
INSURANCE AND CLIMATE RISKS PREVENTION

MISSION RISQUES NATURELS (MRN)
AN INITIATIVE OF FRENCH INSURERS TO IMPROVE
THE KNOWLEDGE AND PREVENTION OF CLIMATE RISKS



INSURANCE AND PREVENTION : A NECESSITY TO FACE CLIMATE CHANGE

With the support of its dedicated association, MRN, the French insurance trade associations acts for knowledge and prevention of damaging climatic events.

This brochure presents the actions of MRN carried out by the French insurance trade associations and conducted in collaboration with public authorities in charges of prevention policies at national and territorial levels.

Many actions are also individually taken on the initiative of industry players (insurer, reinsurer, etc.).

International framework :

- **Sendai framework for disaster risk reduction**

(March 2015, Sendai)

- **Post-2015 development Agenda**

(September 2015, New-York)

- **COP21** on climate

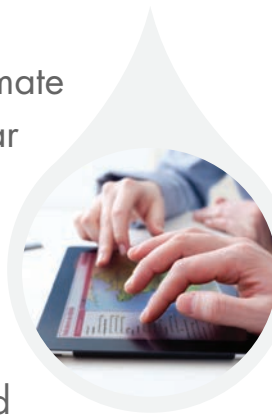
(December 2015, Paris)



The insurance sector has constituted structures dedicated to knowledge and prevention of natural disasters: in the US, the Institute for Business and Home Safety (IBHS), in Canada, the Institute of Disaster Loss Reduction (ICLR), in France, the Mission Risques Naturels (MRN, see following pages).

In Europe, other national insurance associations have developed similar projects (ZURS GEO in Germany, HORA in Austria, FRAT in Czech Republic, etc.). Experience sharing activities are held at the Global Forum of Insurance Associations (GFIA) and Insurance Europe, the European federation of national insurance associations.

In France, insurance plays a vital role in the coverage of risks linked to climate hazards. Since 1982, the French state is indeed a guarantor of a singular system of compensation for natural disasters, based on national solidarity: all citizens who enter into a contract of insurance covering damage to property (home, car, business) are covered against the effects of major disasters (floods, droughts, earthquakes, etc.). Moreover, the effects of windstorms, hail and weight of snow on roofs in particular, are also covered by insurance contracts.



To sustainably maintain this high level of insurance that many countries envy, the entire nation, territories and economic players themselves cannot escape increased prevention efforts, each at his level of responsibility.

In establishing the compensation scheme for natural disasters, the French legislator has provided a strong link between insurance and prevention, to the point where it considers the compliance to the Risk Prevention Plan (*Plan de Prévention des Risques - PPR*) as a condition for insurability.

The following pages show how insurers collectively undertake concrete actions, alongside the public authorities and their policyholders, through:

- their dedicated association : Mission Risques Naturels (MRN)
- their active participation in the National Observatory for Natural Hazards (*Observatoire National des Risques Naturels - ONRN*)



MISSION RISQUES NATURELS (MRN) BETWEEN FFSA AND GEMA

Floods and storms of 1999 were the catalysts of a collective reaction, with the creation by FFSA and GEMA in 2000 of the Association of French Insurance Undertakings for Natural Risk Knowledge and Reduction (*Mission des sociétés d'assurances pour la connaissance et la prévention des risques naturels - MRN*), complementing an existing network of national players involved in the management and prevention of disaster risk (*see following pages*).



NATIONAL OBSERVATORY FOR NATURAL HAZARDS (ONRN)

The French State, represented by the Ministry of Sustainable Development (MEDDE), the Central Reinsurance Company (*Caisse Centrale de Reassurance - CCR*) and the MRN signed in 2012 a partnership agreement.

This launched the National Observatory for Natural Hazards (ONRN). The implementation of this observatory reinforces in a new way the relationship between insurance and prevention and provides an opportunity for the actors to collect, share and disseminate data and indicators on natural risks (*see following pages*).

