

CHAPTER 3: THE FRENCH REGULATORY FRAMEWORK

This Chapter,⁴⁹⁷ using the methodological framework developed and presented in Chapter 2,⁴⁹⁸ presents a critical legal appraisal of the French regulatory framework pertaining to LBMP. In order to do so, it commences by giving an overview of France and its associated constitutional, economic and social characteristics. This Chapter then provides some introductory background about the current French environmental regulatory framework pertaining to LBMP. In this context, it presents and analyses the most relevant French environmental statutes in terms of LBMP regulation, especially in terms of the regulatory scope and objectives. It also presents the incorporated law principles. The Chapter then conducts a critical analysis of the most relevant regulatory instruments (direct and indirect) in terms of LBMP regulation implemented by French environmental law. It also analyses the current French institutional structure involved in LBMP regulation. The French priority regulatory areas in this context are also presented and their associated regulatory instruments are assessed.

It is important to note at this stage, as shown below, that the French regulatory framework is significantly influenced by European environmental law.⁴⁹⁹ Therefore, even if the emphasis of the legal comparative assessment conducted in the context of this study is on the national legal frameworks of South Africa and France in relation to LBMP regulation, it is necessary (in order to provide a thorough analysis) to conduct a critical assessment of the relevant European legal provisions in relation to French law.⁵⁰⁰ It has been decided that it would be more effective for this study, to

497 I would like to acknowledge the assistance of Prof. Jean-Pierre Beurier (Université de Nantes http://www.univ-nantes.fr/beurier-jp/Office_annuaireksup/) for kindly accepted to review this chapter and who provided very valuable comments. I hope I have managed to address most of its recommendations.

498 Such a methodological framework involved a legal assessment of the following regulatory features: law principles, regulatory scope, regulatory objectives/purpose, regulatory instruments, institutional structure, and priority areas, refer to 2.3 for further information.

499 "Up to 90 per cent of the new environmental rules in a country that is member of the European Union (EU) originate from EU legislation", Bobu 2003 *Environmental Engineering and Management Journal* 105-118.

500 This study focuses on the most relevant Directives in terms of LBMP regulation, as Directives are the main source of EU environmental law. "Directives are a form of law peculiar to the

analyse the relevant provisions of French law in terms of LBMP regulation first and then, for completeness' sake, to provide a complementary detailed legal analysis of the relevant provisions of the most relevant European Directives, especially if they have not been fully and/or comprehensively implemented in the French regulatory framework. (Such an analysis is provided in Chapter 4.)⁵⁰¹

3.1 Overview of the subject matter: France

As stated in Chapter 2,⁵⁰² it is important for a country to assess and implement "the most suitable regulatory mix, best suited to its respective natural, cultural, constitutional and economic scenario".⁵⁰³ In this context, this section aims to provide some background about the French environmental, economic, legal, social and political scenario. This scenario will inform the assessment of the French regulatory framework pertaining to LBMP and the comparison between France and South Africa.⁵⁰⁴ The Metropolitan French territory⁵⁰⁵ and its associated coastal and marine environment is divided mainly into two distinct marine areas, namely the Mediterranean Sea and the Atlantic Ocean (which includes some parts of the North Sea).

European Union, which are the most frequently used (in terms of EU environmental law). They are designed to impose obligations on Member states and to be sufficiently flexible to take into account differing legal and administrative traditions (...) Regulations are used when a unified system is needed, such as funds institutions, EU voluntary schemes eco-label, product or trade regulation. About 10 per cent of EU environmental laws take the form of regulations. Regulations are directly binding in Member states and supersede any conflicting national laws. Decisions are used to specify detailed administrative requirements or update technical aspects of regulations or Directives. Decisions are individual legislative acts which are binding in their entirety upon the parties to whom they are addressed. They differ from regulations or Directives in that they are usually very specific in nature. They are less common in the environmental field". Bobu 2003 *Environmental Engineering and Management Journal* 105-118.

501 Chapter 4 will provide an analysis of the most relevant Directives in terms of LBMP regulation, the law principles they encompass, and their respective regulatory scope and objectives in terms of LBMP regulation. The Chapter then conducts a detailed legal analysis of the key Directives using the methodological framework outlined in Chapter 2. Some of the key sectoral Directives in terms of LBMP regulation are also presented, and a brief legal analysis, mainly of the direct regulatory instruments that they prescribe, is conducted in respect of each of them. Chapter 4 should be regarded as complementary to Chapter 3 (this Chapter).

502 See 2.3.4.3.

503 Osborn and Datta 2006 *Ocean & Coastal Management* 576-596.

504 See 2.3.4.3.

505 See 3.1. for a definition of Metropolitan France.

3.1.1 Current state of LBMP in France

In France as in most European countries, LBMP has been identified as a major contributor to marine pollution.⁵⁰⁶ The main LBMP pollution issues in France include urban waste water (effluents, sewage, run-off and storm water), nitrates (mainly from stormwater and agricultural activities), erosion caused by extensive coastal urban development, and atmospheric pollution.⁵⁰⁷ Some of the main influencing factors include⁵⁰⁸ insufficient or inappropriate sewage systems and waste water systems (canalisation and treatment) from an infrastructure and capacity perspective, some houses are not connected to the urban sewage network, bad separation between sewage and rain evacuation networks, discharge from agri-food processing industries, leakage from manure after land spreading, and incidental release of effluents/waste water from various activities: camping, industry, agricultural activity, tourism sites, climate related events: heavy rain, storms, exaggerated tides, high temperatures, and increases in population density over festive period.

In terms of pollutants, the total amount of azote substances reaching the marine environment every year is estimated to be 607 000 tonnes. In addition, there are 433 000 tonnes of nitrates, 42 000 tonnes of phosphor and 28 000 tonnes of phosphate which reach the marine environment every year.⁵⁰⁹ Coastal areas are negatively affected by the discharge of azote substances.⁵¹⁰ Recent data demonstrate an increase in copper contents and pesticides in some coastal and marine areas, which is directly related to LBMP.⁵¹¹ The coastal zone is the end receiver of 20 per cent of the total toxic pollution emanating from industrial activities, including heavy metals, petroleum substances, and oil.⁵¹² The most affected areas are the coastal industrial zones and port zones including *Nord-Pas-de-Calais*, *Seine-Maritime*, and the *Bouches du Rhone*. Radioactive substances are also a concern. A recent analysis also demonstrates the presence of new chemicals and toxic

506 See 1.5.

507 GESAMP/UNEP *Protecting the oceans from land-based activities*.

508 Based on the data from Ifremer 2008 <http://www.ifremer.fr/anglais/>.

509 Based on the data from Ifremer 2008 <http://www.ifremer.fr/anglais/>.

510 MEDD *L'environnement en France* 209.

511 Ifremer 2008 <http://www.ifremer.fr/anglais/>.

512 Ifremer 2008 <http://www.ifremer.fr/anglais/>.

pollutants in the marine environment.⁵¹³ Nitrates contamination is an important source of pollution of the French water resources, especially of some of the coastal water.⁵¹⁴ Organic pollution and phosphates-related pollution also affect the state of the coastal environment in France.⁵¹⁵ Table 4 provides an overview of the main sources of LBMP impacting on bathing water quality in France.

