Table: Criteria		
Column	Data type	Constraints
GlobalCriteriaID	INTEGER	•PRIMARY KEY AUTOINCREMENT
ObjectiveID	INTEGER	•REFERENCES Objectives (ObjectiveID)
CriteriaSubID	INTEGER	
CriteriaID	TEXT	•UNIQUE •AS (ObjectiveID || '.' || CriteriaSubID) •NOT NULL
CriteriaName	TEXT	

#	GlobalCriteriaID INTEGER	ObjectiveID INTEGER	CriteriaSubID INTEGER	CriteriaID TEXT	CriteriaName TEXT
0	1	1.1	1	1.1.1	Resilience planning and policies
1	2	1.1	2	1.1.2	Service system thinking
2	3	1.2	1	1.2.1	Interdependencies
3	4	1.2	2	1.2.2	Redundancies
4	5	1.3	1	1.3.1	Infrastructures' register
5	6	1.3	2	1.3.2	Monitoring, real-time control and early warning
6	7	1.3	3	1.3.3	Human and financial resources
7	8	1.3	4	1.3.4	Disturbing events
8	9	1.3	5	1.3.5	Climate change preparedness
9	10	2.1	1	2.1.1	Internal risks understanding
10	11	2.1	2	2.1.2	External risks understanding
11	12	2.1	3	2.1.3	Inspection, maintenance and rehabilitation
12	13	2.2	1	2.2.1	Service performance
13	14	2.2	2	2.2.2	Failure consequences

(Table title: Table: Criteria)

Table: Dimensions		
Column	Data type	Constraints
DimensionID	INTEGER	•PRIMARY KEY •UNIQUE
DimensionName	TEXT	•UNIQUE

Table: Dimensions

#	DimensionID INTEGER	DimensionName TEXT
0	1	Functional Dimension
1	2	Physical Dimension

Table: Metrics

Column	Data type	Constraints
GlobalMetricID	INTEGER	•PRIMARY KEY AUTOINCREMENT
CriteriaID		•REFERENCES Criteria (CriteriaID)
MetricSubID	INTEGER	
MetricID	TEXT	•AS (CriteriaID || '.' || MetricSubID) •UNIQUE
MetricName	TEXT	
MetricQuestion	TEXT	
Answer_Type	TEXT	

#	GlobalMetricID INTEGER	CriteriaID	MetricSubID INTEGER	MetricID TEXT	MetricName TEXT	MetricQuestion TEXT
					Table: Metrics	
0	1	1.1.1	1	1.1.1.1	Stormwater strategic plan	Does the service have an implemented strategic plan with adequate monitoring and review?
1	2	1.1.1	2	1.1.1.2	Plan alignment with the City Master Plan	Is the plan aligned and complying with the City Master Plan, including land use zoning?
2	3	1.1.1	3	1.1.1.3	Plan alignment with Resilience system-thinking	Does the plan have an explicit resilience-oriented view?
3	4	1.1.2	1	1.1.2.1	Service management inclusion in city planning and strategic involvement	Is the stormwater service included in the city strategic planning?
4	5	1.1.2	2	1.1.2.2	Knowledge exchange with other urban services	Does the service have knowledge exchange procedures with other urban services (partnerships, partici
5	6	1.1.2	3	1.1.2.3	Service involvement in R&D activities	Is the service involved in R&D or other innovation activities or projects?
6	7	1.1.2	4	1.1.2.4	Service contribution to societal change	Does the service provide opportunities for public engagement and participation?
7	8	1.2.1	1	1.2.1.1	Stormwater service dependencies on other urban services	To what extent are dependencies on other services known?
8	9	1.2.1	2	1.2.1.2	Urban services dependencies on Stormwater service	To what extent are dependencies from other services known?

Table: Metrics	
#	Answer_Type TEXT
0	Single choice
1	Single choice
2	Single choice
3	Single choice
4	Single choice
5	Single choice
6	Single choice
7	Single choice
8	Single choice