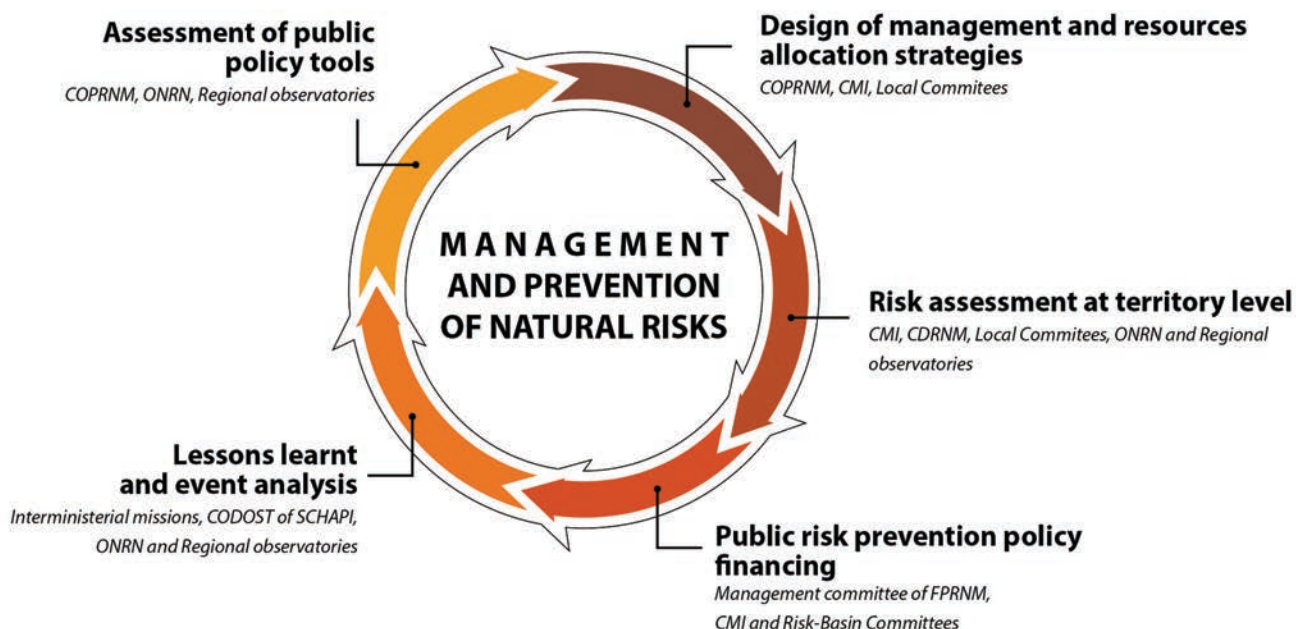
PARTICIPATION IN THE GOVERNANCE OF NATURAL RISKS PREVENTION

🔹 An essential collaboration with the State

With MRN, insurance trade associations are involved in key stages of natural risks management in France, through its involvement in various accredited national and territorial committees established by the State for the participative governance of prevention.



Representation of insurance trade associations in participative governance bodies



MAJOR NATURAL HAZARDS PREVENTION FUND (FPRNM)

Since the Act of February 2, 1995, on strengthening the protection of the environment, a NatCat levy on the premium (currently 12%) finances the major natural risk prevention fund (FPRNM or «*Barrière*» fund). Under certain conditions, this fund subsidizes various individual or group prevention measures such as expropriation, amicable acquisitions, flood prevention action programs (*Programmes d'Actions et de Prévention des Inondations* - PAPI), studies and works to comply with PPR requirements, etc.

Networking and partnerships with communities and associations

Insurers have also established partnerships and collaborations with territorial public actors, as well as thematic associations.

Insurance trade associations and their committees, MRN and AQC, play a key role in facilitating the relations and collaborative actions between stakeholders for the sake of DRR.



Les collectivités en Europe pour la prévention du risque d'inondation
Communities and local authorities in Europe preventing flood risk



PARTNERSHIP BETWEEN AFEPTB AND MRN

After numerous bilateral collaborations between EPTBs and MRN, a framework agreement was signed between their association, AFEPTB, and MRN.

It allows operational collaboration on various themes including:

- Evaluating the prevention
- Improving knowledge of floods economic impact
- Information and awareness raising



