



*Let's adapt our habits
to preserve the natural state of our rivers*

HANDBOOK

**OWNERS OF WATERFRONT
PROPERTIES**

▲ **Les structures GEMAPI vous informent**

VOCABULARY

Catchment area (Bassin versant)

An area from which surface runoff is carried away by a single drainage system

Coppicing (Recépage)

The action of cutting back a tree to ground level to stimulate growth

Drainage (Drainage)

Natural or artificial removal of a surface's water and sub-surface water from an area with excess of water

Dredging (Curage)

Removal of sediments and debris from the bottom of lakes, rivers, harbors, and other water bodies

Fascinage

Reinforcement of the riverbank by using bundles of wood tied together (fascines)

GEMAPI

Qualification that territorial organisations have on monitoring aquatic environments and preventing floods (GEstion des Milieux Aquatiques et la Prévention des Inondations). Organisations in charge are called Syndicats GEMAPI

Logjam (Embâcles)

Blockage caused by the crowding together of a number of logs or plant debris floating in a river

Low-water level (Etiages)

Flow of water in a stream during prolonged dry weather

Meander (Méandre)

Winding curve of a river

Spawning area (Frayères)

Lieu où les poissons déposent leurs œufs

"Retalutage"

Reinforcement of the riverbank

Riparian woodland (Ripisylve)

Wooded area of land adjacent to a body of water such as a river, pond, lake etc

Riverbank (Berge)

Riverbanks are natural or artificial transitional boundaries between the aquatic and terrestrial ecosystems

Valve (Vanne)

Device for controlling the passage of water in order to control its flow

Wetland (Zones humides)

Area where the water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year



SOMMARY

PRELUDE **3**

RIVERS ARE SENSITIVE ENVIRONMENTS **4**

Vegetation
Morphology
Wetlands
Logjam

RIGHTS AND DUTIES **7**

MAINTAINING MY WATERWAY **9**

CONTACT MY SYNDICAT **12**



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PRELUDE

Ecological functions of rivers have been altered due to artificialisation and man-made morphology modifications. **The ecological balance of these waterways is fragile**, and as a landowner you have a key role in protecting their proper functioning.

Owners of waterfront properties and hydraulic infrastructures (including watermills, bridges, waterbodies...) are responsible for all maintenance on their property, as well as the impact on water quality these infrastructures may have.

YOU OWN A WATERFRONT PROPERTY

You are a key stakeholder in environmental conservation. This handbook holds the most important information you need to know, as well as helpful tips.



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DID YOU KNOW ?

HEALTHY ENVIRONMENT EQUALS HEALTHY USERS

Rivers with good water quality provide numerous ecosystem services to nature and mankind :

- **Good water quality** (for drinking water)
- **The proper functioning of hydraulic dynamic** : limitation of floods and low-water levels
- **A rich and diverse wildlife**
- **A peaceful setting**, and a recreational space (fishing, canoe, kayak, hikes, etc.)

RIVERS ARE SENSITIVE ENVIRONMENTS

Water is part of our common heritage. Its protection is essential, especially in the context of climate change. **Everyone needs to contribute to the conservation of good quality water and aquatic environments in general.**



THE RIPARIAN VEGETATION

The vegetation bordering waterways (riparian vegetation) **plays an important role in the river's proper functioning.** Its thickness and diversity (species of trees, bushes, aquatic weeds...) allows this vegetated border to have different consequences : the purification of water running down the catchment, the stabilisation of the riverbank, the creation of natural habitats (birds, small mammals, insects...), the cooling effect of shade on water temperature.

Yet, the riparian vegetation is not always healthy :

- It can be totally **missing, very deteriorated, or destroyed** by drasting maintenance or clearcutting
- It can inhabit species that **are not adapted** : invasive species (Japanese knotweed, Himalayan balsam,...), or uniform an blocky plantations
- The riparian vegetation is not always well maintained, which can lead to the **accumulation of plant debris blocking the natural flow of the waterway**, or even blocking the sunlight from the river.

YOU OWN A WATERFRONT PROPERTY

You are **responsible** for the **maintenance on the riparian vegetation** along the riverbank.



WATERWAY MORPHOLOGY

Mankind often tends to straighten, widen or control waterways that are **naturally meandering.** These modifications have led to habitat homogenisation, particularly for aquatic species. A river needs to express its **natural dynamic, including floods and low-water levels.**

Individually, it can be hard to take into account all factors, as it may concern numerous landowners. Organisations in charge of monitoring aquatic environments and preventing floods (GEMAPI) can help you restore the natural state of the river.

YOU OWN A WATERFRONT PROPERTY

You also have the responsibility to not alter the watercourse further. **Massive rockfill, scouring or dredging need to be avoided.**

This kind of drastic maintenance **has a strong negative impact on hydraulic dynamic** : floods downstream, draining of wetlands, amplification of low-water level periods, destruction of aquatic species habitat...



