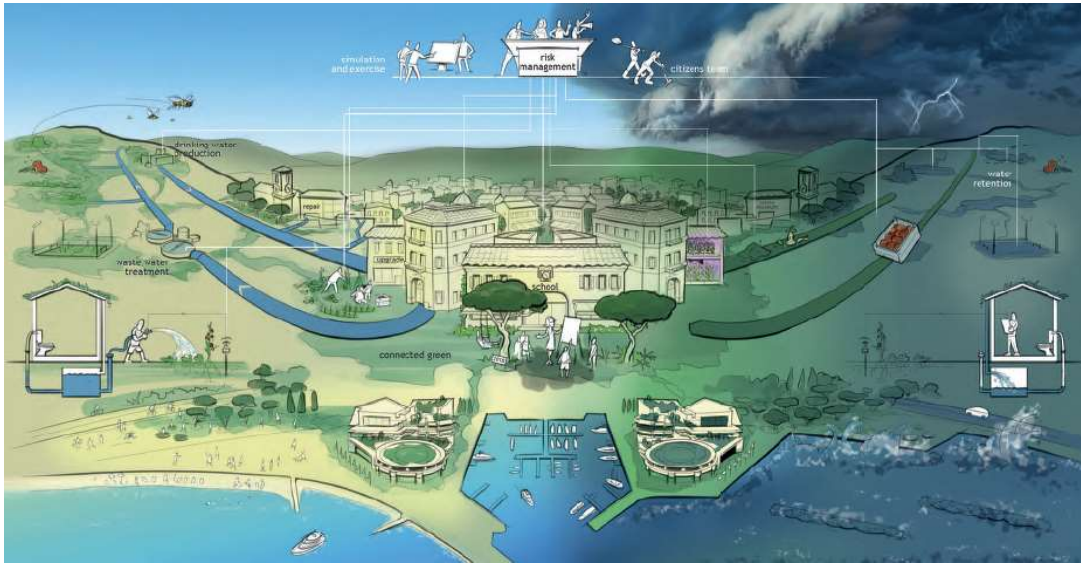
Roadmap to Cannes 2050:
A green, safe and pleasant city



Presentation for the Joint roadmap workshop
01 october 2020

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Cannes NBS interventions

- Which NBS can enable water retention while keeping the glamourous identity of the city center and protect the coast from storm waves?
- Which NBS will contribute to quality of the public space and smart water retention systems to buffer for dry periods in Petit Juas, la Republique and La Bocca (districts in renovation)?
- Which NBS will enable La Roubine to become a resilient and green eco-district & showcase for NBS and improve green and blue space quality and accessibility along the Frayère river (Cannes Grand Ouest Project)?
- Which NBS can enable water retention during heavy rainfalls and availability of clean water for use in agriculture in Basse Vallée de la Siagne?

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Cannes Governance interventions

- How to create a green mentality and make sure that NBS are directly integrated in urban planning?

- How to find sustainable financing for implementing NBS in the city?

