by the LAB130,210Buffer areas next to ravineProposed by the LAB200,102	SOURCES PUANTESSTATUSNAMEm²HaNeighbourhood area1,230,994123Public spaces17.6190,018Buffer areas next to ravineProposed by the LAB27,3000.027Buffer areas next to ravineProposed by the LAB42,5920.042Buffer areas next to ravineProposed by the LAB130,2100.13Buffer areas next to ravineProposed by the LAB130,2100.2

Table 32. Sources puantes: Total percentage of public spaces

The World Health Organization (WHO) recommends 9m²/inhabitant

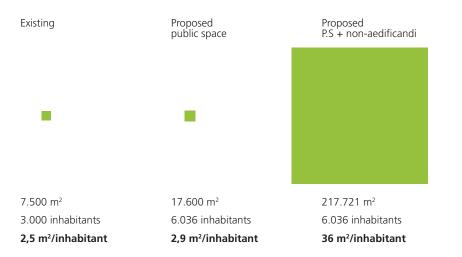
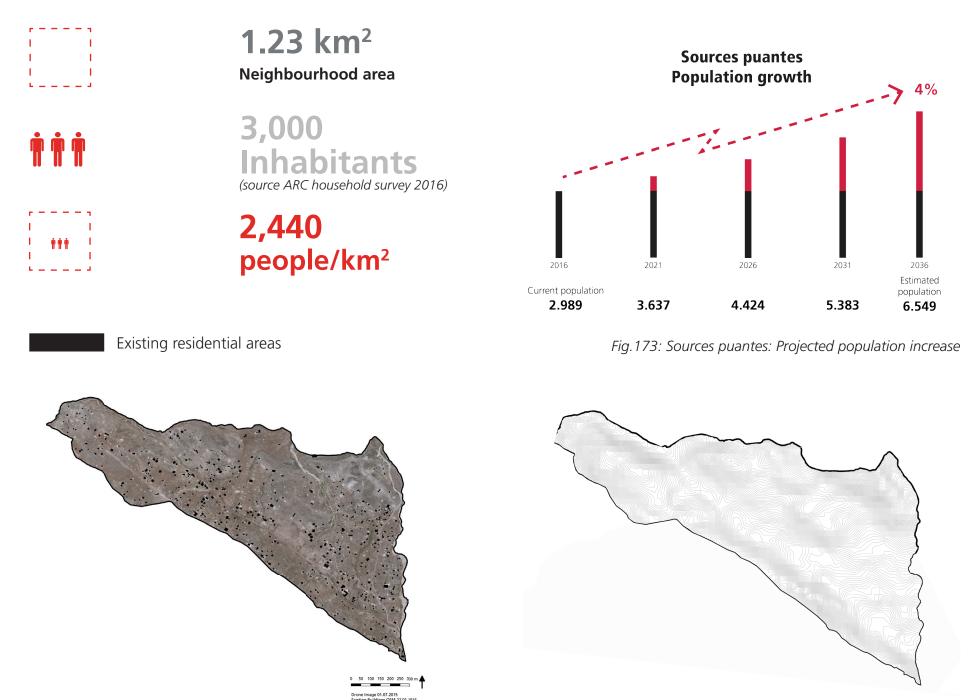


Table 33. Sources Puantes: Public space area per inhabitant diagram



Fig. 171: Sources Puantes: Overall public spaces' land use and buffer area (400m)

C. RESIDENTIAL AREAS



Proposed densities



Most of the low density areas are found in the north of the neighbourhood where the slopes becomes challenging. Considering a density of 8,000 inhabitants per km2 for this category, Hautes Sources Puantes will be able to host 2,616 people. The houses in this classification are often connected to secondary streets. It is possible to have small commerce provided their connection to pedestrian paths.



The medium density areas in the new plan are not many. They are in proximity of high density areas and from just 11HA of the total neighbourhood's area. The topography is moderate and densification of existing low density zones into medium ones is therefore feasible. The plan proposes in having 12,000 people per km2 in this category which means 1,332 inhabitants will be able to live in Source Puantes.

Fig. 174: Sources Puantes: Contours

mostly next to accessible roads. The topography is complex in

the north where the slopes becomes steep leaving no possibility

for development to happen.

The location of high density areas is concentrated in the centre of the neighbourhood and in proximity of the proposed arterial road. UN-Habitat recommends to have 15,000 people per km2 in this category. This means that a study of plot resizing and modification needs to be carefully conducted. Noting that the high density areas form 33Ha, Hautes Sources Puantes will be able to accommodate 2,097 people.

In the upcoming 20 years, and if the population growth remains

Fig. 172: Sources Puantes: Existing settlements

Hautes Source Puantes is a neighbourhood with low density. Having a population of 3,000 people and an area of 1.23km², the density of the neighbourhood is of 2.440 inhabitants per km2. The settlements are anarchically repatriated. They are found

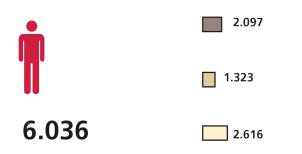
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Low density

Medium density

High density

Sources puantes Density and population



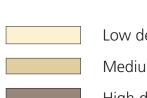
HIGH DENSITY MEDIUM DENSITY LOW DENSITY

POPULATION 15,000 / KM² (0.14 KM²/ 11,36%) POPULATION 12,000 / KM² (0.11 KM²/ 8,95%) POPULATION 8,000 / KM² (0.33KM²/ 26,57%)

Fig. 175: Sources Puantes: Diagram of population in the new proposed residential areas.

of 4%, it is expected that the current population of 2,989 will reach 6,549 inhabitants. The densification, as proposed in the new plan, will be able to host 6,036 people which is not sufficient. One saturated, the medium density areas will need to be more densified in order to respond to the population growth demand.

The presence of economic activities in the residential areas is highly encouraged on condition to have a direct access to the roads. The size of commercial activities depends on the types of roads and the density of the area; the higher the density, the bigger the commerce and vice versa. The compactness of the city is induced by the integration of different usages into the urban fabric.



Low density

Medium density

High density



Fig. 176: Sources puantes: Residential areas and proposed densities

D. COMMERCIAL AREAS