Approximately, 70 per cent of French bathing waters are considered as being of good quality, while 3.5 per cent of French bathing waters are not.⁵¹⁶ The situation can therefore be improved. The Mediterranean Sea has been the most affected by LBMP, mainly from extensive coastal development, waste water and sewage-related problems, population pressures and tourism-related activities in the coastal zone. Experts have supported the position that "for the Mediterranean Sea, action is urgently needed considering its geographically almost enclosed feature that contributes to the comparatively slow full renewal of its waters – estimated to take over a century".⁵¹⁷

GESAMP and GAP⁵¹⁸ have provided useful information on the priority issues in terms of LBMP for the Mediterranean Region (including France), which include municipal sewage, POPs, heavy metals, oil, nutrients and suspended solids, agricultural and industrial waste water, urban solid waste, and the physical alteration and destruction of habitats. Such issues should be permanently prioritised in terms of LBMP regulation. In the North East Atlantic Region (including France), four priority issues have been identified: the protection and preservation of ecosystems and biological diversity, hazardous substances, radioactive substances, and eutrophication.⁵¹⁹

513 MEDD *L'environnement en France* 209.

514 MEDD *L'environnement en France* 210.

515 MEDD *L'environnement en France* 213.

516 Ministère de la sante, de la jeunesse et des sports 2006 <http://baignades.sante.gouv.fr/htm/rapports/synthese/rapport2006.pdf>.

517 Hilderling, Keessen and Van Rijswick 2009 *Utrecht Law Review* 81.

518 GESAMP/UNEP *Protecting the oceans from land-based activities* 58-66.

519 GESAMP/UNEP *Protecting the oceans from land-based activities* 58-66.

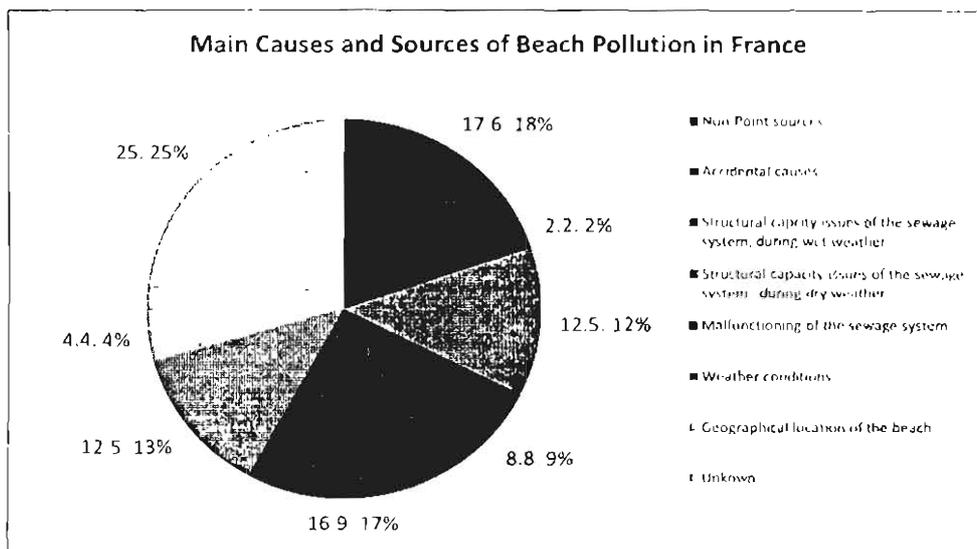


Table 4. Main causes and sources of beach pollution in France⁵²⁰

It seems that a national and localised regulatory approach will be required to effectively address LBMP in France.

3.1.2 Governmental and administrative structure

The French territory is geographically divided between Metropolitan France⁵²¹ and its overseas territories (*territoires and collectivités d' outre-mer*).⁵²² Only the regulatory framework applicable to Metropolitan France and its associated coastal and marine areas will be assessed in this study. The French administration⁵²³ is characterised as

520 Ministère de la santé de la jeunesse et des sports 2006 <http://baiqnades.sante.gouv.fr/html/rapports/synthese/rapport2006.pdf>.

521 Metropolitan France extends from the Mediterranean Sea to the English Channel and the North Sea, and from the Rhine to the Atlantic Ocean, and is located within the EU.

522 France's overseas departments (DOM) - including Guadeloupe (since 1946), Martinique (since 1946), French Guinea (since 1946) and Réunion (since 1946) - and *collectivités* (TOM), consist broadly of French-administered territories outside of the European continent. These DOM and TOM have varying legal status and different levels of autonomy. For further information refer to Dantonel-Cor *Droit des collectivités territoriales*.

523 According to Art 1 of the *Orientation law regarding territorial administration of the French Republic (Loi d'orientation)*, 6 February 1992, the territorial administration of the Republic is the responsibility of the local authorities and the delocalised services of the state (*Service*

decentralised⁵²⁴ and "deconcentrated".⁵²⁵ The decentralisation process has led the territorial organisation to be divided into two main spheres,⁵²⁶ the national state (and its associated deconcentrated entities) and the *collectivités territoriales*⁵²⁷ (including

deconcentrés de l'Etat). According to the definitions of the *Cour des Comptes* (Accounts Court), "de-concentration" (*déconcentration*) means the action of giving more powers to the local representative of the central state; "decentralisation" (*décentralisation*) means the action of giving more management responsibilities to the elected local authorities (*collectivités territoriales*). *Cour des Comptes la déconcentration des administrations et la réforme de l'Etat* 5. "The decentralisation law of 2 March 1982 relative to the rights and freedoms of the communes, departments and Régions is one of the largest institutional reforms of the last 25 years. Since then, France has been a decentralised unitary state. Decentralisation transferred neither legislative authority nor government to a local level. Among the territorial units which overlap it is important to distinguish between the local authorities that are run by an elected assembly (territorial authorities whose representatives are chosen by the citizens) and those that constitute administrative districts, which serve as a base for state services (state representatives)". *Ministère du logement et de la ville* 2008 <http://www.eukn.org/binaries/france/home/territorial-organisation-of-the-French-administration.pdf>. Also see Appendix 2. For further information about French administration, refer to Dantonel-Cor *Droit des collectivités territoriales*; Rouault *Droit administratif*; Forges *Les institutions administratives françaises*.