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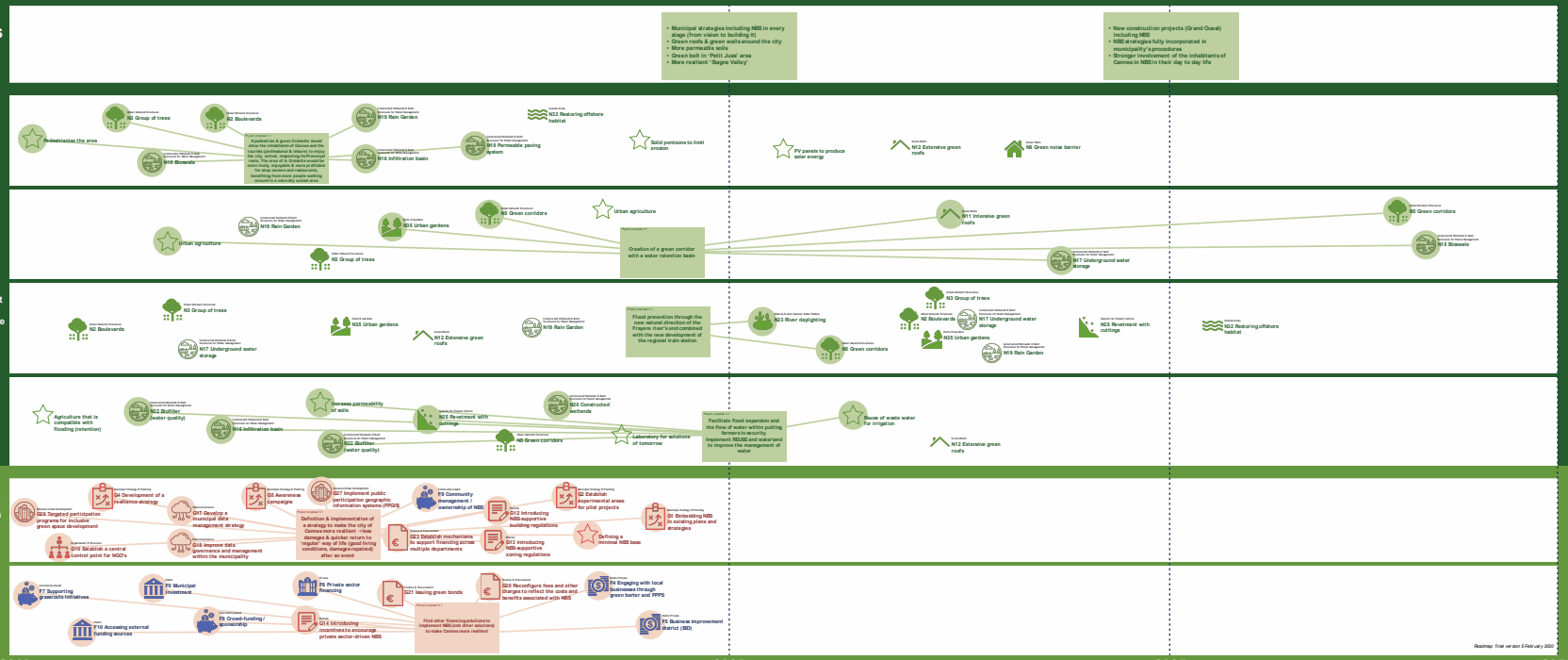
Cannes roadmap to 2050

ROADMAP — NATURE-BASED SOLUTIONS FOR CLIMATE & WATER RESILIENCE



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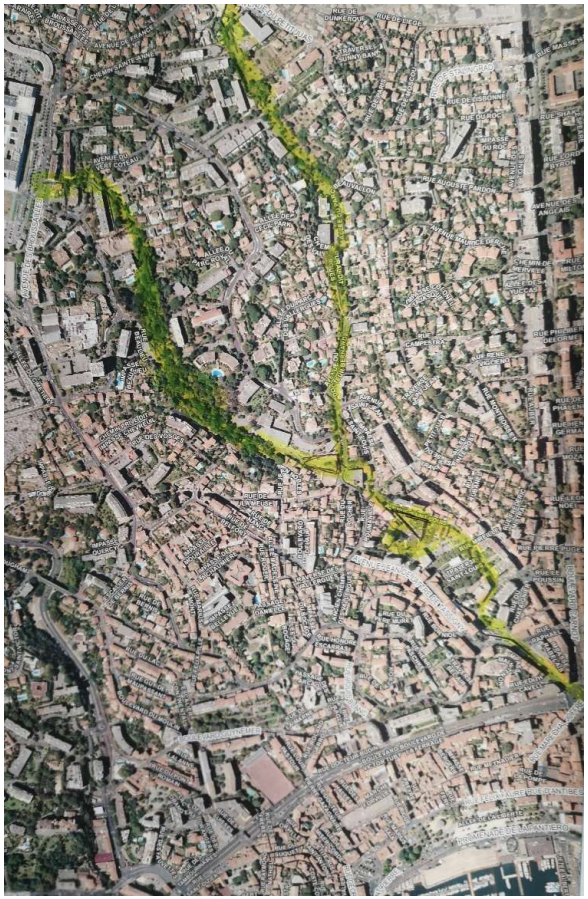
Cannes NBS Projects