Maintenance too drastic



© SMABACAB



Straight watercourse



© SYBRA



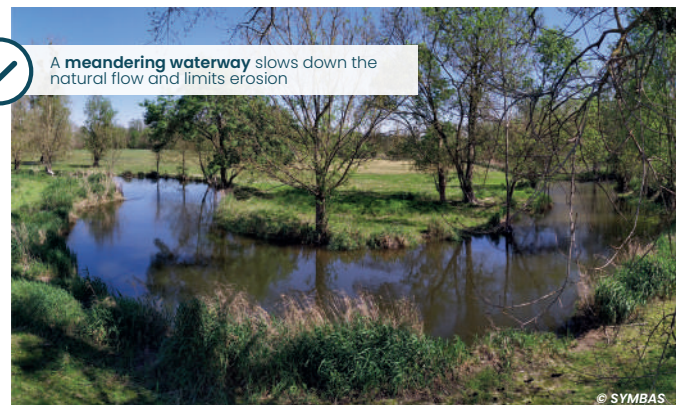
The riparian vegetation stabilises the riverbank and brings organic matter



© SAB VIENNE



A meandering waterway slows down the natural flow and limits erosion



© SYMBAS



CONSERVATION OF WETLANDS

Wetland conservation is an important issue. These areas are usually located near a watercourse, and where water covers the soil for varying periods of time during the year. **Wetlands have water retention properties, and contribute to slowing down floods and periods of low-water levels** (1 m² of wetland can retain up to 1000 liters of water).

Wetland soil also have water **purifying properties and allow the development of a specific flora.**

YOU OWN A WETLAND

You can contribute to their protection by not urbanising the area, not draining it, and implement adapted land use such as a prairies and meadows.



IMPACT OF HYDRAULIC INFRASTRUCTURE

The proper functioning of rivers can also be **altered by hydraulic infrastructures** (watermill, valve, bridge, waterbodies...). They can have numerous impacts:

- **Restriction of fish circulation and other aquatic species** due to the presence of barriers
- **Buildup or lack of sediments up and downstream from hydraulic infrastructures** can cause : siltation, riverbank erosion, deepening of the riverbed...
- **Poor water oxygenation and alteration of its quality**

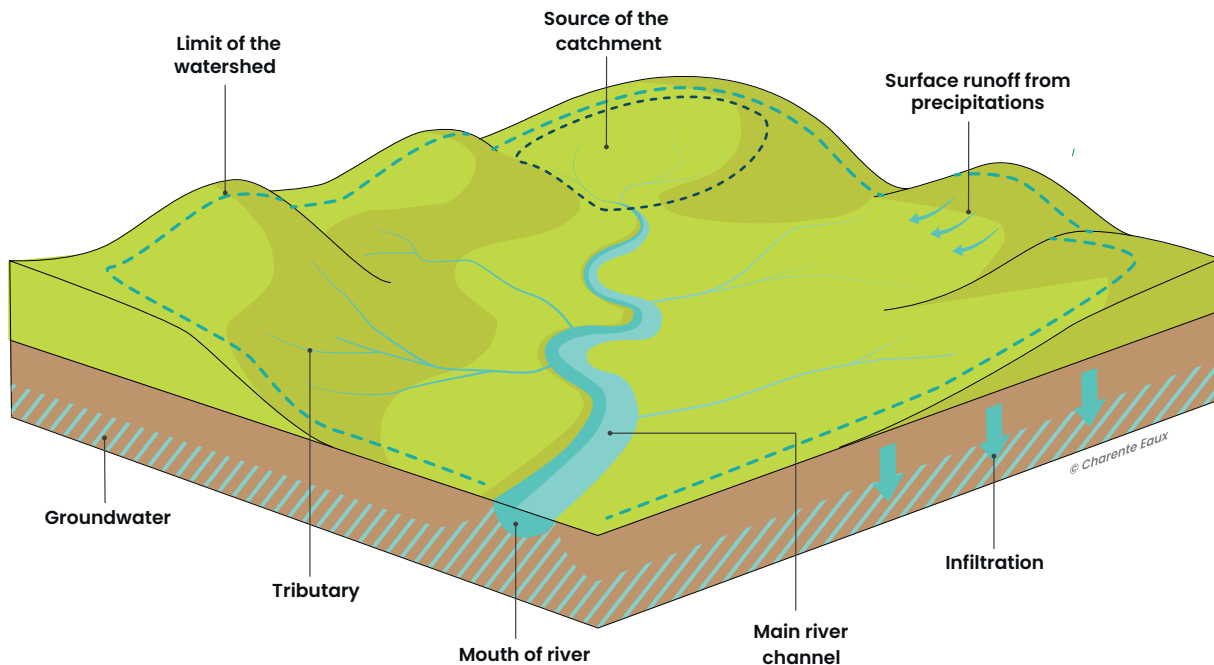
YOU OWN A PROTECTED WATERCOURSE

You need to allow the **circulation of aquatic species and sediments** in protected watercourses listed in list 2. (> [see the interactive map p.12](#))