524 This concept refers to the process of transferring decision-making power and authority closer to the people or citizens, including the transfer of authority and responsibility for public functions from the central government to subordinate or quasi-independent governments. In the French context, this includes political and administrative decentralisation to the *Régions*, *departments* and *communes*. According to the definitions of the *Cour des Comptes*, "functional decentralisation" is aimed at assigning specific missions of the public service to a public entity which has legal personality and which is managed by an executive director under the control of an administration board. Functional de-concentration means the allocation of specific services of the central administration to an administrative service managed independently from the rest of the de-concentrated services. *Cour des Comptes La déconcentration des administrations et la réforme de l'Etat* 10. For further information see Maestri *La decentralisation*.

525 This concept refers to the reallocation of decision-making authority including financial and management responsibilities among different levels of the national government. In the French context, it refers mainly to the transfer/reallocation of powers, functions and responsibilities from the central government to the government "agents" located in the *Régions*, *Provinces* or *municipalities*, creating various levels of local administrative capacity under the supervision of central government ministries. According to the *Décret of the 1st of July 1992*, referred to as '*La Charte de Déconcentration*,' de-concentration is the general rule of repartition of the functions, mandates and means between the different spheres of the state civil administration. For further information on the de-concentration phenomenon in France, refer to Albertini *La déconcentration*.

526 It can also refer to three spheres including states, *collectivités territoriales* and public establishments which also benefit from a certain level of administrative and financial independence similar to that of the *collectivités territoriales*. For further information, refer to Rouault *Droit administratif*.

527 Most of the legal provisions regulating the *collectivités territoriales* are prescribed by the *Code générale des collectivités territoriales* (the general code of the territorial entities). This section aims only at providing an overview of the French institutional and administrative structure. A detailed analysis of the French administrative organisation is outside the scope of this study. For further information about the *collectivités territoriales* refer to Dantonel-Cor *Droit des collectivités territoriales*; Bonnard *Les collectivités territoriales en France*, Verpeaux *Droit des collectivités territoriales*.

the *Régions*,⁵²⁸ *departments*⁵²⁹ and *communes*⁵³⁰) which are public legal persons (administrative entities) separate from the state.⁵³¹ Their main function is to protect the interests of the inhabitants of the specific territorial areas that they represent.⁵³² There are two "categories" of representation of the national state. The first level is through the decentralised public establishments⁵³³ and the second level is through the de-concentrated representatives/entities of the central state in the different *collectivités territoriales*.⁵³⁴

-
- 528 The *région* (région) is made up of all of the departments grouped together according to their economic interest. The executive authority of the *région* is the President of the Régional Council elected by the régional councillors, themselves elected by direct universal suffrage. The main scope of activities and powers of the region relates to transport planning, territorial planning, economic development, professional training, the construction, the facilities and spending to run high schools. Ministère du logement et de la ville 2008 <http://www.eukn.org/binaries/france/home/territorial-organisation-of-the-French-administration.pdf>.
- 529 The executive authority of the *département* (department) is the President of the Departmental Council, elected by the Council, within the council, for 6 years. The Departmental Council is made up of Departmental Councillors who are elected for 6 years by direct universal suffrage within the framework of a canton or constituency. The main scope of the activities and powers of the *département* relates to health and social work, (the elderly, child support, welfare), rural facilities, departmental road maintenance investment expenditure and expenditure to run secondary schools, as well as specialised preventive actions. Ministère du logement et de la ville 2008 <http://www.eukn.org/binaries/france/home/territorial-organisation-of-the-French-administration.pdf>.
- 530 The division of the French territory into *communes* dates back to the French Revolution in 1789. Each *commune* has a mayor, who is elected for 6 years by the inhabitants of the *commune*, by direct universal suffrage. The election is overseen by the town council. The main scope of the activities and powers of the *région* relate to local action, building maintenance, the running of primary schools, urban planning, local social work, communal roads maintenance, and refuse collection. Ministère du logement et de la ville 2008 <http://www.eukn.org/binaries/france/home/territorial-organisation-of-the-French-administration.pdf>.
- 531 As of January 1, 2008, Metropolitan France was divided into 22 *régions* (including Corsica). The Metropolitan *régions* are subdivided into 96 departments, the departments are divided into 330 *arrondissements*, the *arrondissements* are then divided into 3,883 *cantons*, which are subdivided into 36,569 *communes* (although some of the larger *communes* actually are composed of several *cantons*). The intercommunal structures are 16 urban communities (*communautés urbaines*), 167 agglomeration communities (*communautés d'agglomération*), 2,397 communities of *communes* (*communautés de communes*), and 5 syndicates of new agglomeration (*syndicats d'agglomération nouvelle*), a category being phased out.
- 532 Also see 3.7
- 533 They are public legal persons (similar to an organ of state in the South African context). They have a certain level of administrative and financial independence. There are two types of public establishments: administrative, *établissement public administratif* (EPA) and industrial and commercial, *établissement public à caractère industriel ou commercial* (EPIC). For further information refer to Dufau *Les entreprises publiques* and Rivero and Waïne *Droit administratif*.
- 534 Also refer to 3.7.

The French President has the responsibility of ensuring that the Constitution is respected. The French Constitution of 1958, adopted on 4 October 1958 (herein after referred as the Constitution), established the French Fifth Republic.⁵³⁵ The President ensures the regular functioning of the public powers, and protects the integrity of the territory and the continuity and independence of the state.⁵³⁶ He/she designates the Prime Minister,⁵³⁷ who is the head of the government, and upon the recommendation of the Prime Minister nominates the other members of the government.⁵³⁸ The Prime Minister is in reality the crucial pillar of the French Republic. He determines and ensures the implementation of national policy.⁵³⁹ He/she controls the administration and directs government actions. He/she holds the executive authority and has the responsibility of ensuring the implementation of the law.⁵⁴⁰ The legislative authority is vested in the Parliament, which consists of the National Assembly and the *Sénat*.⁵⁴¹ The functional area of their legislative authority is restrictively defined by the Constitution. Everything which is not enumerated as being a functional area of legislative authority will fall within the functional area of the executive authority.⁵⁴² Appendix 2 provides further information on the French governmental and administrative structure.

The French Republic is also part of the EU.⁵⁴³ The EU is an additional level of legislative, executive and administrative authority. France has to transpose and implement EU legislation,⁵⁴⁴ which will impact on its regulatory framework.⁵⁴⁵

535 Referred to hereinafter as the French Constitution.

536 S 5 and 15 of the French Constitution.

537 S 18 of the French Constitution.

538 S 21 of the French Constitution.

539 S 30 of the French Constitution.

540 S 20, 21 and 22 of the French Constitution.

541 S 24 of the French Constitution.

542 S 34 and 37 of the French Constitution.

543 Titre III of the French Constitution. The *Treaty of Rome, establishing the European Economic Community* (EEC), signed in Rome on 25 March 1957, and which entered into force on 1 January 1958. The EU was established by the Treaty of Maastricht on 1 November 1993 upon the foundations of the European Communities. The EU is a union of twenty-seven independent states based on the European Communities and founded to enhance political, economic and social co-operation. The *Treaty on European Union*, which was signed in Maastricht on 7 February 1992, was a major EU milestone, setting clear rules for the future single currency as well as for foreign and security policy and closer co-operation in justice and home affairs. Under the treaty, the name "European Union" officially replaces "European Community". The Maastricht Treaty changed the name of the ECC to simply "the European

Traditionally, the French political scene has always been divided between right and left wing political parties.⁵⁴⁶ Most political parties in France have to address similar issues including unemployment, crime, poverty alleviation, EU related matters, and local democracy, in order to address the main concerns of the French population. Traditionally the 'green political parties' belong to the left wing.⁵⁴⁷

Community". In terms of the *Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community*, signed at Lisbon, 13 December 2007, the EU replaces and succeeds the European Community. For further information see EU 2010 <http://eur-lex.europa.eu/en/treaties/index.htm#other>.