SYNERGY BETWEEN AQC AND MRN

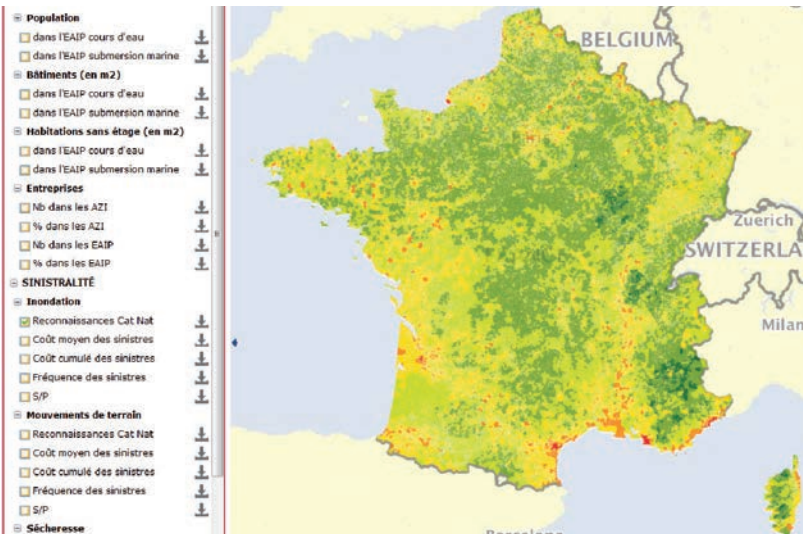
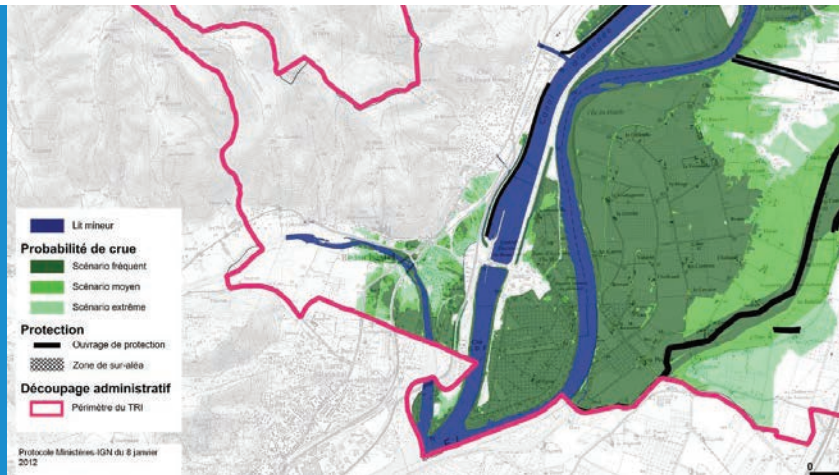
- Guidance documents targeting project owners and other participants in the act of building, on issues such as :
 - Subsidence risk reduction for housing
 - New constructions in flood-prone areas
- Partnership on a new research project undertaken by the MRN: «Using insurance loss adjustment data to analyze damages caused by climate on buildings».

HAZARDS AND RISKS OBSERVATION

On behalf of its members, MRN monitors public data on hazard zoning and assets exposure. Its expertise provides a critical eye on the status of data availability, quality and use. It produces public reports to the stakeholders.

PROMOTING PUBLIC DATA ON HAZARDS

MRN contributes to the public effort to collect, integrate and make available the hazard data produced under the Floods Directive (flood-prone areas on the territories with potential significant flood risks).



INTERACTIVE WEBSITE OF ONRN

MRN has participated in the design of the interactive website of the ONRN. This platform provides information to the general public and stakeholders, through data and indicators on hazards, assets at risk, loss records, lessons learned, and natural risk prevention procedures. It also contributes to its continuous supply of data.

STUDY OF THE IMPACTS OF CLIMATE CHANGE

MRN is taking part in the studies on the economic impact of climate change undertaken by the State, local authorities and economic actors. It has in particular provided estimates of the impact of storm surge on property damages.



MRN GIS tool for commercial lines risk prevention

To inform and raise awareness of their customers, insurance companies need to bring together public risk data that can help analyzing the exposure of specific assets.

To this end, MRN has developed an extranet platform of geo-services: MRN GIS.

This tool, regularly updated with new data can geolocate risks.

It is possible to edit a report that synthesizes available information on the status of risks and collective prevention procedures, which concern a specific site.