DYNAMIC OF CATCHMENT AREAS

Protecting our rivers also means protecting its whole **catchment area**. Whether we are farmers, local residents, or territorial organisations, **we are all responsible for our impact on aquatic environments.**



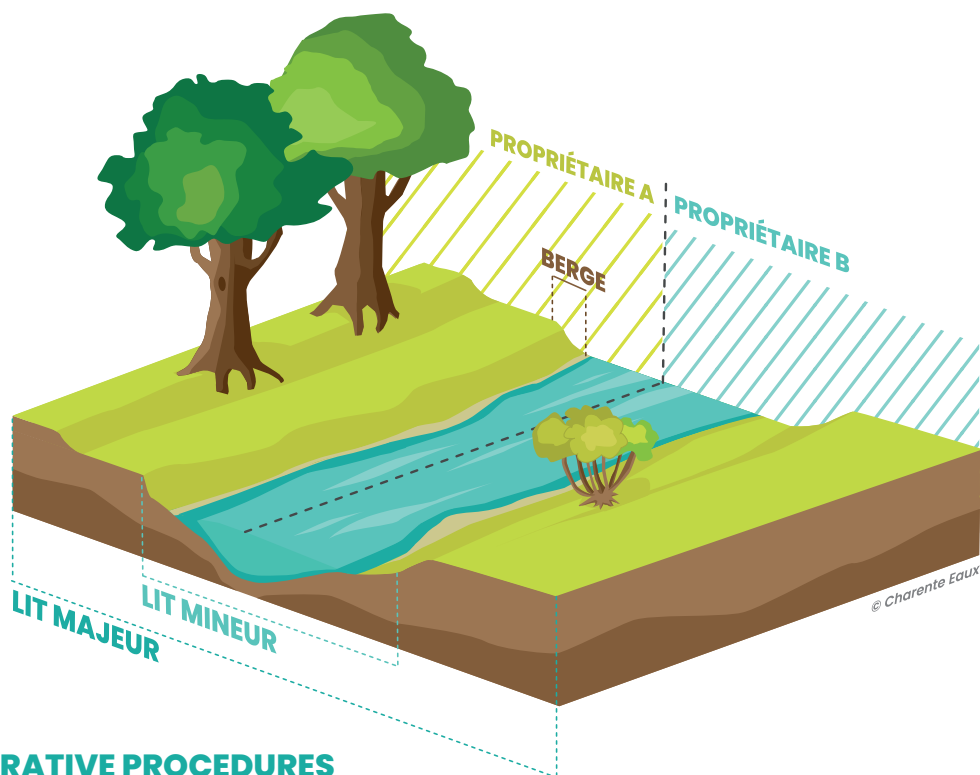
Rivers are very sensitive aquatic ecosystems that need to be protected. As an owner, you are responsible for maintaining their quality and proper functioning.

Local territorial organisations such as the city council are also responsible for the protection of rivers. **Organisations in charge of monitoring aquatic environments and preventing floods (GEMAPI)** can also assist you in these actions.

RIVER OWNERSHIP

In Charente, **less than 5% of the watercourse is state-owned**. The maintenance is ensured by the maintenance department at the Conseil Départemental. (> [See the interactive map page 12](#)).

The remaining 95% is private. **Residents are owners of half of the riverbed**, from the riverbank to the middle of the stream, and are responsible for its maintenance. Interventions on waterways, riverbanks and wetlands are strictly monitored in order to monitor their impact on the ecosystem



ADMINISTRATIVE PROCEDURES

Most interventions and maintenance work on rivers are regulated and **requires authorisation from state services**.

These interventions include dredging, recalibrating, riparian vegetation clearing, the extract or input of sediments, the modification of river morphology, any reinforcement of the riverbed or bank, as well as works on flood-risk areas or wetlands (including draining, filling, excavating, ...).

Administrative procedures you need to fill depend on the type and extent of construction you want to do : every situation is different. It is recommended to contact the Direction Départementale des Territoires (Mer), DDT(M), of your specific Département **before starting any work of this nature**. Any intervention or construction that has been done without authorisation is an infraction to the Environmental code, that can result in a fine or an offence leading to prison time.

DID YOU KNOW ?

Other types of run-off or watercourse are also important !

Ditches also collect water from surface run-off, precipitations or drainage systems. Maintenance on these trenches is also important as they play an important part in the **dynamic of the whole catchment area**, especially by purifying water and regulating floods.

