

- Identify flood prone areas (e.g. rivers, streams, low-lying areas).
- Activate official weather alerts on your phone and follow their instructions.
- Prepare an emergency kit and get familiar with its contents.

- Plan evacuation routes and meeting points, and review them with your household.
- Check your home: clear drains and gutters, and keep important documents in safe, accessible places.



- Stay informed via radio or mobile phone.
- Follow instructions from the authorities and evacuate if necessary.
- Avoid walking or driving through flood-prone areas, streams or underpasses.

- Do not touch electrical appliances if they are wet.
- Do not risk your life to save belongings or your car.
- Find higher ground whenever possible.
- Help vulnerable people whilst prioritising your own safety first.



- Only return home when it is safe.
- Check for structural damage and hazards.
- Avoid using contaminated water.

- Document all damages for insurance claims.
- Clean the house using appropriate protective equipment, such as gloves and masks.

THE MARRADARS REGION

- During heavy rain, avoid low-lying urban and agricultural areas near streams.
- Make sure drains and water outlets are clear and not blocked by debris.
- Vehicles are not boats: do not attempt to drive through flooded areas. Do not walk through flooded

areas - the water may be deeper or faster than it appears.

- If the rain is very heavy and continuous, seek shelter in elevated parts of buildings, such as the Temple of Neptune.



SAINT JOAN DE KIRKIBARA

- During instances of torrential rain, avoid going outside unless absolutely necessary or directed otherwise.
- Do not drive on roads near streams or flood-prone areas.
- Avoid coastal areas during storms with strong winds.

- Do not stop or drive on dry streams - they can flood suddenly during heavy rain.
- Familiarise yourself with alerts and emergency plans - understanding them can save lives.



THE PULAIRAB REGION

- In the event of a coastal flood warning, stay away from the shoreline and move to higher inland areas.
- Do not drive or walk through flooded areas, particularly on bridges or in tunnels, where conditions can be extremely dangerous.

- Disconnect electricity and gas if there is any risk of water reaching the installations.
- Be wary of dry stream beds during heavy rain; they can overflow suddenly, so stay away and move to higher ground.



THE POLIGOLAD REGION

- Familiarise yourself with how to receive and interpret alerts from the Early Warning System (EWS).
- If there is a high risk of flash floods, act quickly in accordance with the alerts.

- Avoid low-lying areas near rivers and reservoirs.
- Watch out for streams and mountain slopes: water can come down suddenly with great force.



MOUNT MAKCHIA

- Familiarise yourself with how to receive and interpret Early Warning System (EWS) alerts.
- During periods of heavy autumn and winter rain, avoid leaving your home.
- Do not travel on roads near streams and flood-prone areas.

- Act quickly and evacuate immediately to the nearest safe, higher ground as directed by the authorities.
- Never go to low-lying areas such as the harbour or the coast.



BIGURVY

- Familiarise yourself with how to receive and interpret Early Warning System (EWS) alerts.
- Do not use low bridges or paths near the river during rainfall.

- Evacuate vulnerable areas immediately.
- Evacuate areas near overflowing streams, especially if there are industrial estates or facilities nearby.



FLOODS, are you prepared?

Essential actions to protect yourself, your family and your community

BEFORE A FLOOD

PUT YOUR EMERGENCY PLAN IN ORDER

DURING A FLOOD

PUT YOUR EMERGENCY PLAN IN ORDER

AFTER A FLOOD

PUT YOUR EMERGENCY PLAN IN ORDER

AREA-SPECIFIC RECOMMENDATIONS

PUT YOUR EMERGENCY PLAN IN ORDER

Individual preparedness and community collaboration
can save lives

Inform yourself, take action, and share

Emergencies
112

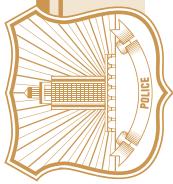


CLAIM	
Nom del denunciant:	Anna Torres Vila
Ubicació:	Carrer Major, Marradars
<p><i>I am seeking compensation for the products damaged in my display cabinet. Although I had a small drainage system, the storm overwhelmed it and water entered from the street. I have lost much of the material in the display cabinet.</i></p>	



CLAIM	
Nom del denunciant:	Pere Garcia Roca
Ubicació:	Carrer del Torrent, Marradars
<p><i>I am claiming compensation for the damage to my car. It was parked on the street near the stream and when the water level rose, the car was completely flooded. The rain was so intense that we had no time to react.</i></p>	





CLAIM

Nom del denunciant: Raül López Benítez

Ubicació: Torrent de na Bàrbara, Marradars

I am claiming compensation for damage to my recording equipment. I went into the dry stream bed to record a video of the flash flood and my camera fell into the water. I was not warned how quickly the water level would rise!