Informations sur le risque

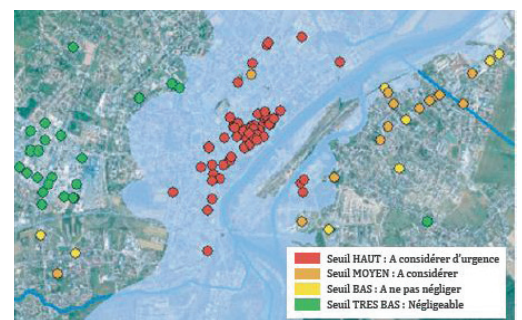
	Inondation	Sécheresse	Séisme	Cavités	Avalanches
Informations Administratives					
Commune déclarée à risque	Oui	Oui	Oui	Non	Non
Date du dernier arrêté CATNAT	13/01/2013	-	-	-	-
Nombre d'arrêtés CATNAT	17	0	0	0	0
Nombre d'arrêtés CATNAT < 5ans	5	0	0	0	0
Commune dotée d'un DICRIM			Oui		
Informations Préventives					
Seuil de vigilance MRN	HAUT	BAS	BAS	MOYEN	TRES BAS
Exposition à l'aléa	Non La Garonne à 81 m.	Oui	Oui	Oui	Non
Zone	Non	FAIBLE	Faible 0,7 à 1,1 m/s²	19 cavités recensées dans la commune soit 0,21 au km²	Les zonages CLPA ne font pas état d'intensité d'aléa avalanches.
Informations Réglementaires					
Commune dotée d'un PPR	Approuvé	Non	Non	Non	Non
Date de prescription	07/01/1997	-	-	-	-
Date d'approbation	20/11/2000	-	-	-	-
Perspective de modulation de franchise au prochain arrêté CATNAT	Non	Non	Non	Non	Non
Situé en zone réglementée	Abs. données	Non	Non	Non	Non
Zone	Non	Non	Non	Non	Non
Lien vers règlement associé					
Commune dotée d'un PCS			Oui		
Informations MRN					
Taux de professionnels en zone d'aléa	23% (~1300)	Non concerné	68% (~3800)	Non concerné	0% (~0)
Taux de logements en habitation collective en zone d'aléa	0% (~0)	Non concerné	100% (~19800)	Non concerné	0% (~0)
Taux de logements en maison individuelle en zone d'aléa	0% (~0)	73% (~6800)	100% (~9000)	Non concerné	0% (~0)

REPORT FOR EXPOSURE ANALYSIS

The report contains, in addition to administrative, preventive and regulatory information from public databases, statistics on professionals and individual exposure to natural risks taken provided by the MRN observatory, and a conventional interpretation of the exposure level for internal use.

It informs on the major risks covered by NatCat insurance cover: flood, drought, earthquakes, avalanches, underground cavities.

Moreover, interested companies may use the source data to assess the exposure of their portfolio, their cumulative risks, their need for reinsurance, etc.

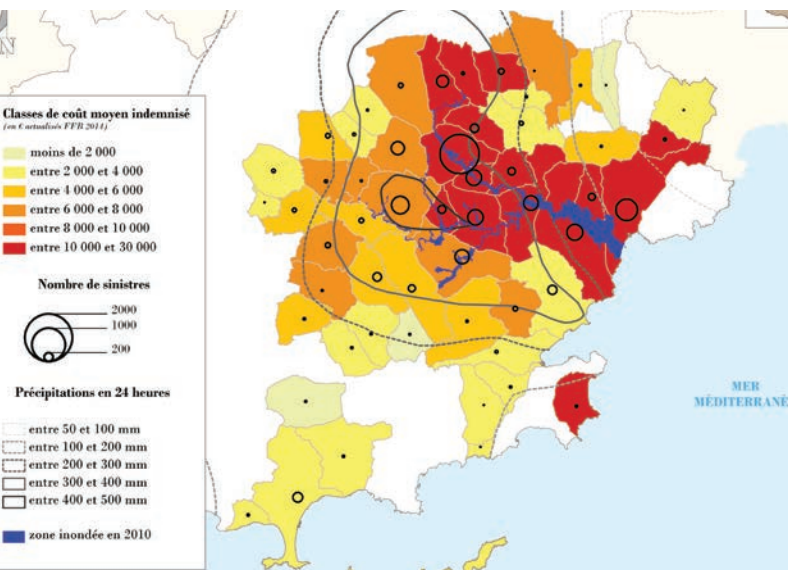
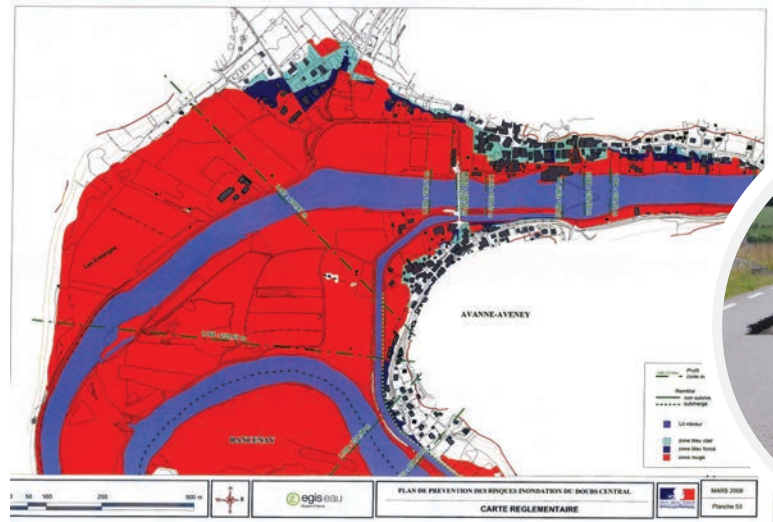