#	GlobalMetricID INTEGER	CriteriaID	MetricSubID INTEGER	MetricID TEXT	MetricName TEXT	MetricQuestion TEXT
				Table: Metrics		
9	10	1.2.2	1	1.2.2.1	Type of redundancies in place	What type of redundancies are purposely in place?
10	11	1.2.2	2	1.2.2.2	Redundancies communication	Are redundancies communicated to population?
11	12	1.3.1	1	1.3.1.1	Infrastructures' register existence and completeness	Are the infrastructures properly identified and mapped?
12	13	1.3.1	2	1.3.1.2	Infrastructures' register update	How frequent is the infrastructures' register updated?
13	14	1.3.1	3	1.3.1.3	Infrastructures' register format	In what format is the infrastructures register kept?
14	15	1.3.1	4	1.3.1.4	Infrastructures' register sharing	What is the infrastructures' register sharing policy?
15	16	1.3.2	1	1.3.2.1	Monitoring equipment in place	What type of monitoring equipment is installed?
16	17	1.3.2	2	1.3.2.2	Monitoring data treatment, usage and sharing	How is monitoring data used?
17	18	1.3.2	3	1.3.2.3	Real-time control equipment in place	Is there real-time controlled equipment installed?
18	19	1.3.2	4	1.3.2.4	Early warning procedures	Are there forecasts and/or early warning procedures?
19	20	1.3.3	1	1.3.3.1	Human resources adequacy for service cover	Does the service have adequate human resources?
20	21	1.3.3	2	1.3.3.2	Financial plan and budget allocation	Does the service have a financial plan with dedicated budget for resilience building/ disaster risk r
21	22	1.3.3	3	1.3.3.3	Service material resources in case of failure	Does the service have adequate material resources?

Table: Metrics	
#	Answer_Type TEXT
9	Multiple choice
10	Single choice
11	Single choice
12	Multiple choice
13	Single choice
14	Multiple choice
15	Multiple choice
16	Multiple choice
17	Single choice
18	Single choice
19	Single choice
20	Single choice
21	Single choice

Table: Metrics					
#	GlobalMetricID INTEGER	CriteriaID	MetricSubID INTEGER	MetricID TEXT	MetricName TEXT	MetricQuestion TEXT
22	23	1.3.4	1	1.3.4.1	Response protocol for disturbing events	Does the service have a standard protocol for emergency situations?
23	24	1.3.4	2	1.3.4.2	Recording procedures for disturbing events	Are recording procedures implemented in the case of a disruptive event?
24	25	1.3.4	3	1.3.4.3	Adaptation capacity after disturbing events	Does the service have cases of adaptation measures/ strategies taken as a consequence of past disrupt
25	26	1.3.4	4	1.3.4.4	Transformability capacity after disturbing events	Does the service have cases of transformational measures/ strategies taken as a consequence of past d
26	27	1.3.5	1	1.3.5.1	Commitment to CC mitigation (%GHG reduction)	Is the service committed with CC mitigation through reduction of GHG emissions?
27	28	1.3.5	2	1.3.5.2	Existence of local/ downscaled CC scenarios	For which relevant climate variables/ events are there agreed CC scenarios/local projections?
28	29	1.3.5	3	1.3.5.3	Current performance with future conditions	Has the performance of the current system been evaluated on the basis of known CC scenarios?

Table: Metrics	
#	Answer_Type TEXT
22	Single choice
23	Multiple choice
24	Single choice
25	Single choice
26	Single choice
27	Multiple choice
28	Single choice

#	GlobalMetricID INTEGER	CriteriaID	MetricSubID INTEGER	MetricID TEXT	MetricName TEXT	MetricQuestion TEXT
					Table: Metrics	
29	30	1.3.5	4	1.3.5.4	In place or planned CC adaptation measures	What type of measures has the service implemented/ planned to address climate change mitigation and a
30	32	2.1.1	1	2.1.1.1	Known internal risks	Which of the following physical internal risks are currently assessed?
31	33	2.1.1	2	2.1.1.2	Mapping of internal risks	Are the physical internal risks mapped?
32	34	2.1.2	1	2.1.2.1	Known external risks	Which of the following physical external risks are currently assessed?
33	35	2.1.2	2	2.1.2.2	Mapping of external risks	Are the physical external risks mapped?
34	36	2.1.3	1	2.1.3.1	Inspection procedures	How are inspection procedures implemented?
35	37	2.1.3	2	2.1.3.2	Maintenance of inlet devices	Are there inlet devices maintenance procedures?
36	38	2.1.3	3	2.1.3.3	Maintenance of special equipment	Are there special equipment maintenance procedures?
37	39	2.1.3	4	2.1.3.4	Rehabilitation of sewers/open channels	What is the average annual percentage of storm sewers/open channels with more than 10 years rehabili

Table: Metrics	
#	Answer_Type TEXT
29	Multiple choice
30	Multiple choice
31	Single choice
32	Multiple choice
33	Single choice
34	Multiple choice
35	Single choice
36	Single choice
37	Single choice

Table: Metrics					
#	GlobalMetricID INTEGER	CriteriaID	MetricSubID INTEGER	MetricID TEXT	MetricName TEXT	MetricQuestion TEXT
38	40	2.1.3	5	2.1.3.5	Coverage of expenditure with inspection, maintenance and rehabilitation	What is the ratio between expenditure with rehabilitation, operation and management of infrastructur