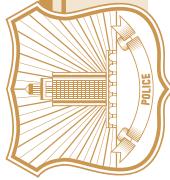
CLAIM

Nom del denunciant: Martina Cassar

Ubicació: Valley Road, St. John's Kirkibara

During the storm, the water level rose very quickly on my street, called Valley Road. This is where I had my car parked. In less than half an hour, the water swept the car away, dragging it a few metres down the street and leaving it wedged against a street lamp. The engine and brakes are completely broken and inoperable. I am requesting cover for vehicle damage.





CLAIM

Nom del denunciant:	Kevin Camilleri
Ubicació:	Terrace, Kirkibara Industrial Estate, St. John's

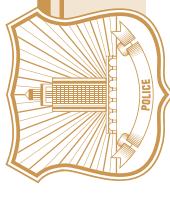
We organised a barbecue with friends, and just then it started to rain. We decided to stay because we thought it would be a passing shower. Water began to pool on the terrace, and when we plugged in the electric barbecue, it caused a short circuit. The garden table floated and fell off the terrace. I am requesting compensation for the damaged equipment and the lost food.



CLAIM

Nom del denunciant:	Andre Spiteri
Ubicació:	Triq Kirkibara

My house is at the bottom of a sloping street. Water came in through the back door and flooded the basement. I have lost electrical appliances, furniture, and boxes of stored materials. We did not receive the warning in time and were unable to lift anything off the ground. I am requesting compensation for material damage and loss of property.



CLAIM

Nom del denunciant:	Guilia Romano
Ubicació:	Vecchia Porto Street, Pulairab

During the storm, water entered my underground garage where I keep my car. Despite placing sandbags at the entrance as recommended, the drainage system became overwhelmed and the water rose by more than a metre. The car has been rendered unusable. I request compensation for the damage to the vehicle and the garage fittings.



CLAIM

Nom del denunciant:	Teresa Bellini
Ubicació:	Via Parco della Rinascita, Pulairab

The rainwater flooded the tarmacked street, which did not drain properly, and entered my home through the front door. Fortunately, we had raised the appliances as instructed in the council's guide. Even so, the washing machine was damaged. I am requesting assistance for the loss of the appliance.





CLAIM

Nom del denunciant:	Matteo De Luca
Ubicació:	Zona Lama Balice, Pulairab

During the rains I decided to go down to the dry stream with my quad bike to see how the water level was rising. While I was filming a video on my mobile, the water swept me away and I had to be rescued by the fire brigade. My quad bike is destroyed. I request that I be paid the value of the vehicle.

CLAIM

NOM DEL DENUNCIA	Stefan Todory
UBICACIÓ	Rural road 7, low-lying area, Poligolad

The torrential rain flooded my entire plot of land. I had planted potatoes, carrots and peppers for the local market. The water came so quickly that there was no time to protect anything. We had clean drainage ditches and channels, but the river burst its banks with a fury we had never seen before. Everything was lost. I request compensation for agricultural damage.





CLAIM	
NOM DEL DENUNCIAnt	Elena Dimitrova
UBICACIÓ	Lipa Street, Poligolad

I live with my parents in a single-storey house. When the rain started, the water rose quickly in the street. We switched off the electrical systems and left, following the instructions of Civil Protection. When we returned, we discovered that one of the exterior walls had partially collapsed due to the water pressure. We are requesting help to repair the wall and part of the roof.



CLAIM	
NOM DEL DENUNCIAnt	Valentin Petrov
UBICACIÓ	Avenida del Mar, Poligolad

During the storm, as the water level in the street was already rising, we decided to go up onto the roof to be safe. Since we had time, we set up an impromptu pool party with pool floats, music and soft drinks. We were in our swimwear and everything was going well... until a gust of wind knocked the new Bluetooth speaker into the water. I am claiming its cost, because it was very expensive.



CLAIM



NOM DEL DENUNCIA nt	Josep Maria Solà
UBICACIÓ	Biguery Industrial Estate

During the torrential rains on 16th October, the river burst its banks at the industrial estate where we work. Water entered our industrial unit, causing damage to machinery, computers and part of the materials warehouse. We had to stop production for 3 days. We are claiming for property damage, business interruption and cleaning costs.



CLAIM



NOM DEL DENUNCIA nt	Núria Puig i Arnau
UBICACIÓ	Carrer de la Font, Biguery

During the heavy rain, the sewer system could not drain all the water and the street was flooded. Water entered the basement of our home, affecting household appliances and furniture. In addition, damp appeared on the walls. We request that the insurance cover the repair of the damage and the cost of the affected furniture.



CLAIM



NOM DEL DENUNCIA nt	<i>Laura Rovira</i>
UBICACIÓ	<i>Industrial unit in Bigurvy</i>

During the floods, I personally tried to disconnect several machines in the industrial unit by directly switching them off, without cutting the main power supply or using the appropriate protective equipment. This caused a short circuit that damaged part of the internal electrical system. I am claiming from the insurance for the repair of the damage caused by the flood.