SCIENTIFIC AND TECHNICAL STUDIES IN PARTNERSHIP WITH PUBLIC ACTORS

MRN hosts and supervises PhD student staff members in partnership with educational and research institutions (Mines ParisTech, Universities of Montpellier III, Paris Diderot, Paris-Est...). This work benefits to both public stakeholders and MRN members.

EVALUATION OF PPR

The Risk Prevention Plans (PPR) are the only regulatory documents mentioned in the Insurance Code. They leverage public preventive action at municipal level. Therefore the insurance trade associations mandated MRN to assess and report on the consistency of their coverage at national level.



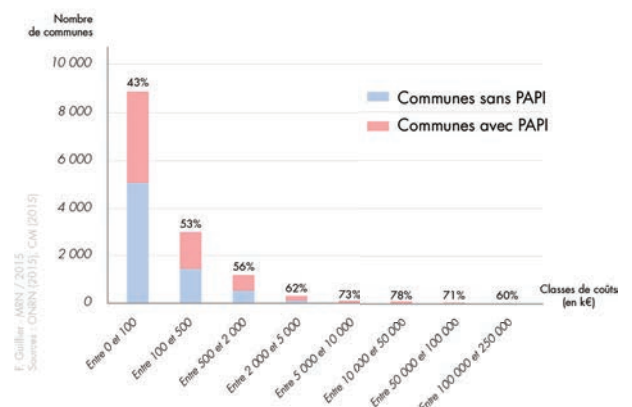
DATABASE ON INSURED LOSSES BY EVENT

The cost of claims by flood event is known for major disasters only. To overcome this lack of knowledge for less intense but more frequent events, MRN has created, in partnership with voluntary insurance companies, a database of compensated losses aggregated by municipalities and flooding event.

PAPI ABILITY TO REDUCE VULNERABILITY

The Flood Prevention Action Programs (PAPI), funded by FPRNM, are key tools to support flood risk reduction policy. MRN is implementing a research study in partnership with national public authorities to assess the PAPI ability to reduce the vulnerability of territories (ongoing PhD at MRN).

Proportion de communes couvertes par un PAPI par classe de coût cumulé des sinistres inondation sur la période 1995-2010



AWARENESS RAISING AND INFORMATION

🔹 A network of representatives at territorial level

Effective prevention has to contribute to raise risk awareness. This is why insurance trade associations have created a network of correspondents, anchored in the territories, which meets the local issues and needs.

This network of Departmental Major natural Risk Prevention Insurance Representatives (CPRNDA), led by MRN contributes and participates in:

- information meetings on the natural disasters insurance system and the link between insurance and prevention,
- the Departmental Committees for major natural Risk Prevention (CDRNM), dedicated local participative governance activities,
- the Risk-Basin Committees that identify territories with potential significant flood risks (TRI) and define flood risk management plans (PGRI).