Cannes NBS Project 1 : Creation of a green corridor in Petit Juas district



Objectives:

- Increase retention
- Lower summer temperatures
- Raising awareness of the presence of water
- Biodiversity corridor and pedestrian displacement

NBS : retention basin, rain garden, shared gardens, corridors of biodiversity between each valley

Conditions:

- Pre-existing green structure largely with a shared garden
- Have sufficient underground storage space
- Financial investment
- Climate-adapted plants and trees to minimize maintenance
- Integration of rooftop gardens
- Solidity of supporting structures and flat roofs

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Cannes NBS Project 1 : Creation of a green corridor in Petit Juas district

Beneficiaries:

- Strengthening of "Cannes Green and Sporty City"
- Residents and other residents: reducing noise pollution
- Biodiversity and air quality
- Contribution to the fight against global warming (reducing the carbon footprint)
- Lowering summer temperature and thermal amplitude
- Increase in property values for homeowners
- Improved quality of life

Process:

- 2020: feasibility studies (retention basin, greenways, integration of "inhabited" roofs on the Saint Louis project
- 2022: launch of project management and land acquisitions
- 2025: completion of the retention pond and rooftop gardens
- End max 2035

Indicators:

- Number of metres laid out on the green corridor
- Pedestrian attendance
- Capacity of the retention pool created
- Number of trees planted

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Cannes NBS Project 2 : Basse Vallée de la Siagne

Objectives: Improving water and flood management

The lower Siagne Valley could reduce the vulnerability of the entire territory to flooding while allowing a circular water economy and promoting biodiversity in a green and blue framework approach.

NBS:

- Flood expansion area : improvement / restoration of flood management functions
- Wetland: biodiversity, water management, amenity
- Other NBS: shoreline comfort, runoff filtration, soil infiltration, re-use of treated water

Conditions:

- Upstream action (La Roquette, Pegomas, existing polluting activities)
- Downstream action (Old Siagne spillway, motorway and airport crossing)
- Regulatory aspects
- Agricultural activity on the site

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Cannes NBS Project 2 : Basse Vallée de la Siagne

Process:

- Flow study on BVS
- Setting refuge areas for farmers' tools
- Recalibration Old Siagne and Béal
- Removal of corks
- Treatment of runoff from polluted water
- Soil de-waterproofing
- Solution to maintain flow functions of Old Siagne and Beal
- Shoreline stabilization
- Wetland recognition
- Wetland expansion
- Managing water arrivals and wetland outlet
- REUSE (uplift treated water throw the Beal and the wetland)
- Relocation of polluting activities

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Cannes NBS Project 3 : Renaturation of the Frayère river

Flood prevention through the new natural direction of the Frayere river's end combined with the new development of the regional train station

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Cannes NBS Project 3 : Renaturation of the Frayère river

Flood prevention through the new natural direction of the Frayere river's end combined with the new development of the regional train station

Objectives : Diversion of the Frayère with widening and development of the banks in green flow

NBS :

- Creation of a green corridor
- Renaturation of the river

Conditions :

- Land control
- Studies
- Possible soil remediation
- Relocation of economic activities

Beneficiaries : population, public authorities, local economic activities, wildlife, SNCF

➔ Flood control, protection of homes and public facilities, creation of a fun and sports area (green flow), biodiversity development, creation of TGV station

Financing : high cost

- SNCF participation (train company)
- PAPI participation (flood control plan)
- CACPL

Process :

- Before 2030 : taking into account in urban planning, PAPI and SNCF studies , the launching of land acquisitions
- Start of work after 2030

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Cannes Governance Project 1 : Definition and implementation of a strategy to make the City of Cannes more resilient to climate change

Objectives: reduction of the vulnerability of Cannes (development and buildings, awareness).