CLAIM

Nom del denunciant:	<i>Eleni Papadopoulou</i>
Ubicació:	<i>Suburban area near the river in Mount Makchia</i>

During the storm, my garage was completely flooded in less than half an hour. The drainage systems were insufficient to evacuate the accumulated water, causing serious damage to my car and several household appliances. I request compensation for the material damage and an upgrade to the area's stormwater infrastructure.



CLAIM

Nom del denunciant:	Yorgos Dimitriadis
Ubicació:	Near the Kaloxori road, beside Mount Makchia Bay

The bridge I cross every day to get to work was severely damaged by erosion caused by the rising water. There were no visible warning signs and several vehicles, including mine, were trapped. My car suffered considerable chassis damage and I was significantly late for work. I request an assessment of the damage and improved signage at risk points.



CLAIM

Nom del denunciant:	Spyros Kanellis
Ubicació:	Rural road in the mountainous area of Mount Makchia

After receiving warnings of heavy rain, I decided nonetheless to visit my grandmother as we had arranged. She lives on the other side of the valley and, to cut the journey short, I crossed the ravine in my SUV. It didn't look like there was much water. However, the current swept the vehicle away and I became trapped. I had to climb out through the window and onto the roof of the car until the emergency services arrived. I am claiming the value of my car, which was rendered unusable.

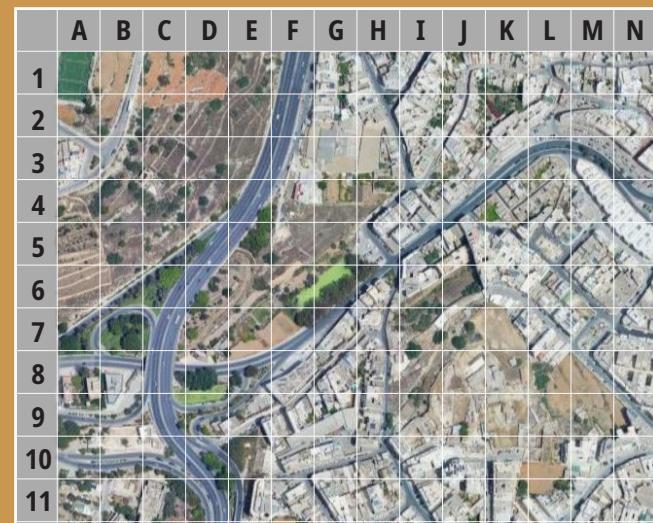


THE MARRADARS REGION



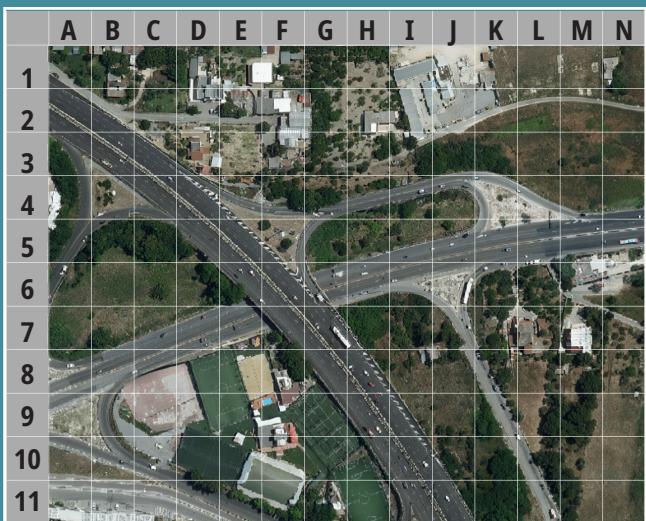
 *Map of flood zones for a 100-year return period*

SAINT JOAN DE KIRKIBARA



 *Map of flood zones for a 100-year return period*

THE PULAIRAB REGION



 *Map of flood zones for a 100-year return period*

THE POLIGOLAD REGION



 *Map of flood zones for a 100-year return period*

BIGURVY



 *Map of flood zones for a 100-year return period*

MOUNT MAKCHIA



 *Map of flood zones for a 100-year return period*

E-1, F-2, G-3, H-4, I-5,
J-6, E-7, F-7, K-7, F-8,
K-8, F-9, G-9, L-9, G-10,
L-10, H-11, M-11



THE MARRADARS REGION

L-2, K-3, L-3, M-3, J-4,
N-4, I-5, H-6, F-7, G-7,
B-8, D-8, E-8



SAINT JOAN DE KIRKIBARA

A-1, B-1, C-1, D-1, E-1, F-1, G-1, H-1,
I-1, C-2, D-2, E-2, F-2, G-2, H-2, I-2,
J-2, K-2, D-3, E-3, F-3, G-3, H-3, I-3,
J-3, K-3, L-3, M-3, N-3, A-4, F-4, G-4,
H-4, M-4, N-4, C-5, B-6, C-6, D-6, A-7,
B-7, C-7, D-7, E-7, A-8, B-8, C-8, D-8,
E-8, F-8, A-9, B-9, C-9, D-9, A-10