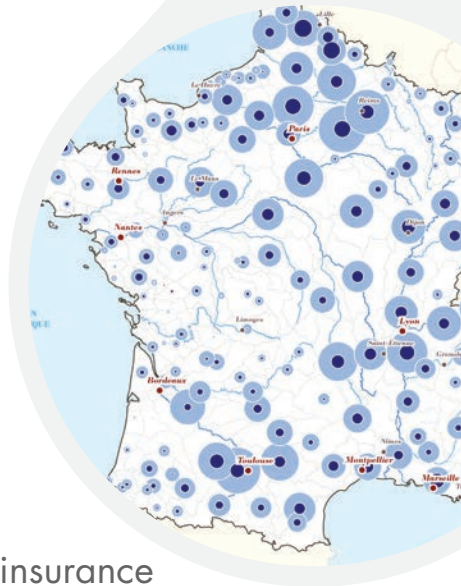
The network of CPRNDA complements the territorial networks of FFSA and GEMA

QUOTES BY CPRNDA REPRESENTATIVES

« Overall we do not express much, but our voice carries. As such, the use of FPRNM is an important trigger for the implementation of studies and works. Otherwise, I am now asked by elected local authorities to attend public meetings to explain the impact of the implementation of PPRN »

« Our job is poorly understood by public authorities, in particular the regulation aspects and the different procedures that apply. The role of MRN representatives is therefore to present, explain and even warn about certain topics »

« Knowledge sharing brings trust through a common culture. We all have an interest in developing our risk culture »



Support for risk awareness raising and diagnosis

INDIVIDUALS

To inform individuals about how NatCat insurance cover works, how to obtain subsidies for risk reduction measures, ... MRN distributes a brochure entitled «Insurance and prevention of natural disasters» and a series of «Practical mementos for the private individuals» indicating the measures to be taken before, during and after the occurrence of an event.

PROFESSIONALS

In partnership with the State and other public stakeholders, MRN contributes to actions targeting professionals:

- Exposure analysis,
- Risk awareness raising and methodological support to vulnerability diagnostics,
- Information on vulnerability reduction measures

MRN publishes a semi-annual newsletter to stakeholders of natural risk management.



Downloadable documents:
www.mrn.asso.fr

MRN also publishes lessons learned monographs on major natural events, as well as various reports and indicators available on the ONRN website (www.onrn.fr).



LIST OF ACRONYMS

- AFA** : Association Française de l'Assurance
- AFEPTB** : Association Française des Établissements Publics Territoriaux de Bassin
- AFPCN** : Association Française pour la Prévention des Catastrophes Naturelles
- AFPS** : Association Française du Génie Parasismique
- AFIGEO** : Association Française pour l'Information Géographique
- AQC** : Agence Qualité Construction
- CCR** : Caisse Centrale de Réassurance
- CEPRI** : Centre Européen de Prévention du Risque d'Inondation
- CDRNM** : Conseil Départemental des Risques Naturels Majeurs
- CIFRE** : Convention Industrielle de Formation par la Recherche
- CMI** : Commission Mixte Inondation
- CNPP** : Centre national de prévention et de protection
- CODOST** : Conseil d'orientation et d'appui scientifique et technique
- COMITER** : Commission Territoriale
- COP 21** : 21ème Conférence des parties de la Convention-cadre des Nations unies sur les changements climatiques
- COPRNM** : Conseil d'Orientation pour la Prévention des Risques Naturels Majeurs
- CPRNDA** : Correspondants Prévention Risques Naturels Départementaux des entreprises d'Assurances
- DGPR** : Direction Générale de la Prévention des Risques
- EPTB** : Établissement Public Territorial de Bassin
- FFSA** : Fédération Française des Sociétés d'Assurances
- FPRNM** : Fonds de Prévention des Risques Naturels Majeurs (dit Fonds « Barnier »)
- GEMA** : Groupement des Entreprises Mutuelles d'Assurances
- HCFDC** : Haut Comité Français pour la Défense Civile
- IAU Île-de-France** : Institut d'Aménagement et d'Urbanisme d'Île-de-France
- ONRN** : Observatoire National des Risques Naturels
- ORRM PACA** : Observatoire Régional des Risques Majeurs en PACA
- MRN** : Mission des sociétés d'assurances pour la connaissance et la prévention des risques naturels
- PAPI** : Programme d'Actions de Prévention des Inondations
- PGRI** : Plan de Gestion des Risques d'Inondation
- PPR** : Plan de Prévention des Risques Naturels
- SCHAPI** : Service Central d'Hydrométéorologie et d'Appui à la Prévision des Inondations
- SHF** : Société Hydrotechnique de France
- SNGRI** : Stratégie Nationale de Gestion du Risque Inondation
- TGN** : Tempêtes Grêle Neige (garantie d'assurance)
- TRI** : Territoire à Risque Important (d'inondation)
- UNISDR** : United Nations Office for Disaster Risk Reduction



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