- 544 "The Directives are, by nature, measures that bind the Member states in terms of the results to be achieved. The Member states are, on the other hand, free to choose the form and means of achieving this result. To do so, the Member states have a deadline within which they must transpose the Directives". Europa 2005 http://europa.eu/legislation_summaries/internal_market/internal_market_general_framework/l22021_en.htm. Normally, Directives will prescribe a timetable for the implementation of the intended outcome by the Member states. Then more commonly Member states will have to make the necessary national legal changes to their laws (amendments and/or primary laws) to give force to implement the provisions of the Directive, which is commonly referred to as transposition. "Preparation for drafting of legislation should start before or as soon as the Directive is published in the Official Journal of the EU. Where legislation is required to transpose the Directive, the Regulatory Impact Assessment (RIA) should be attached to the Memorandum to government seeking permission to draft Heads of a Bill. This would considerably reduce the need for retrospection. Consideration as to whether implementation/transposition should be by way of primary legislation or Ministerial regulations (either pursuant to the *European Communities Act 1972* or by other primary legislation which contains a specific power to implement/transpose EU legislation by regulations made under it) or through other alternatives to regulation, should be identified by the RIA. In line with the principles of Better Regulation and the government Decision on RIA, if the Department proposes to introduce additional regulatory changes in the legislation transposing a Directive or Regulation, the RIA should be updated as appropriate. Early consultation with the Attorney General's Office on this issue is necessary. Factors which would influence this choice would be whether indictable offences will be created as sanctions to implement/transpose the EU legislation in question (in which case, primary legislation is necessary) or whether the EU legislation contains diverse policy choices or derogations/abrogations from the EU measure itself to be adopted by the Member state (in which case primary legislation will be necessary). For further information refer to Guidelines on best practice on the Transposition of EU Directives found on http://www.laoiseach.gov.ie/enq/Publications/Publications_Archive/Publications_2006/Fina_Version_Guidelines.pdf.
- 545 See 3.2.2 and 4.1 for further information on the implications of European environmental law for French law, and more specifically for LBMP regulation.
- 546 Since 1995, the French President has been from the right wing. However, the majority of the executive powers (cabinet) and the national assembly have not always been from the same political party (and influence) as the President of the Republic, creating a "political dichotomy" in the government. Cohabitation has been a new dimension of the political scene in France. Cohabitation happens when the President of the Republic and the government formed from the parliamentary majority come from opposite political movement (mainly the traditional opposition right and left wing). Understand France 2008 <http://www.understandfrance.org/France/Society.html> and Library of Congress 2008 <http://www.loc.gov/rr/international/Europe/france/resources/tr-government.html>.
- 547 It is noteworthy that environmental management policies or objectives were not mentioned in the Presidential election programme of Nicolas Sarkozy (currently the President). In response

3.1.3 Economic situation

The French economy is characterised by a unique combination of a socialist economy and a free market in alignment with the world market and global capitalist rules. Between 1997 and 2001, France has experienced balanced economic growth due to a favourable international market, efficient regulatory reforms and the passage to a single currency, the Euro, which has enabled France to counterbalance external economic pressures.⁵⁴⁸ Since 2001, the economic situation has been more fragile.⁵⁴⁹ More recently, output has been growing, unemployment has been falling and public finances have improved.⁵⁵⁰ As explained in the Organisation for Economic Co-operation and Development (OECD) Policy brief about France "another key challenge for the (French) authorities is a persistently high budget deficit leading to rising public sector debt".⁵⁵¹ The major industries contributing to the French economic growth include agriculture, energy production, manufacturing (automobile, chemical, construction, textile, steel, weapons, and biological products), services, tourism, and transport.⁵⁵² Major economic and social reforms have also been implemented.⁵⁵³

to international pressure the government has decided to address the climate change issue as a matter of political urgency, which might impact on the attention given to the issue of land-based marine pollution.

548 OECD *Policy brief regarding the economic survey of France* 2005 2-5.

549 OECD *Policy brief regarding the economic survey of France* 2005 2-5.

550 OECD *Economic Survey of France* 2007 3-8. The change seems to be the result of a fiscal pressure from the health and pension systems, the lack of a creative entrepreneurial and business climate, and uncontrolled public spending. Inflation has also played a role in the slowing down of the economy. OECD *Policy brief regarding the economic survey of France* 2005 2-6.

551 Recently there has been a strong focus on developing policies and strategies to restore sustainable public finances, which includes substantial reforms of the pension and health systems as well as strictly regulating public expenditure in the different administrative and executive spheres, OECD *Economic survey of France* 2007 2-6.

552 OECD *Economic Survey of France* 2007 2-6.

553 Including public spending reforms, tax law reforms (to reduce tax rates and stimulate business creation and growth), health and pension systems reforms (to rationalise and ensure the sustainability of the systems), competition law reforms (to increase productivity, growth and employment), and labour law reforms (to reduce labour costs and stimulate the employment mainly of low-skilled and young workers). OECD *Economic survey of France* 2007 2-15.

3.1.4 Social situation

As stated in the Constitution, France is a "social" state,⁵⁵⁴ which has established various social rights. Historically, France has managed to develop and implement a very sophisticated social welfare system including comprehensive education, housing, employment, health and pension systems.⁵⁵⁵ However, such policies have been a significant burden on the national economy and most of them need to be reformed to ensure their sustainability.⁵⁵⁶ Unemployment is still a major concern for national policy.⁵⁵⁷ France is also facing the challenge of population ageing, which has various negative related impacts on the economy.⁵⁵⁸ Social tensions (revolving around poverty, insecurity, exclusion and racism) remain a social challenge faced by the French government.⁵⁵⁹

3.1.5 Preliminary implications for LBMP regulation

The institutional structure of the French territorial, governmental and administrative organisation has several implications for LBMP regulation.⁵⁶⁰ Due to the nature and impacts of LBMP,⁵⁶¹ a strong level of co-operation is needed between the different

554 S 1 of the French Constitution.

555 OECD *Economic survey of France 2007* 2-10.

556 OECD *Economic survey of France 2007* 2-10.

557 OECD *Economic survey of France 2007* 11, "A feeling of pessimism and insecurity has been sustained by persistently high unemployment, often leading to social exclusion, a problem for which the educational system struggles to find solutions. Demographic ageing, long foreseen but whose consequences have not yet been fully addressed, will soon be having a real impact on labour force developments and public finances... This survey concentrates on these linked issues – most of which have been raised in *Going for Growth 2007* – of unemployment, ageing, poverty and social exclusion, with which the new government will have to deal". The population is against change and does not support any alteration to the current social system, as it is perceived as a negative alteration of the social victories achieved in the last 50 years. Currently, there is a lot of tension in the French population due to the fear of losing social privileges.