THE PULAIRAB REGION

A-4, B-4, C-4, D-4, E-4, F-4, G-4,
H-5, I-5, J-5, K-5, L-5, M-5, N-5,
G-6, H-6, I-6, J-6, K-6, L-6, M-6,
N-6, G-7, H-7, I-7, J-7, K-7, F-8,
G-8, E-9, F-9, E-10, F-10, D-11,
E-11, F-11



THE POLIGOLAD REGION

K-3, K-4, L-4, M-4, N-4, C-5, D-5, E-5,
J-5, K-5, L-5, N-5, B-6, C-6, D-6, E-6,
F-6, G-6, H-6, I-6, J-6, K-6, L-6, N-6,
A-7, B-7, C-7, D-7, E-7, F-7, G-7, H-7,
I-7, N-7, C-8, D-8, E-8, F-8, G-8, H-8, I-8,
N-8, D-9, E-9, G-9, H-9, I-9, N-9, B-10,
C-10, D-10, G-10, H-10, I-10, N-10, E-11,
F-11, G-11, H-11, I-11



BIGURVY

N-5, A-6, B-6, C-6, D-6, E-6,
N-6, E-7, F-7, G-7, H-7, I-7,
J-7, K-7, L-7, M-7, N-7, N-8,
M-9, M-10



MOUNT MAKCHIA



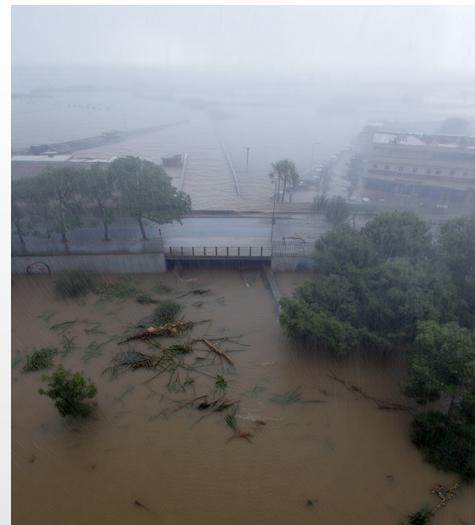
12:12

THE MARRADARS REGION



12:23

THE MARRADARS REGION



12:42

THE MARRADARS REGION



9:05

SAINT JOAN DE KIRKIBARA



9:16

SAINT JOAN DE KIRKIBARA



9:30

SAINT JOAN DE KIRKIBARA



17:08

THE PULAIRAB REGION



17:27

THE PULAIRAB REGION



17:45

THE PULAIRAB REGION



18:50

THE POLIGOLAD REGION



19:02

THE POLIGOLAD REGION



19:18

THE POLIGOLAD REGION



10:50

BIGURVY



10:57

BIGURVY



11:12

BIGURVY



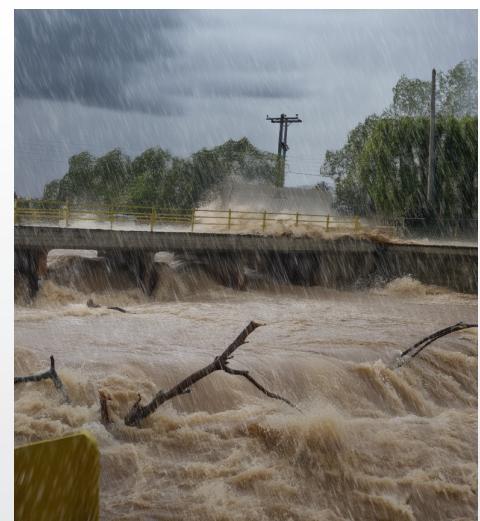
15:50

MOUNT MAKCHIA



16:08

MOUNT MAKCHIA



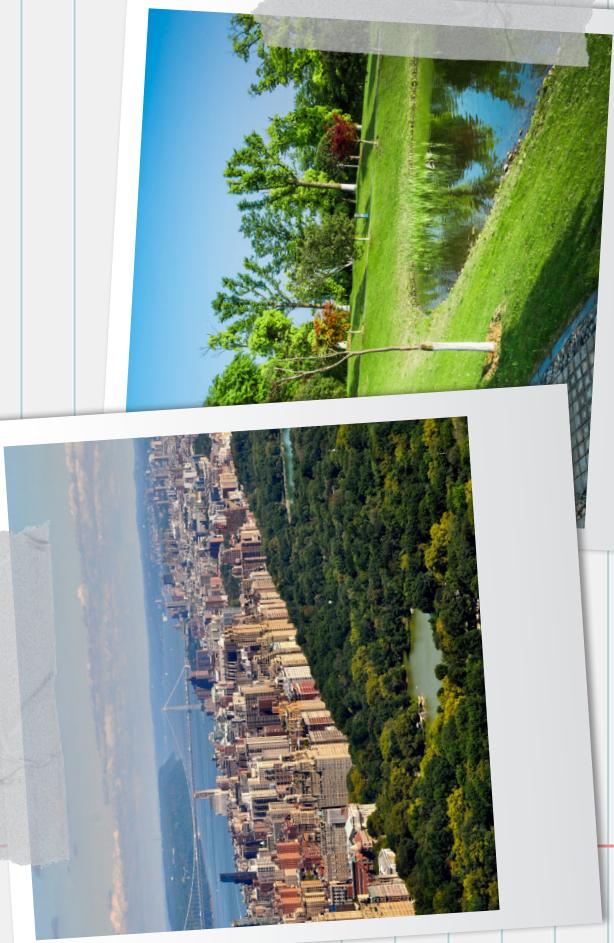
16:29

MOUNT MAKCHIA

LAND TYPOLOGIES AND HYDRAULIC BEHAVIOUR

TYPE OF ZONE	ESTIMATED FLOODING TIME AFTER RAINFALL BEGINS	HYDRAULIC BEHAVIOUR
Dense urban and industrial zones 	10-25'	Highly impermeable surfaces generate intense runoff. Flooding occurs rapidly in streets, ground floors, and basements. <i>High water velocity</i>
Mixed urban or coastal zones 	10-30'	Partially permeable surfaces due to vegetation slow water absorption. Flooding develops progressively and depends on sewer capacity or water accumulation in low-lying, poorly drained areas, especially near the coast. <i>Medium-high water velocity</i>