Ditch maintenance need to be declared to state authorities. Some interventions need to be avoided :

- **Recalibrating or modifying the morphology**
- **Scouring or dredging**
- **Using phytosanitary products or crop protection substances** less than 5 m around the ditch
- **Regular maintenance** (it is recommended to have a 5 year period between each work).

> **Before any intervention : Contact your local DDT(M)**

RIGHTS AND DUTIES

By owning waterfront properties, residents have rights but also get duties especially to ensure a **respectful maintenance on the river**. **These rights and duties can not be removed or transferred.**

RIGHT OF OWNERSHIP



Residents are owners of half of the riverbed, from their side of the riverbank to the middle of the stream. You need to make sure your fence doesn't obstruct the way to boats or plants debris carried by the riverstream.

However the water belongs to everyone : you have to allow the crossing of boats and vessels.

RIGHT TO FISH



Your right to fish is affiliated with your right of ownership. You are allowed to fish on your property, **as long as you have a valid licence, and you respect the regulations.**

RIGHT OF WATER USAGE



Owners of waterfront properties are allowed to use the water **to some extent** (domestic use, watering, ...).



OBLIGATION TO GIVE A RIGHT OF WAY



Owners have to give a right of way to authorities and technicians in charge of monitoring aquatic ecosystems (organisations GEMAPI, water police, fishing federation...).

REQUIREMENT TO NOT HARM AQUATIC ECOSYSTEMS AND WATER QUALITY



It is prohibited to **discharge harmful substances** in the waterway (chemicals, waste, polluted water...)

The introduction of pest species (red-eared slider, pumpkinseed fish, spinycheek crayfish...) is **strictly prohibited.**

RESPECT OF REGULATIONS

« LOI SUR L'EAU »



Some watercourses are classified as « cours d'eau » by the water police. Interventions on these watercourses are regulated by the water act, or Loi sur l'eau. **You have to respect this regulation.**

> [See the interactive map p.12 to view all watercourses classified as "cours d'eau" according to the water police](#)

DUTY TO MAINTAIN



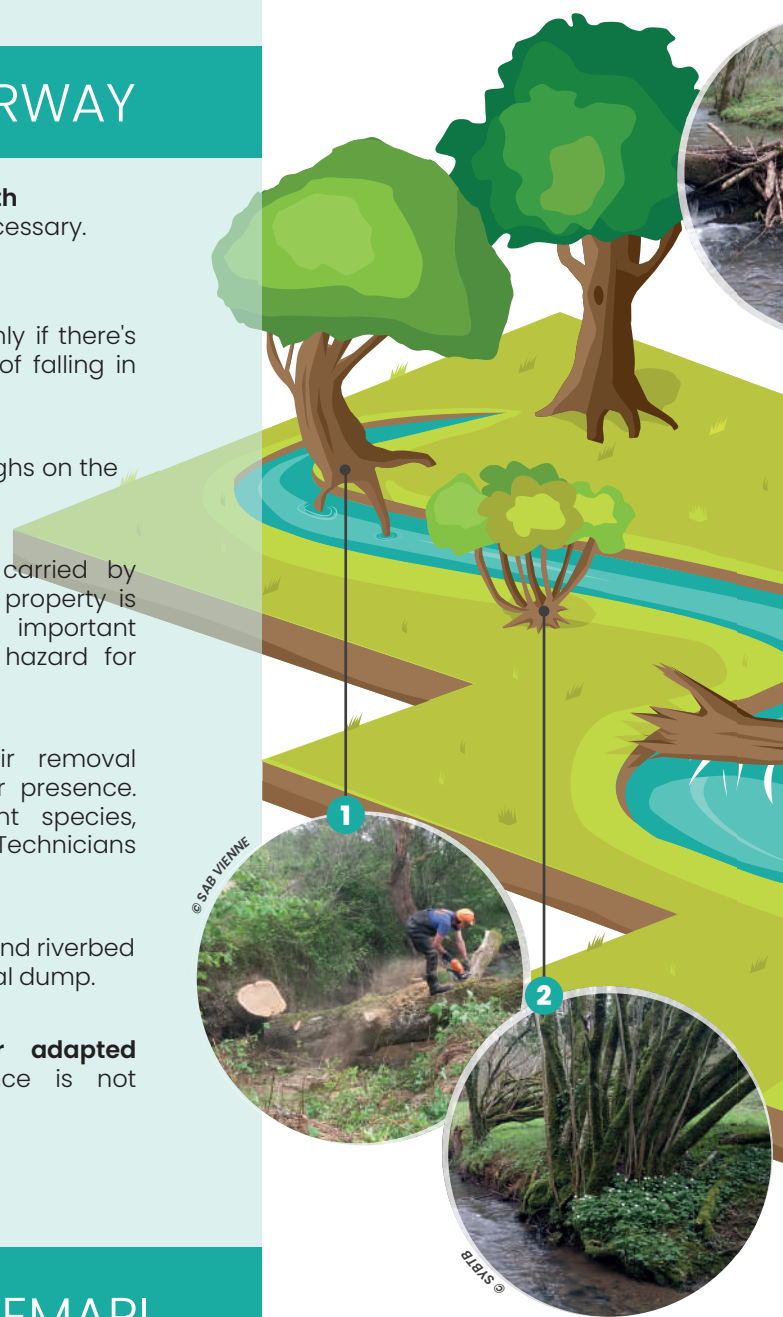
According to article L215-14 of the French Environmental Code, **owners have to regularly maintain their portion of the watercourse.** This maintenance has several goals :