558 The consequence of the significant immigration rates between 1960 and 1990 has been the creation of social tensions reflected by the stronger positioning of the extreme right wing parties on the political scene, as demonstrated during the Presidential election of 2002. OECD *Economic survey of France 2007*.

559 See the previous footnote.

560 See 3.7 for further information on the French institutional structure in terms of LBMP regulation.

561 As described in 2.2.

governance spheres including the European, national/central, regional, departmental and municipal governmental spheres.⁵⁶² The OECD notes that:

Despite France's previously well deserved reputation as a highly centralised state, a significant number of responsibilities have been devolved to regional and local government over the past two decades. The process has not been easy. The extremely large number of very small municipalities makes economies of scale in the implementation of policies hard to realise, and measures to overcome this have been at best only partially successful. Competence is often shared between levels of government, obscuring accountability, and the central government has often retained an arguably unnecessary degree of prerogatives. Reorganising the system to avoid overlapping responsibilities and improving transparency and accountability in local government finance provide some difficult challenges.⁵⁶³

Such a situation might affect LBMP regulation. Cooperation might be difficult to achieve, considering the different territorial legislative, executive, regulatory and administrative competences. The current regulatory and institutional framework is fairly complex and this might have implications for effective LBMP regulation, especially in terms of the implementation of integrated environmental management, as reflected in international best practice. The financial aspects of territorial administration and the need to rationalise public expenditure might also limit effective regulation of land-based marine pollution in France, especially in terms of financial management.⁵⁶⁴

As a consequence of the introduction of fiscal and tax reform the government might delay the development and implementation of new environmental economic instruments which might have a negative impact on economic growth and business creation.⁵⁶⁵ This would affect LBMP regulation. For instance, tourism is a significant source of income on the French coast, but it is also a very important source of LBMP.⁵⁶⁶ One of the main economic issues related to LBMP is the "retrofitting" and control of existing industries and facilities (especially linked to coastal urban

562 See 3.7 for further information.

563 OECD 2007 [http://www.oilis.oecd.org/olis/2007doc.nsf/LinkTo/NT00002ECE/\\$FILE/JT03230695.PDF](http://www.oilis.oecd.org/olis/2007doc.nsf/LinkTo/NT00002ECE/$FILE/JT03230695.PDF).

564 See 3.5.2 for further information.

565 The current opposition to a carbon tax by French industry is an example of resistance to the development of further environmental tax-related measures.

566 As said in 2.4.2.

development) to reduce the generation of pollution and its impacts on the marine environment, which has considerable economic and financial consequences.⁵⁶⁷ The economic lobby is also very powerful in France and can influence the effective development and implementation of environmental regulation.⁵⁶⁸ At this stage, in the context of LBMP regulation, the main social pressures are from the movement of population from inland to coastal areas and the associated pressures on the marine environment.

3.2 Background to the French environmental regulatory framework

This section is aimed at providing some background information about the French environmental regulatory framework related to LBMP, highlighting its historical evolution and the main statutes involved. This section also introduces the legal relationship between EU environmental law and French environmental law, especially in the context of LBMP, providing a rationale for the need to conduct a detailed legal analysis of some key EU Directives involved in the regulation of LBMP.⁵⁶⁹

3.2.1 Historical development of the French regulatory framework relevant for LBMP

There are two main areas in French environmental law which are relevant to LBMP regulation, namely, the legal provisions related to water and water resources management and the legal provisions related to the protection of the "Littoral".⁵⁷⁰ These provisions are codified in the *Code de l'environnement*.⁵⁷¹ The provisions of the

567 For example, waste water and sewage treatment plans and reticulation systems, *Le Parisien* 2009 <http://www.leparisien.fr/economie/la-facture-d-eau-des-franciliens-va-bondir-21-11-2009-719268.php>.

568 The current opposition to a carbon tax in French by the industry is an example of industrial lobbying.

569 Such a legal assessment is conducted in Chapter 4.

570 The littoral is a similar concept to the coastal zone. See 3.4.3.1 for further information.

571 The French environmental code. Such provisions are respectively encompassed in terms of *Livre II : Milieux physiques* (Book II: Physical environment), *Titre I: Eau et milieux aquatiques* (Title I: Water and aquatic environments), Art L210-1 to L218-86 for the legislative sections of the code and the associated Art (R211-1 to R218-5) of the *partie réglementaire* (reglementary section) of the code and *Livre III : Espaces Naturels* (Natural areas) *Titre II: Littoral*, Art L321-

Code consolidate the various legislative interventions in these areas. In terms of water management, one of the first French statutes which strove to provide for a regulatory regime regarding decentralised water protection and pollution management was the *Loi n°64-1245 du 16 décembre 1964 relative au régime et à la répartition des eaux et à la lutte contre leur pollution*.⁵⁷² This law remains the foundation of the French water law and aims to ensure a better distribution of water and better control of pollution.⁵⁷³ The Law n° 92-3 of January 3, 1992, *la Loi sur l'eau*,⁵⁷⁴ consolidated the water regulatory framework.⁵⁷⁵ The Law n° 95-101 of February 2, 1995 (law Barnier) reinforces the regulatory provisions regarding water management in France.⁵⁷⁶ The Law n° 2004-338 of April 21, 2004⁵⁷⁷ transposes the EU Water Framework Directive⁵⁷⁸ (WFD). All of these statutes have been instrumental in shaping the current water-related regulatory regime.⁵⁷⁹ The 2005 Marine Environment Strategic Actions Plan is also an important policy document in terms of LBMP regulation, as it strives to address marine/coastal water quality and marine/coastal water pollution management. The Action Plan identifies four priority areas for action: restoration of coastal and transitional water quality (ecological and chemical); prevention of LBMP; management of maritime pollution; and improvement

1 to L322-14 and the associated Art of the reglementary section of the code (Art R321-1 to R322-42).

572 The Law n° 64-1245 of December 16, 1964 relating to the regime and distribution of water and water pollution control, La documentation Française 2004 <http://www.vie-publique.fr/politiques-publiques/politique-eau/index> and Prieur *Droit de l'environnement* 562.

573 La documentation Française 2004 <http://www.vie-publique.fr/politiques-publiques/politique-eau/index>, and Prieur *Droit de l'environnement* 562-563.

574 The water law of 1992. This law also clearly linked French water law to environmental law. Romi *Droit administration de l'environnement* 515.