Urban zones with nearby dry streams 	10-30'	Dry streams quickly collect rainfall, causing water levels to rise rapidly. If channels are obstructed by debris or dumping, overflow occurs suddenly. <i>Medium-high water velocity</i>
Rural agricultural areas or sparsely built zones with abundant vegetation 	20-40'	Permeable soils allow good infiltration. Flooding is less sudden but may occur in depressions or poorly drained areas <i>Medium-low water velocity</i>
Steep slope zone with vegetation 	20-40'	Vegetation reduces flow speed, but saturation can occur where soils are shallow, increasing runoff downslope. <i>Medium-low water velocity</i>

RAIN GARDENS

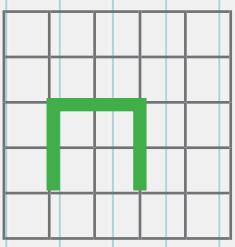


Terrain depressions designed to capture water from roof and street runoff, often integrating local vegetation. They can be associated with a drainage system that collects the water and reuses it, for example, for urban allotments. They promote aquifer recharge, reduce flooded areas, and filter pollutants carried by runoff water.

IMPLEMENTATION AREA:

urban – industrial
small – medium

SCALE:



GREEN ROOFS

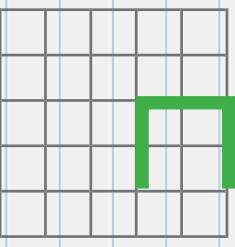


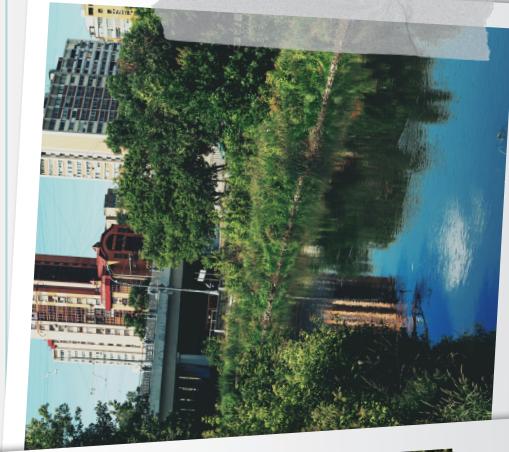
Bioengineering system that includes an impermeable layer, a drainage system, fertile soil, and vegetation. Can be extensive or intensive. They capture rainwater, reduce and delay the volume that reaches the streets, and thermally insulate buildings. The water can be collected and used for maintaining the roof's vegetation or for watering urban allotments. Especially suitable for densely urbanised areas.

IMPLEMENTATION AREA:

urban – industrial
small – medium

SCALE:





URBAN FORESTS AND WOODLAND

IMPLEMENTATION AREA:

urban - industrial

SCALE:

large - extra large

RESTORATION OF RIVER FLOODPLAINS, BEDS, AND BANKS OF STREAMS

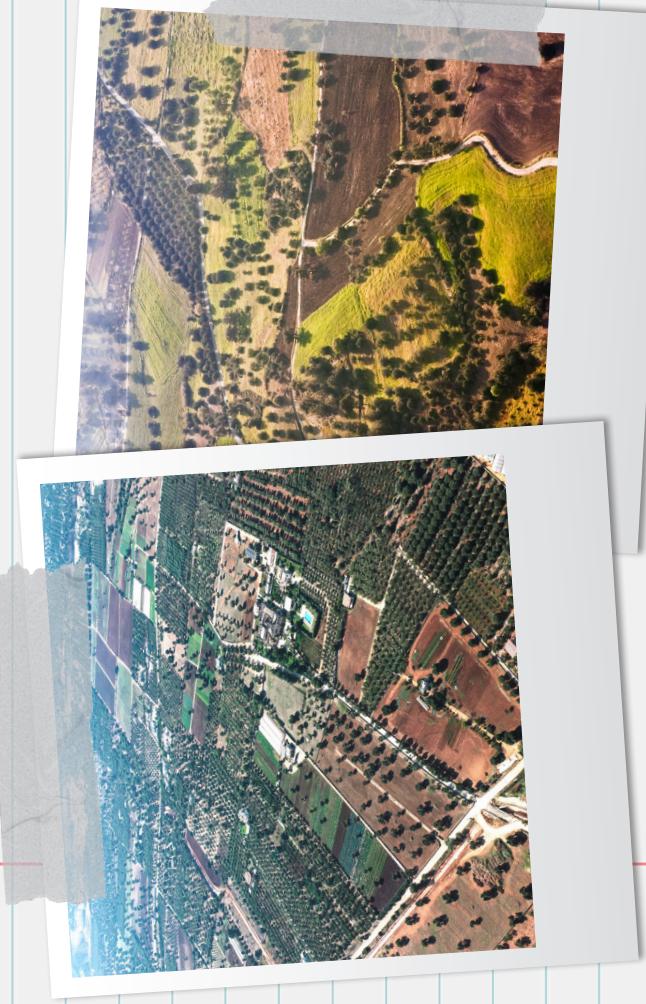
IMPLEMENTATION AREA:

urban - natural

SCALE:

large - extra large

Actions to restore meanders, floodplain connectors, restore floodplains in streams that have been channelled with infrastructure, and revegetate the banks of rivers and streams. In all these spaces, the use of local vegetation and bioengineering solutions promotes bank stabilisation, reduces erosion, and restores the function of watercourses as channels for drainage, attenuation (reducing the flood peak), and infiltration of rainwater.



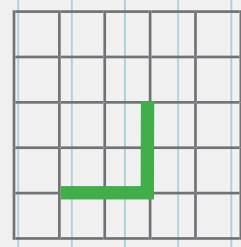
NATURAL WATER RETENTION MEASURES (NWRM)

IMPLEMENTATION AREA:

natural

SCALE:

medium - large



Construction of structures in intermittent watercourses to attenuate flood peaks, temporarily storing excess rainwater at first, and then releasing it gradually. This reduces the risk of flooding downstream, as well as erosion. Construction materials should preferably be natural, such as rocks, logs, or earth bags.

REGENERATIVE LAND MANAGEMENT TECHNIQUES IN AGRICULTURAL AND PERI-URBAN AREAS

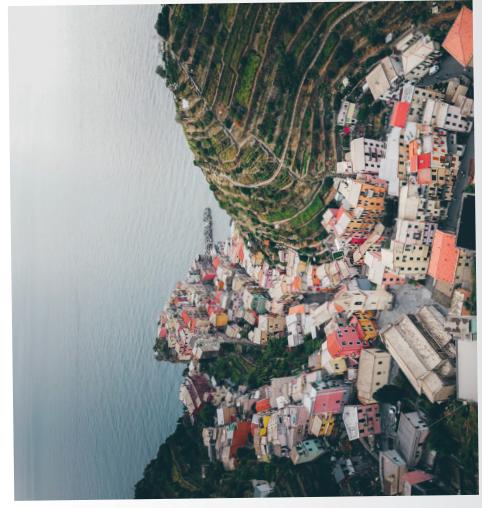
IMPLEMENTATION AREA:

urban - natural
medium - extra large

SCALE:



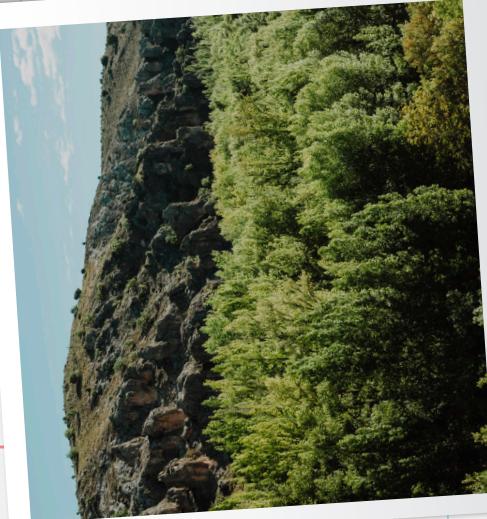
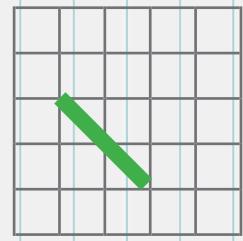
The implementation of regenerative agriculture practices promotes water infiltration, reduces runoff, improves soil structure, and increases vegetation cover. These techniques include, among others, agroforestry mosaic cultivation respecting topography and woodland patches, and improving soil health.