- Upkeeping the **natural morphology and profile** of the river
- Sustaining the **natural water flow**
- Contributing to its **good ecological state**, particularly by removing debris that could be barriers (rocks, plant debris...).

MAINTAINING MY WATERWAY

River maintenance needs to be executed **with moderation**, and limited to the strict minimum necessary.

- 1. Tree trimming or the cutting of unstable trees** only if there's a safety hazard for you or local residents, or risk of falling in the watercourse.
- 2. Coppicing some trees** to allow sunlight breakthroughs on the river.
- 3. Removing mobile logjams** as they could be carried by waterflow and cause damage (especially if your property is near a bridge). There also could be a risk of important flooding damaging goods or people, or safety hazard for kayakers.
- 4. Removing exotic invasive plant species.** Their removal requires caution to not amplify or relocate their presence. If you notice any presence of invasive plant species, please contact your local organisation GEMAPI. Technicians will guide you through the removal procedure.
- 5. Littering and waste discharging** on the riverbanks and riverbed are **prohibited**. You can dispose of them at your local dump.
- 6. Plantation of trees or bushes of local or adapted species on the riverbank.** Regular maintenance is not under any regulation.

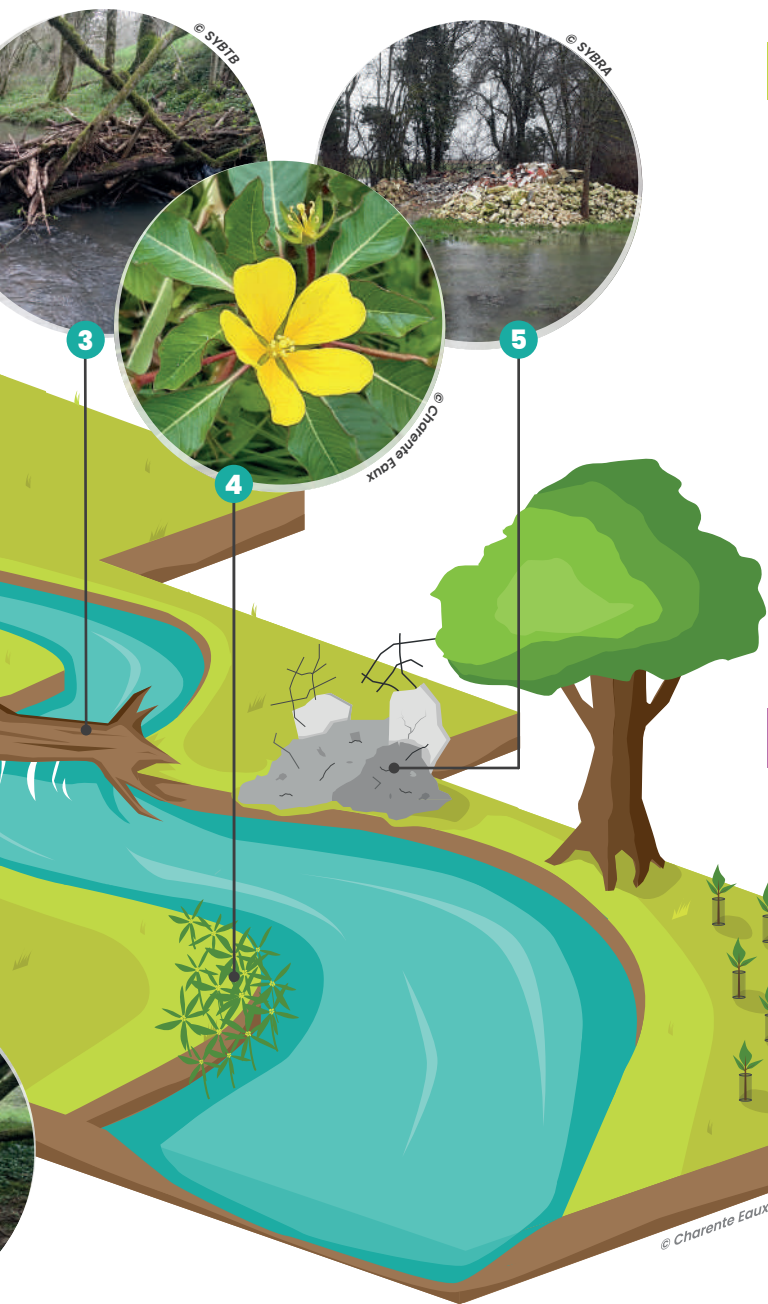


ROLES OF SYNDICAT GEMAPI

Actions taken by organisations GEMAPI only apply in a context of **general public interest or emergencies**. That's the reason why a **Déclaration d'Intérêt Général ou d'urgence (DIG)** needs to be filed before any intervention.