575 La documentation Française 2004 <http://www.vie-publique.fr/politiques-publiques/politique-eau/index> and Prieur *Droit de l'environnement* 562-563. The statutes of 1962 and 1994 are regarded as the "backbone" of water law in France. Romi *Droit administration de l'environnement* 517.

576 La documentation Française 2004 <http://www.vie-publique.fr/politiques-publiques/politique-eau/index>.

577 *Loi n.2004-338 du 21 Avril 2004 portant transposition de la Directive 2000/60/CE du parlement Européen et du Conseil du 23 Octobre 2000 établissant un cadre pour une politique communautaire dans le domaine de l'eau*. (The law transposing the EU Water Framework Directive). See 4.2.1 for further information about this Directive.

578 Directive 2000/06/EC of the European Parliament and the Council of 23 October 2000 establishing a framework for Community action in the field of water policy.

579 Romi *Droit et administration de l'environnement* 516.

of the quality of bathing water.⁵⁸⁰ However, the provisions of this Action Plan are very generic and it is only a "strategic document" with no legally binding value. *Les 9èmes programmes d'intervention des agences de l'eau (2007-2012)*, 1 January 2007,⁵⁸¹ are also important, establishing six main programmes of intervention to assist the management of river basins, taking into consideration their respective challenges and circumstances. Such programmes are centred around two main goals: improved compliance with EU water law⁵⁸² (especially regarding sanitation requirements), and implementation of the WFD with a focus on specific areas of priority.⁵⁸³ The *Loi sur l'eau et les Milieux Aqualiques* of 2006⁵⁸⁴ (LEMA) is the most recent statute in terms of water management.⁵⁸⁵ France does not have a formalised National Action Programme⁵⁸⁶ as prescribed by the GPA.⁵⁸⁷

In terms of the protection and management of the littoral, the *Loi relative a l'aménagement, protection and la mise en valeur du littoral, 1986 as amended*⁵⁸⁸ (*Loi Littoral* or Littoral Law) is an important statute in the context of LBMP regulation. Some provisions of the *Code de l'Urbanisme*⁵⁸⁹ and *La loi relative au développement*

580 Ministère de l'Écologie, de l'Énergie, du Développement durable et de la Mer 2007 <http://www.ecologie.gouv.fr/Plan-d-actions-strategique-mer-du.html>.

581 *9th programme of intervention of the water agencies for 2007 to 2012*. Ministère de l'Écologie, de l'Énergie, du Développement durable et de la Mer 2007 <http://www.ecologie.gouv.fr/Les-9es-programmes-d-intervention.html>.

582 Including WFD and others Directives. See 4.1.1 for further information.

583 Such areas of priority include: agricultural diffuse pollution, water availability and the sustainability of water resources, industrial water discharges, sludge management, and the elimination of the discharge of hazardous/dangerous substances. They also have a very strong financial component, which includes the need to respect strict financial guidelines regarding expenses and the implementation of new-market based instruments which consist mainly of a suite of taxes on the use of water and water pollution. The main direction is to ensure sound financial management and cost effectiveness. Ministère de l'Écologie, de l'Énergie, du Développement durable et de la Mer 2007 http://www.ecologie.gouv.fr/IMG/pdf/ix_programmes_version_pages.pdf.

584 *Act dealing with water and aquatic environments, loi n° 2006-1772 du 30 décembre 2006 sur l'eau et milieux aquatiques*.

585 *Romi Droit et administration de l'environnement* 517.

586 As described in Chapter 2

587 Ministry of Ecology and Sustainable Development 2006 http://www.gpa.unep.org/documents/national_report_france_1_english.pdf.

588 *Loi n° 86-2 du 3 Janvier 1986 relative a l'aménagement, la protection et la mise en valeur du littoral*, (the Act dealing with the development, protection and valorisation of the coastal environment), hereafter referred to as the "Loi Littoral".

589 Specifically Art L146-1 à L146-9. Also refer to 3.4.3 for further information.

des territoires ruraux 23 février 2005⁵⁹⁰ are also very relevant in terms of the regulatory framework pertaining to the management of the littoral and are indirectly involved in LBMP regulation.

3.2.2 European and French legislation

The relevant EU environmental legislation in the context of LBMP regulation, as analysed in Chapter 4, is directly relevant to the French regulatory context.⁵⁹¹ France has an obligation, in terms of the EU legal framework,⁵⁹² to incorporate (transpose,

590 Law dealing with the development of rural territories.

591 EU law is a unique legal system which operates alongside the laws of Member states of the EU. EU law has direct effect within the legal systems of its Member states, and overrides national law in many areas, especially in areas covered by the Single Market, Obradovic and Lavranos *Interface between EU Law and National Law* 7; Prieur *Droit de l'environnement* 19-20; Romi *Droit et administration de l'environnement* 51-59. "The essential feature that Community law enjoys in comparison with general international law is its specific nature, meaning that it enjoys supremacy, direct applicability and direct effect by itself and not because the national constitution or the national law provides so". Popescu 2006 http://www.federalism.ch/files/FileDownload/918/Popescu_web.pdf 8. "The European Court of Justice has created a system whereby the laws of the Community take precedence over conflicting laws in the Member states. Consequently, the national courts are obliged to ensure the practical effectiveness of supremacy by upholding Community law. Naturally, the reception of the doctrine of supremacy in the Member states has been varied". Stiernstrom *The Relationship Between Community Law and National Law* 2 and 5. In terms of a case in front of the Environmental Court of Justice 26/62 NV *Algemene Transporten Expeditie Onderneming van Gend en Loos v Nederlandse Administratie der Belastingen* [1963] ECR 1: "The Community constitutes a new legal order of international law for the benefit of which the states have limited their sovereign rights, albeit within limited fields, and the subjects of which comprise not only Member states but also their nationals. Independently of the legislation of Member states, Community law therefore not only imposes obligations on individuals but is also intended to confer upon them rights which become part of their national heritage. Those rights arise not only where they are expressly granted by the Treaty, but also by reason of obligations which the Treaty imposes in a clearly defined way upon individuals as well as upon the Member states and upon the institutions of the Community". For further information about the interface or interaction between EU law and national law, in particular at assessing the delineation of competences between the EU and its Member states regarding various policy areas, consult Obradovic and Lavranos *Interface between EU Law and National Law* and Oppenheimer *The relationship between European community law and national law*. In terms of the specific matter of the applicability of EU environmental law in Member states, for further information consult Jans and Vedder *European Environmental Law*.