SOIL CONSERVATION PRACTICES ON SLOPES AND TERRACES

IMPLEMENTATION AREA:
natural

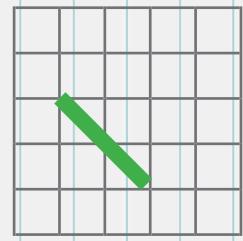
Promoting cultivation that respects topography, implementing structures that fix the soil, and maintaining terraces by restoring the dry-stone walls that support them are actions that help reduce erosion and sedimentation in areas with steep slopes, control the flow of water descending towards urban areas, and reduce its velocity.



AFFORESTATION AND REFORESTATION

IMPLEMENTATION AREA:
costa

SCALE:
large - extra large



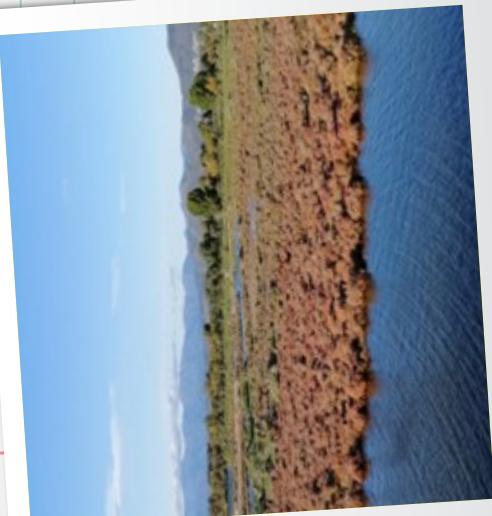
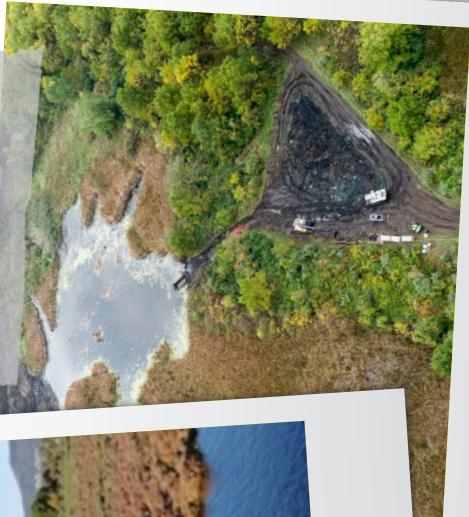
Planting trees and restoring wooded areas in headwaters promote water infiltration, stabilise the soil, especially on slopes, reduce runoff and erosion, and regulate the water that reaches gullies, streams, and rivers.

INLAND WETLAND RESTORATION

IMPLEMENTATION AREA:
urban – industrial

SCALE:
medium – large – extra large

The restoration and/or construction of wetlands in urban or industrial spaces turns these places into authentic natural sponges: they absorb floodwaters, reduce runoff velocity, and create a habitat with high biodiversity of flora and fauna.

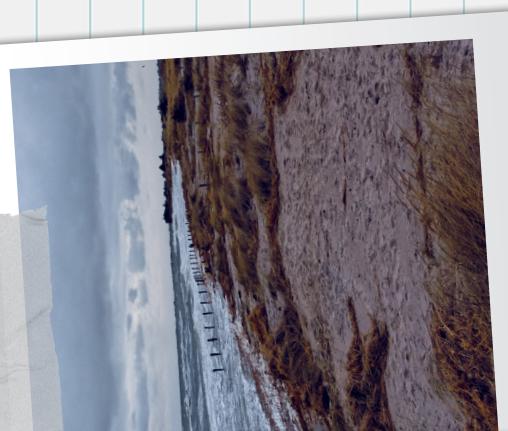


FLOODPLAIN RESTORATION

IMPLEMENTATION AREA:
coastal

SCALE:
large – extra large

Actions to restore controlled floodplains near estuaries and river mouths help to cushion the impact of floods during rains and the impact of waves during storms. This promotes water infiltration and accumulation and reduces surface runoff.





MARRADARS

SANT JOAN
DE KIRKIBARA

REGIÓ DEL
PULAIRAB

FLUT ISLAND HERALD

REGIÓ DEL
POLIGOLAD

BIGURVY

MOUNT
MAKCHIA

MARRADARS NEWS

Stone walls and trees, key against erosion



A decade ago, the residents of Marradars decided to act against the growing effects of climate change. As a result of a participatory process, a land bank was promoted to connect landowners with young, landless farmers. Thanks to this initiative, abandoned mountain farmlands have been recovered, and dry-stone walls have been restored with the expertise of a master waller. Thus, olive trees, almond trees, and vineyards that had been agonizing for years have flourished again.

In the urban area, the community opted to clean the dry streams, removing structures that obstructed them, and promoted reforestation with native riparian vegetation. These actions have turned the water-

courses into a green lung that today structures and gives identity to the city.