KEY ACTIONS UNDERTAKEN BY SYNDICATS GEMAPI

- The **rewilding of watercourses** (actions on the general morphology to remeander the waterway)
- The removal of logjams or the plantation of plants that could have a positive impact on **flood regulation**, or to counter potential major crisis (ex. plantations implemented after the 1999 storm)
- The reestablishment of fish and sediment circulation
- The manoeuvres of valves that they are in charge of
- The restauration of fish habitat
- The inventory, restauration and **conservation of wetlands**
- The achievement of diagnoses, hydrometric monitoring, councelling and working on **preventing floods**.



SIMPLE ACTIONS

- When tree cutting, **cut as close as possible to the ground, and keep the tree stump and roots** : they will help maintaining the riverbank
- **elect harvesting allows a diversified vegetation**
- **Preserve young trees**
- **Cut down progressively species that are not adapted to riverbanks** (resinous, poplar trees...)
- **Keep some dead trees between the riverbank and your land** : its an excellent refuge for biodiversity
- **Keep some logjams that seem well secured** for their ecological role (fish habitat, insect habitat...)



WATCH OUT !

- **Intervene with parsimony and don't over maintain**



The evaluation of environmental and social issues allow the **elected representatives of organisations GEMAPI to decide and plan** every intervention on watercourses that are needed. **An annual action programme is established for each action declared as of general public interest**, actions that are then carried out by syndicats GEMAPI or local stakeholders.



SYNDICATS GEMAPI ARE KEY MEDIATORS ON RIVERS TO THE EXTENT OF CATCHMENT AREAS

- **Assist owners by raising awareness, giving technical advices and helping :**
 - **maintaining waterways and aquatic environments**
 - **bringing private-owned hydraulic infrastructures to legal standards, an reestablishing fish and sediment circulation**
- **Assist territorial organisations** by making sure **aquatic environment protection** is taken into account in all projects (urban projects, urban planning...)
- **Raise public awareness on freshwater and waterways** and assist local stakeholders (agricultural professionals, local residents,...) **on change in practices**



INTERVENTION PROCESS



Diagnosis of the territory



Concertation



Decision of elected representatives



Instruction du dossier réglementaire



Syndicat GEMAPI Intervention

FAQ

WHEN IS IT BEST TO WORK ON A WATERWAY ?

To maintain the vegetation part of a waterway, it is better to do it during the **vegetative resting period**, which is in winter.

The removal of waste and rubbish can be done **whenever**. However, as the water level is lower in spring and summer, collecting waste can be easier and more thorough. Invasive plant species need to be removed as soon as possible once identified.

For any other maintenance on your water way (removal of ligneous species, removal of logjams), you need to contact your local syndicat GEMAPI. They will assist you on the process and identify the best period depending on some species of fauna mating season.



DON'T FORGET !

It's better to **regularly maintain** your waterway instead of occasionally and drastically.



BE CAREFUL !

Do not keep any waste on your plot of land as it could be swept downstream by a flood.

I THINK I HAVE IDENTIFIED A RIVER CONTAMINATION OR SKETCHY FLOW WHEN ON A WALK. WHOM CAN I CONTACT ?

If you notice any contamination (visual or odorous) please contact rapidly :

> **Office Français de la Biodiversité of Nouvelle Aquitaine**

05 56 13 28 10 | See your **département's contact list** (<https://ofb.gouv.fr/nouvelle-aquitaine>)

I WANT TO PLANT NEXT TO A WATERWAY : WHAT SPECIES ARE RECOMMENDED ?

Some species adapted to our territory :

- **Helophytes** : yellow iris, lysimchias, purple loosestrife, cane, marsh...
- **Bushes** : guelder rose, common dogwood, common spindle...
- **Trees** : alder, white willow, grey willow...

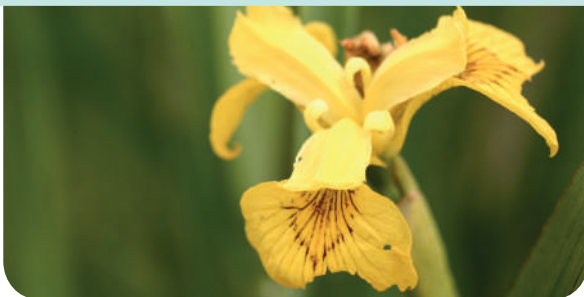
Make sure to anchor your plantations to stable parts of the riverbank. **A slight reinforcement of the bank on a gentle slope is possible.** However, **please avoid the use of plastic materials** (tarps, protective nets) as they could eventually be swept away and contaminate rivers and oceans. Vegetal alternatives exist (coconut fibres, organic mulching, wooden tuteurs...).