The integration of resilience in the public policy of the City, in the planning, in the development and in the mobilization of the inhabitants and other actors of the territory should help reduce the damage caused by climatic events and return to normal more quickly.

Conditions: the 3 climatic events of 2015 and 2019 made it possible to raise the awareness of all stakeholders and validate human, organizational and financial investments concerning the flood control policy and the new urban plan.

Indicators:

- Cost of repairing weather damage (which is expected to decrease)
- Number of victims (figure to be reduced to zero)
- Number of actors mobilized (to be increased)

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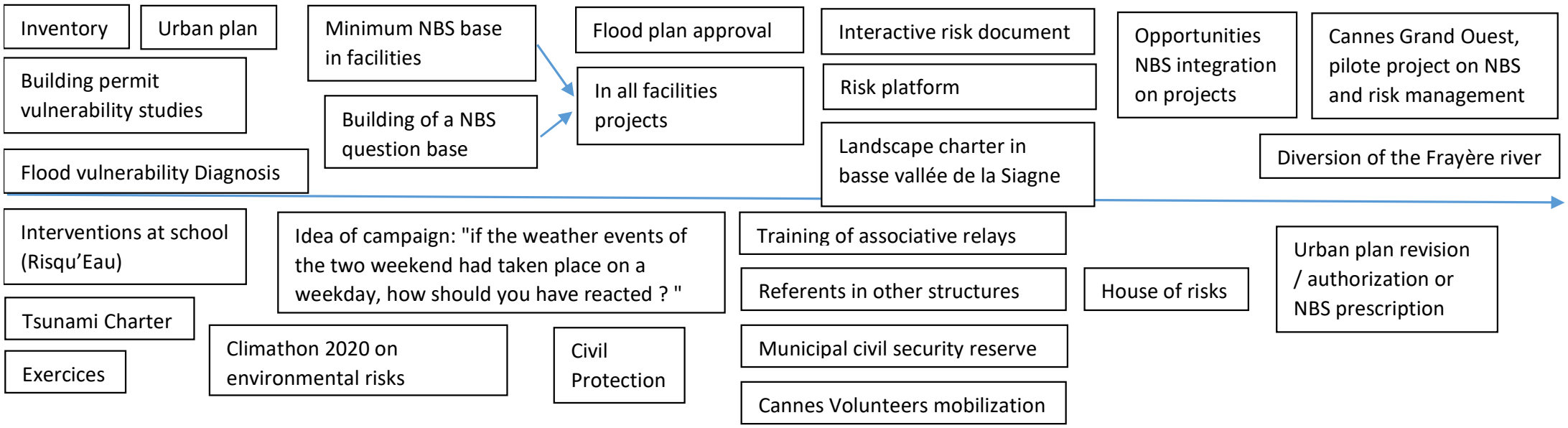
Cannes Governance Project 1 : Definition and implementation of a strategy to make the City of Cannes more resilient to climate change

Process:



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Questions to the frontrunner or other follower cities

How to implement NBS with our particular weather (long dry period in summer and violent rainfall episodes) ?

How to build green roofs (or green walls) resilient to dry period (without any water supply) and heavy rainfalls ?

Are permeable pavements efficient in case of heavy rainfalls ? How to manage permeability while the pervious soils (even natural soils) are made sealed under very heavy rainfall ?

How to implement NBS (which promote water in the center of the city) without promoting tiger mosquitoes (Aedes albopictus) ?

Do you use NBS solutions to protect your city against coastal erosion ?

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