

## MAINTENANCE AND PROTECTION OF AREAS SUBJECT TO HYDROGEOLOGICAL INSTABILITY

### OBJECTIVE

To guarantee the maintenance and functioning of existing ditches and drains.

### DESCRIPTION

To avoid hydrogeological instability phenomena it is necessary to ensure the continuity of the outflow routes between upstream and downstream of the newly built roads, by means of side rails and suitable crossing structures. It is necessary to avoid blocking the roads of outflow at any point of the drainage network to prevent the formation of stagnant zones. Public and private ditches must be kept under maintenance, they can be neither eliminated nor reduced in their size without providing adequate compensation measures. Interventions on the sewerage system or closure of existing ditches are prohibited, except for justified needs of public interest and their reconstruction must provide for a suitable new configuration.

### EXPECTED RESULTS

Preventing damage to homes due to flooding and reduction of traffic problems due to heavy rains; greater safety for passers-by.

### RESULT INDICATORS

Water drained by ditches and drains [m<sup>3</sup>]

Flood return time [ $T=1/p$ ; years]

### INVOLVED ACTORS

Local government, local landowners, urban planner specialists, hydrogeological risk experts and stakeholders.

### EXPECTED TIMELINE FOR ACTION

- Short term (1-4 years)

### BEST PRACTICES

- Veneto Region – Italy

### CRITICALITIES

Urban development plans, need for new construction areas, constant monitoring.

## SCOPE OF THE ACTION

- Adaptation

## TYPE OF PROPOSED ACTIONS

- Grey

## SECTOR OF ACTION

- Public health
- Urban settlement
- Water resource management
- Other

## CLIMATE IMPACTS

- Extreme precipitation
- Floods

## IMPLEMENTATION SCALE

- Association of municipalities
- Municipality
- Province
- Region / Country

## SOURCE

<https://www.venetoadapt.it/wp-content/uploads/2020/03/Del%20A2%20-%20VenetoADAPT%20Adaptation%20State%20of%20the%20art%20assessment.pdf>

<https://www.padovanet.it/informazione/piano-di-assetto-del-territorio-pat>

<https://www.padovanet.it/informazione/piano-di-assetto-del-territorio-intercomunale-pati>