DON'T FORGET !

It is very important to only **plant local plant species.**

Don't plant decorative ornamental species as they could be invasive or inadapted. Identify species present in more natural sites to inspire your plantations. You can also extract parts of existing plants to plant cuttings to grow a new plant (willows for example), or buy new individuals at your local garden center.



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A TREE FROM MY PROPERTY FELL INTO THE RIVERWAY, WHAT DO I NEED TO DO ?

You are responsible and need to ensure the removal of the tree. If the intervention is delicate, **your local syndicat GEMAPI can evaluate the situation and assist you** in the procedure. > **Contact your syndicat** (p.12)

I OWN A **HYDRAULIC INFRASTRUCTURE**.

WHAT ARE MY RESPONSABILITIES ?

- For all watercourses on List 1 (> *see interactive map p.12*), **all new projects are forbidden**.
- According to article L.214-17 of the environmental code on watercourses on list 2, your hydraulic infrastructure (existing or in construction) need to ensure the **circulation of aquatic species and sediments** (construction of a tailrace, removal of the infrastructure...). According to the law, you are financially and technically responsible for all construction to bring your structure up to regulation.

Public funding exist to help you in the completion of these jobs. Your local syndicat GEMAPI can assist you in the planning of any construction, as well as give you technical advices and adapted solutions.

THE RIVERBANK IS ERODING AND EATING AWAY PARTS OF MY GARDEN/ LAND. **CAN I REINFORCE THE BANK ?**

The river is **influenced by the variation of its constant flow** : there can erosion of sediment deposition. Its profile is **constantly changing**.

When you heavily reinforce a riverbank (massive rockfilling, low walls...) a constraint is created and forces the river dynamic to be dissipated elsewhere (leading to important erosion on the facing bank, deepening of the riverbed...). **It can have drastic consequences on water-levels** of the whole watercourse : because of its deepening, some areas would lose their absorbant properties and create unstable and dangerous riverbanks.

To prevent riverbanks from being more and more sensitive to erosion, it's better to use **more gentle techniques**: plantations, plant cutting, fascinage, reinforcement (retalutage) on a slight slope. Heavy construction should be limited to situations where there is a danger for people or goods (flooded roads, deteriorated house foundations...), or **if there's no other solution. Do not use** any green or inert waste to reinforce your riverbank.

> **Visit** : <https://genibiodiv.inrae.fr/> for information on techniques of vegetalisation.



DON'T FORGET !

Please evaluate the risks of erosion on people and goods before starting any construction. If there are risks, it is important to reinforce your riverbank, but short-term solutions using vegetal techniques should be prioritised. These techniques are more gentle, usually sufficient and more adapted to the environment.

Please contact a local technician in charge of GEMAPI to identify the origin of the erosion, and potential solutions adapted. **You will then be noticed of an possible existing project, and be assisted on any administrative procedure you need to start.**

CAN I PUMP WATER FROM THE RIVER TO WATER MY GARDEN ?

Yes, because of your right of ownership you are allowed to use water from the river under conditions :

- It needs to return to the ecosystem **without any alteration of its quality**.
- The extraction of water is considered as domestic use when the quantity is lower than 1000 m³/an. You will need a device to measure the quantity extracted, such as a volume meter. Beyond this limit, you need to have authorization from your local DDT(M).
- **During droughts, the volume authorized can be lowered by prefectorial decree.**



DON'T FORGET PAS !

Any extraction of water needs to be declared to **your municipality (Mairie)**. You need to ensure that there is a **viable water flow at all times**, for aquatic species circulation and reproduction. If the minimum biological flow is no longer naturally reached, all extraction of water are prohibited.

WHOM CAN I CONTACT



> La Direction Départementale des Territoires (et de la Mer) [DTT(M)]