Table: Metrics	
#	Answer_Type TEXT
38	Single choice

Table: MetricsOptions		
Column	Data type	Constraints
MetricGlobalID	INTEGER	•PRIMARY KEY AUTOINCREMENT
MetricID		•REFERENCES Metrics (MetricID) MATCH "FULL"
Opt1	TEXT	
Opt2	TEXT	
Opt3	TEXT	
Opt4	TEXT	
Opt5	TEXT	
Opt6	TEXT	
Opt7	TEXT	
Opt8	TEXT	
Opt9	TEXT	
Opt10	TEXT	

Table: MetricsOptions					
#	MetricGlobalID INTEGER	MetricID	Opt1 TEXT	Opt2 TEXT	Opt3 TEXT
0	1	1.1.1.1	The strategic plan does not exist.	The strategic plan exists but is not implemented (is outdated / is not monitored).	The strategic plan is implemented but considers only a technical component.
1	2	1.1.1.2	No.	Partially.	Yes.
2	3	1.1.1.3	No.	Partially or indirectly.	Yes.
3	4	1.1.2.1	No strategic involvement.	Yes, but indirectly, marginally, or sporadically.	Yes.
4	5	1.1.2.2	No explicit knowledge exchange procedures in place.	Yes, but informally or unofficially.	Yes.
5	6	1.1.2.3	No involvement in the last 5 years.	Yes, in the last 5 years but not at the moment.	Yes, at the moment or up to the next 5 years.
6	7	1.1.2.4	Not explicitly.	Only when mandatory.	Yes, regularly.
7	8	1.2.1.1	No knowledge or formal understanding about dependencies.	Minor understanding about dependencies.	Critical dependencies known.
8	9	1.2.1.2	No knowledge or formal understanding about dependencies.	Minor understanding about dependencies.	Critical dependencies known.
9	10	1.2.2.1	None	Meshed network (relief sewers)	Oversized sewers (onsite storage)
10	11	1.2.2.2	No.	Yes, passively.	Yes, actively.
11	12	1.3.1.1	No structured register of infrastructures exist.	Global infrastructures' register exists with low detailed level	Detailed infrastructures' register exists for critical areas
12	13	1.3.1.2	No update routines/criteria	Updated but with no defined frequency or other criteria.	Updated on periodic basis.
13	14	1.3.1.3	Sketched based register (CAD or similar)	GIS attribute based (shapefiles or similar)	

Table: MetricsOptions				
#	Opt4 TEXT	Opt5 TEXT	Opt6 TEXT	Opt7 TEXT
0	The strategic plan is implemented and considers technical and non-technical components.			
1				
2				
3				
4				
5				
6				
7	Full map on dependencies is depicted.			
8	Full map on dependencies is depicted.			
9	Storm tanks	Multi-purpose flooding areas	Alternative flow pathways	Detention/ Retention ponds
10				
11	Global and detailed infrastructures' register exists			
12	Updated when infrastructures have any modifications.			
13				

#	Opt8 TEXT	Opt9 TEXT	Opt10 TEXT
	Table: MetricsOptions		
0			
1			
2			
3			
4			
5			
6			
7			
8			
9	Other NBS		
10			
11			
12			
13			

Table: MetricsOptions					
#	MetricGlobalID INTEGER	MetricID	Opt1 TEXT	Opt2 TEXT	Opt3 TEXT
14	15	1.3.1.4	Detailed sharing with other municipal services	Unrefined sharing with the public	Sharing always available
15	16	1.3.2.1	None	Rain gauges	Rainfall radar/ satellite data
16	17	1.3.2.2	Real-time dashboard	Early warning indicators	Real-time control of equipment
17	18	1.3.2.3	No	Yes	
18	19	1.3.2.4	No	Yes, with internal early warning only	Yes, with internal and public early warning procedures exist
19	20	1.3.3.1	No	Yes, for normal conditions	Yes, for normal conditions and emergency situations
20	21	1.3.3.2	No clear financial plan.	The financial plan indirectly includes resilience building/ DRR, but budgets are not ring fenced.	The financial plan directly considers resilience building/ DRR and budgets are ring fenced.
21	22	1.3.3.3	No	Yes, for normal conditions	Yes, for normal conditions and emergency situations
22	23	1.3.4.1	No formal/informal protocol exists.	Protocol exists, but informally (based on past occurrences and available resources)	Protocol exists formally, but not integrated/aligned with city-wide emergency plan
23	24	1.3.4.2	No recording procedures implemented.	Emergency/civil protection calls	Flood duration is measured/ estimated.
24	25	1.3.4.3	No	Yes	
25	26	1.3.4.4	No	Yes	
26	27	1.3.5.1	No commitment.	Yes, but the target is lower than 20% or is not defined.	Yes, with a 20 - 49% reduction target.
27	28	1.3.5.2	None	Sea level rise	Rainfall intensities
28	29	1.3.5.3	No	Yes, for the minor system	Yes, for the minor and major systems