592 "The original EU Treaty (the Treaty of Maastricht) came into force on 1 November 1993 and has been amended successively by the Treaty of Amsterdam, which came into force in 1999, and the Treaty of Nice, which came into force on 1 February 2003. This is the EU treaty that originated the concept of a three-pillar structure, the first pillar consisting of the European Community and the other two of the common foreign and security policy and police and judicial co-operation in criminal matters. There is, however, a big difference between the first pillar and the other two, which have not given rise to any transfers of sovereignty to the common institutions, as in these fields the Member states wished to preserve their independent decision-making powers and restrict themselves to an intergovernmental form of

implement and enforce) in the national legal framework the provisions of EU Directives, as per the timeframe prescribed in the Directives and related implementation guidelines (if applicable) and other prescriptions.⁵⁹³ In situations of non-compliance, France might be subjected to sanctions and penalties imposed for non-compliance with EU legislation. In this context, it is important to note that France is regarded as one of the "biggest offenders" in terms of non-compliance with EU environmental law, especially water-related legislation.⁵⁹⁴ Therefore the EU legal framework in terms of LBMP, as identified and assessed in Chapter 4, is directly relevant for the regulation of LBMP in France, especially when such Directives have not yet been fully implemented in terms of French law.⁵⁹⁵ The key Directives in terms

co-operation. Environment is a sector encompassed in the first pillar". Europa 2009 http://eur-lex.europa.eu/en/droit_communaire/droit_communaire.htm#1.3.

- 593 "Directives may concern one or more EU countries, or all of them. Each Directive specifies the date by which the national laws must be adapted - giving national authorities the room for manoeuvre within the deadlines necessary to take account of differing national situations. Directives are used to bring different national laws into line with each other, and are particularly common in matters that affect the operation of the single market (e.g. product safety standards)". EC 2009 http://ec.europa.eu/community_law/Directives/Directives_en.htm. "EC law and the national law of the EC Member states constitute one composite legal order. Because of the principle of Community loyalty, enshrined in Art 10 EC, Member states are obliged to do everything necessary in order to give full effect to EC law and to refrain from opposing the full effect of EC law in any way. Ultimately, this can be enforced through infringement proceedings brought by the Commission before the European Court of Justice (ECJ) and through preliminary ruling procedures brought by national courts in the course of settling disputes over Community law. In its case law, the ECJ has established that the Member states must interpret their national law in accordance with the EC law that it implements and that in a case of conflict, EC law takes precedence over the national laws of the Member states". Hilderling, Keessen and Van Rijswijk 2009 *Utrecht Law Review* 88.
- 594 Romi *Droit et administration de l'environnement* 517. France has been condemned by the European Court of Justice for failing to transpose recent EU environmental legislation. For example, France admitted not transposing a 2001 amendment to the 1967 Dangerous Substances Directive Europe 2004 <http://www.endseurope.com/9828?referrer=search>. France faced the prospect of fines for neglecting EU environmental laws under infringement proceedings announced by the European Commission. France ignored five judgements against the country by the European court of justice, the EU executive said, as it publicised its first warnings of renewed legal action. ENDS Europe 2004 <http://www.endseurope.com/9615?referrer=search> On 15 March 2001 the Court of Justice condemned France for failing to meet water quality standards and for failing to carry out the monitoring of bathing waters as frequently as the Bathing Water Directive stipulates (Case C-2000/147). Bathing water quality problems did persist, and the frequency of monitoring had not been brought into line with the Directive. The Commission therefore sent France a written warning under Art 228 of the Treaty. European Commission DG Environment 2003 http://www.waternunc.com/qb/dq11en87_2003.htm.
- 595 Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (the Water Framework Directive or WFD) and Directive 2008/56/EC of the European Parliament and of

of LBMP regulation are only "framework" Directives.⁵⁹⁶ They therefore mainly provide regulatory guidance and "architecture", enabling a fair level of flexibility and customisation by European Member states, including France, to decide on the most adequate national regulatory instruments to implement the provisions of the Directives in their national legal frameworks.⁵⁹⁷ For example, the transposition and implementation of the WFD did require some revision of national regulations, but it was not incompatible with the basic statutes of 1964, 1984 and 1992.⁵⁹⁸ Various regulatory instruments implemented by French water law⁵⁹⁹ are being or have been revised to implement and enforce EU water law-related provisions.⁶⁰⁰ In the context of the implementation of the WFD, France has been committed since 2003 to a process involving three major stages: the production of situation reports for river basin districts (completed in 2004),⁶⁰¹ the establishment of water quality monitoring networks (completed at the end of 2006); and the definition of objectives and initial action programmes (completed at the end of 2009).⁶⁰² As previously stated, the most relevant provisions of EU environmental law in terms of LBMP regulation, which have not yet been implemented in French legislation and/or which have not

the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive or MSFD).

596 WFD and MSFD.

597 "EU Directives lay down certain end results that must be achieved in every Member state. National authorities have to adapt their laws to meet these goals, but are free to decide how to do so. Directives may concern one or more EU countries, or all of them. National implementing measures are texts officially adopted by the authorities in a Member state to incorporate the provisions in a Directive into national law". EC 2009 http://ec.europa.eu/community_law/Directives/Directives_en.htm.

598 Ministry of Ecology and Sustainable Development 2006 http://www.qpa.unep.org/documents/national_report_france_1_english.pdf.

599 The SDAGE (*Schema directeur d'aménagement et de gestion de l'eau* – Framework schemes for water management), their associated programmes of measures and river basin district planning documents created in 1992. The programmes of measures and updated SDAGEs have come into force on 1st of January 2010. Refer to 3.6.3 for further information on such instruments.

600 The water agencies (*Agences de l'eau*) have prepared their 9th action programmes to facilitate the implementation of regulatory measures and SDAGE objectives via grants or financial incentives.

601 A situation report for each river basin district was produced in 2004, comprising an analysis of district characteristics, a summary of the pressures on surface and ground water, an economic analysis of the uses of water, and a register of zones requiring special protection. Ministry of Ecology and Sustainable Development 2006 http://www.qpa.unep.org/documents/national_report_france_1_english.pdf. Refer to 3.5.1 and 4.3.2.1 for further information about the situations report in terms of LBMP regulation.

602 Refer to 4.3.2.1 for further information.

effectively/comprehensively been implemented in French law, are analysed in Chapter 4.

The French regulatory framework pertaining to LBMP regulation is the result of a long historical legal process related to coastal and water management in France and it has also been considerably influenced by EU environmental law in terms of water and marine environment management. It can therefore be seen as the product of the legal integration of national and regional regulatory priorities and instruments, taking into consideration local circumstances.

3.3 Law principles, scope and regulatory objectives

3.3.1 Law principles⁶⁰³

French environmental law incorporates the following principles:⁶⁰⁴

- General environmental law principles:⁶⁰⁵ the precautionary principle, integrated management, the polluter pays principle, sustainable development, adaptive management, the participatory/participative approach, equity and prevention.⁶⁰⁶
- Environmental law principles related to "sustainable resources management": the equitable and sustainable use of water resources,⁶⁰⁷ integrated river basin/watershed management,⁶⁰⁸ the integrated ecosystem-based approach⁶⁰⁹ and the integrated territorial approach.⁶¹⁰

603 As previously described in Chapter 2 2.3.1, the phrase "law principles" refers here to environmental principles which have been incorporated in a policy and/or legal framework. International best practice regulating LBMP provides guidance regarding the relevant environmental law principles which are regarded as being conducive to the effective regulation and management of LBMP. Refer to Chapter 2 for further information.