Charente :
dtd-seer@charente.gouv.fr
05 17 17 37 37

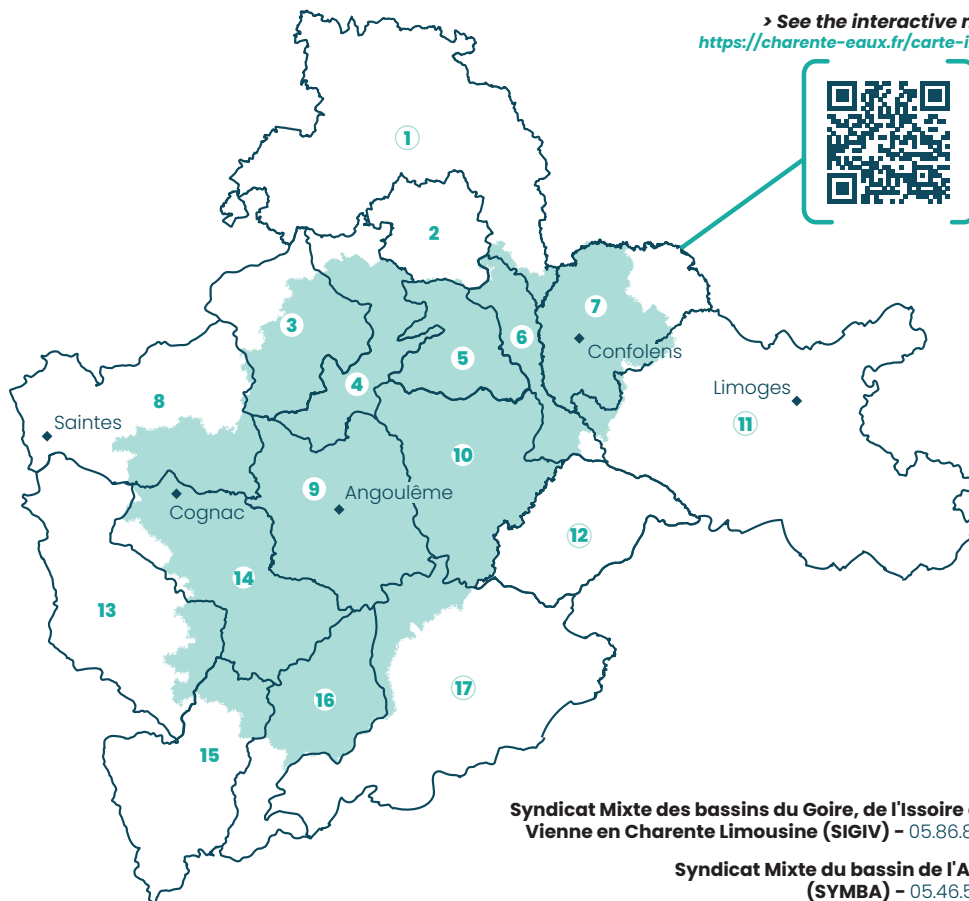
Autres départements :
Visiter l'annuaire.service-public.fr



> Office Français de la Biodiversité [OFB]

See the directory of the OFB to contact the local/regional branch

Charente : 05 45 39 00 00



> See the interactive map
<https://charente-eaux.fr/carte-interactive/>



> **Contacter un syndicat GEMAPI**

Les syndicats GEMAPI présents sur le territoire **sont disponibles pour répondre à vos questions et pour vous accompagner** dans certaines démarches.

- 1 Syndicat Mixte des Vallées du Clain Sud (SMVCS) - 05.49.37.81.34
- 2 Communauté de Communes du Civraisien en Poitou (CCCP) - 05.49.87.67.88
- 3 Syndicat Mixte d'Aménagement des bassins Aume-Couture, Auge et Bief (SMABACAB) - 05.45.21.01.91
- 4 Syndicat des bassins Charente et Péruse (SBCP) - 05.45.22.86.34
- 5 Syndicat des Bassins de l'Argentor, L'izonne et Son-Sonnette (SBAISS) - 05.45.31.14.67
- 6 Syndicat Mixte d'Aménagement du bassin de la Charente Amont (SMACA) - 05.45.85.38.64

- 7 Syndicat Mixte des bassins du Goire, de l'Issoire et de la Vienne en Charente Limousine (SIGIV) - 05.86.84.05.28
- 8 Syndicat Mixte du bassin de l'Antenne (SYMBA) - 05.46.58.62.64
- 9 Syndicat du bassin des rivières de l'Angoumois (SYBRA) - 05.45.38.16.71
- 10 Syndicat d'Aménagement des rivières du Bandiat, de la Tardoire et de la Bonnière (SYBTB) - 05.45.38.10.26
- 11 Syndicat d'Aménagement du Bassin de la Vienne (SAB Vienne) - 05.55.70.77.17
- 12 Syndicat Mixte des Bassins Bandiat Tardoire (SYMBA Bandiat Tardoire) - 05.55.70.27.31
- 13 Syndicat Mixte du bassin de la Seugne (SYMBAS) - 05.16.48.40.04
- 14 Syndicat du bassin versant du Né (SBV Né) - 05.45.78.74.45
- 15 Syndicat Mixte de Gestion des bassins de la Saye, du Galostre et du Lary (SMGBV SGL) - 05.57.25.36.28
- 16 Syndicat d'aménagement du bassin versant Dronne aval (SABV Dronne Aval) - 05.45.98.59.61
- 17 Syndicat de Rivières du Bassin de la Dronne (SRB Dronne) - 05.53.91.98.78

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