#	Opt4 TEXT	Opt5 TEXT	Opt6 TEXT	Opt7 TEXT
Table: MetricsOptions				
14				
15	Flow level in underground infrastructures	Flow rate in underground infrastructures	Flow quality in underground infrastructures/ outfall	Flow level at surface
16	Statistical analysis			
17				
18				
19				
20				
21				
22	Protocol exist formally and is integrated/aligned with city-wide emergency plan			
23	Flood hazardousness (e.g. depth) is measured/ estimated.	Flooded area is measured/ estimated.	Infrastructure failure is registered.	Other(s)
24				
25				
26	Yes, with a minimum 50% reduction target.			
27	Storm surges or coastal overtopping			
28				

	Table: MetricsOptions		
#	Opt8 TEXT	Opt9 TEXT	Opt10 TEXT
14			
15	Other(s)		
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			

Table: MetricsOptions					
#	MetricGlobalID INTEGER	MetricID	Opt1 TEXT	Opt2 TEXT	Opt3 TEXT
29	30	1.3.5.4	None	Stakeholder or public engagement or awareness	Strengthening relationships between (inter)dependent services
30	31	2.1.1.1	None	Structural conditions of sewers and manholes	Discharge conditions at outfalls
31	32	2.1.1.2	No	Partially, not covering the all the risks or all the infrastructure	Yes (if suitable)
32	33	2.1.2.1	None	Electromechanical equipment exposure to flooding	Special equipment exposure to tides
33	34	2.1.2.2	No	Partially, not covering the all the risks or all the infrastructure	Yes (if suitable)
34	35	2.1.3.1	No inspection routines implemented	Locally, when issues are reported	Periodic inspection on critical assets
35	36	2.1.3.2	No maintenance procedures	Maintenance is responsibility of external player	Yes, with no established criteria (arbitrary)
36	37	2.1.3.3	No maintenance procedures	Yes, with no established criteria (arbitrary or when needed)	Yes, regularly and with established criteria
37	38	2.1.3.4	FALTA	FALTA	FALTA
38	39	2.1.3.5	Less than 0.9 or more than 1.2	More than or equal to 0.9 and less than 1.0 or more than 1.1 and less than or equal to 1.2	More than or equal to 1.0 and less than or equal to 1.1

#	Opt4 TEXT	Opt5 TEXT	Opt6 TEXT	Opt7 TEXT
	Table: MetricsOptions			
29	Improvement of information collection and analysis	Development of emergency or contingency plans	Implementation/ improvement of green infrastructure	Implementation/ improvement of grey infrastructure
30	Electromechanical equipment failure	Inlets' and connection branches clogging		
31				
32	Sewer exposure to tides	Sewers exposure to clogging	Inlet devices exposure to clogging	Seweres exposure to silting up and deposition of sediments
33				
34				
35	Yes, regularly and with established criteria			
36				
37				
38				

Table: MetricsOptions		
#	Opt8 TEXT	Opt9 TEXT	Opt10 TEXT
---	---	---	---
29	Power generation in drainage infrastructures (e.g. turbinating)	Energy consumption reduction (service fleet, pumping station optimization, etc.)	Other(s)
30			
31			
32			
33			
34			
35			
36			
37			
38			

Table: Objectives		
Column	Data type	Constraints
GlobalObjecetiveID	INTEGER	•PRIMARY KEY AUTOINCREMENT
DimensionID	INTEGER	•REFERENCES Dimensions (DimensionID)
ObjectiveSubID	INTEGER	

ObjectiveID	TEXT	•UNIQUE •AS (DimensionID || '.' || ObjectiveSubID)
ObjectiveName	TEXT	

#	GlobalObjecetiveID INTEGER	DimensionID INTEGER	ObjectiveSubID INTEGER	ObjectiveID TEXT	ObjectiveName TEXT
Table: Objectives					
0	1	1	1	1.1	Institutional capacity
1	2	1	2	1.2	Urban service relationships
2	3	1	3	1.3	System knowledge
3	4	2	1	2.1	Physical and infrastructural robustness
4	5	2	2	2.2	Performance assessment