Ten years later, the results are tangible

Ten years later, the results are tangible: erosion and water velocity in the upper parts have been reduced, and the floodwaters reach the city attenuated, minimising damage. This evening, the community celebrates this milestone in the urban park that emerged from the stream, amidst olives, almonds, and good wine, and the satisfaction of having made the territory more resilient thanks to these

three interventions.

SANT JOAN DE KIRKIBARA NEWS

Gardens climb to the rooftops!

The Kirkibara region has established itself as a benchmark in sustainable water management thanks to its participation in a European project. In recent years, the municipality has implemented various urban green infrastructures to combat the effects of downpours.

Green roofs have been the most visible measure: municipal roofs converted into gardens that not only beautify the space and provide shade, but also reduce and delay rain run-off. These vegetated roofs function as natural filters, releasing water progressively and reducing the volume that reaches the streets.

In parallel, a network of rain gardens has been deployed, small depressions filled with vegetation capable of retaining water, filtering pollutants, and recharging aquifers. The collected water is even used to irrigate urban allotments, contributing to a circular sustainability model.

The benefits of these two measures are clear: lower flood risk, better water quality, and cleaner air. And the impact is palpable: after two days of heavy rains, while neighbouring towns saw hundreds of homes and businesses flooded, Kirkibara resisted with minimal damage.

PULAIRAB REGION NEWS

Pulairab's green infrastructure minimises the effects of floods

The exceptional rains of recent days have devastated large areas of the island. However, in the neighbourhood located in the lower part of the city, the damage has been much less, and businesses were able to reopen just 24 hours later.

This result is no coincidence. After severe floods in the early 20th century, the area opted

to create a large forest area to reduce erosion, run-off, and simultaneously recharge the aquifers. That strategy inspired the most recent actions: a network of interconnected urban parks that has also become an important climate refuge during the summer heatwaves.

The result is a green network that combines urban forests and ri-

parian forests, with great biodiversity and benefits for the health and well-being of the population. But above all, this natural infrastructure has acted as a shield against the torrential rains. So much so that other municipalities in the region are already analysing the application of these two measures as a model of resilience.



POLIGOLAD REGION NEWS

A network of actions to capture water with proven success

Poligolad has taken a step forward in adapting to the effects of climate change with the implementation of the *National Flood Risk Management Plan 2022-2027*. The strategy is based on natural solutions that act as a barrier against downpours.

The first element is the retention ponds: artificial basins designed to capture large volumes of water during storms and release them in a controlled manner. This system has already proven its effectiveness in the last episode of intense rain, preventing the collapse of

drainage systems and reducing the risk of flooding.

The network is completed by natural drainage channels and the interconnection of green spaces and urban forests. These green infrastructures have had a synergistic effect: in addition to protecting the population, they improve air quality, increase biodiversity, and offer leisure spaces.

The city of Poligolad, with these two actions, has thus become an example of how environmental actions can be both protective and transformative.

BIGURVY NEWS



Trees that save lives and businesses!

This week's heavy rain episode has flooded businesses and industries in several neighbouring localities, but in Bigurvy, the impact has been much smaller. The key: the Bigurvy Banks and the Urban Green Master Plan projects.

The main rivers have been renaturalised by removing channelisations and replanting native vegetation, forming gallery forests that stabilise the banks, reduce water velocity, and improve infiltration. In parallel, ur-

ban green spaces have been redesigned to act as natural sponges, absorbing excess rainwater and preventing recurrent flooding in shops and garages.

According to the expert committee, the impact of the recent storms has been much less than it would have been without these two actions. Furthermore, the City Council already has new plans underway to deploy more nature based solutions and strengthen the city's climate resilience.

MOUNT MAKCHIA NEWS

By land and sea: the force of nature at the city's service.



A few years ago, the Mount Makchia region was experiencing an intense debate. The residents, tired of seeing how each rain episode devastated their homes and lands, and how dams along the river or radical clearing of the riverbeds were quick but ineffective solutions, wanted to push for a change in management.

As they didn't know exactly what, they asked the government for support, which decided to opt for a nature-inspired path. In the upper parts of the catchment, old agricultural terraces and dry-stone walls were recovered, while also encouraging the settlement of young

It has reconfigured the city's relationship with its environment

farmers. This has made it possible to boost a local economy while reducing erosion and promoting water infiltration.

Further down, the focus shifted to the rivers. Their banks and floodplains were renaturalised, creating a dense riparian forest that acts as a natural barrier and, over time, has also become a leisure space and climate refuge for the population.

Finally, at the estuary, the coastal floodplains were restored, which today function as a natural cushion, dissipating the energy of the floodwaters before they reach the urban areas.

These four actions, used in a triple strategy—mountain, river, and sea—have proven highly effective in the recent storms, significantly reducing damage to inhabited areas. Furthermore, it has reconfigured the city's relationship with its environment, integrating nature into the daily lives of its inhabitants and becoming an example of resilience for the region.