604 Only the most relevant in terms of LBMP regulation are listed here, their relevance being judged in relation to according to international best practice Refer to 2.3.1.

605 See 2.3.1 for further information on the importance of these law principles to LBMP regulation.

606 Also see Drobenko *Droit de l'eau* 36-37.

607 Art 210-1 and 211-1 of the *Code de l'environnement*.

608 Drobenko *Droit de l'eau* 36-37.

609 See the footnote above.

610 See the footnote above.

- Environmental law principles related to "coastal and marine management": integrated coastal area/zone management⁶¹¹ and ocean-land-atmosphere connections.⁶¹²

These principles accord with international best practice in the regulation of LBMP.⁶¹³ The fact that most of them are incorporated in the *Code de l'environnement* makes such principles part of environmental law.⁶¹⁴ As it is apparent that these principles are at the heart of international best practice for effective LBMP regulation, their incorporation in the environmental regulatory framework should assist the effective regulation of LBMP in France.

3.3.2 Regulatory scope

The geographical scope of French water law as outlined in the *Code de l'environnement*, especially in terms of the provisions of LEMA as incorporated in the Code,⁶¹⁵ includes surface water, ground water and marine/coastal waters up to the outer limits of territorial waters.⁶¹⁶ French water law regulates activities on land which do or are likely to pollute the marine environment.⁶¹⁷ In this context and in terms of the material scope, French water law has general provisions⁶¹⁸ in terms of water resources management. The *Code de l'environnement* prescribes that general requirements can be determined by a decision of the *Conseil d'Etat*, relating to the

611 This principle *per se* is not enunciated in French environmental law, but it is definitely encompassed in the *Loi Littoral*. Frangouides, Prat and Bailly *Le cadre national des politiques de gestion des zones côtières en France* 12.

612 French water law recognises the interrelationship between fresh and marine water. Drobenko *Droit de l'eau* 37. The interrelationship between climate change and the littoral is also recognised. For a definition of each of these principles refer to 2.3.1.

613 As discussed in 2.31.

614 It is not the purpose of this study to perform a comprehensive analysis of such principles and their legal effectiveness. For more information, refer to Neuray *Principes de droit de l'environnement* and Bonnel *Le principe juridique écrit et le droit de l'environnement*.

615 As specified in Art L211-2 of the *Code de l'environnement*.

616 This is aligned with the WFD, as analysed in 4.2. This is a critical difference from the South African approach. Refer to 5.2 for further information on the South African regulatory scope of water law.

617 It also regulates some marine activities which might pollute marine waters. Art L218-1 to L218-86 of the *Code de l'environnement*.

618 Mainly in terms of L 211-2 and Art L211-2 of the *Code de l'environnement*.

following matters: water quality norms/objectives; the management of water uses; the management of water pollution; protection and conservation measures; products regulation; activities control and enforcement measures.⁶¹⁹ The law also implements sectoral regulatory instruments and measures to manage pollution from specific sources including dangerous substances,⁶²⁰ urban effluents,⁶²¹ sludge treatments and use,⁶²² agriculture,⁶²³ oil,⁶²⁴ lubricants,⁶²⁵ detergents,⁶²⁶ nitrates,⁶²⁷ and specific listed activities.⁶²⁸

The geographical scope of the law aimed at protecting the littoral is not clearly defined. The littoral is not defined in the law itself,⁶²⁹ but by interpreting the scope of the Act it is understood that the littoral includes the land of all municipalities which are in contact with the littoral,⁶³⁰ which are referred to as coastal/littoral municipalities.⁶³¹ However, it is important to note that the planning provisions of the *Loi Littoral* might also apply, in some specific cases as provided by the provisions of the *Code de l'Urbanisme*,⁶³² to municipalities neighbouring coastal/Littoral municipalities. Such cases refer to situations when neighbouring municipalities (non-

619 Art L 211.1, L211.2, and L 211.3 of the *Code de l'environnement*
620 Art R211-11-1 to R211-11-3 of the *Code de l'environnement*.
621 Art R211-22 to R211-24 of the *Code de l'environnement*
622 Art R211-25 to R211-53 of the *Code de l'environnement*.
623 Mainly in terms of Art R211-75 to R211-85 of the *Code de l'environnement*.
624 Art R211-60 to R211-62 of the *Code de l'environnement*.
625 Art R211-60 to R211-62 of the *Code de l'environnement*.
626 Art R211-63 to R211-64 of the *Code de l'environnement*.
627 Mainly in terms of Art R211-75 to R211-85 of the *Code de l'environnement*.
628 Mainly in terms of Art R214-1 to R214-60 of the *Code de l'environnement*, which is aligned with the EU environmental legal framework, as analysed in 4.6.
629 Frangoudes, Prat and Bailly *Le cadre national des politiques de gestion des zones côtières en France* 43.
630 The coastal/marine waters in terms of the Act include the sea, estuaries, tidal rivers, salt water, and natural or artificial lakes of more than 1000 hectares. It also includes the coastal and marine environment up to the limits of the territorial sea.
631 Littoral/Coastal municipalities are municipalities neighbouring the seas and oceans (including public maritime space), salt wetlands, internal water bodies of a size greater than 1000 hectares, estuaries, deltas, and municipalities located below the salt water limit, which participate in the ecological and economic interests of the coastal zone. In this context French law discriminates between the sea and the ocean without providing a definition of either. However it is understood that this distinction would refer for example to the Mediterranean Sea and the Atlantic Ocean. The final list of this last category of coastal municipalities is decided by *décret en conseil d'état*, Art L321-1 and L321-2. It took more than 21 years to establish the full list of such municipalities with the *Décret 2004-311* 24 March 2004 and IUCN *20 ans de loi littoral* 10.
632 The Urban Development Code Art L146-1.

coastal) have "specific role(s) in the economic and ecological equilibrium of the neighbouring coastal municipality(s)". Such a provision seems to be aimed at facilitating integrated coastal management and sustainable development of the littoral, in respect of the interdependence of the two municipalities' economic and social dynamics. The inland geographical scope can be regarded as extensive, but it is still based mainly on administrative boundaries and not on boundaries determined using an ecosystem-based approach.⁶³³ The sea-side boundaries are not clear, being based on an interpretation of the relevant provisions of the *Code de l'environnement*. It seems that they are limited by the limits of the territorial seas, excluding the French exclusive economic zone, as the *Loi Littoral* also aims to regulate specific land-based and maritime activities.⁶³⁴

The French regulatory scope associated with LBMP regulation is generally in accordance with international best practice.⁶³⁵ However, it is considered to be limited especially in terms of the regulatory scope of the provisions relating to French water law, which are limited to coastal waters and territorial waters.⁶³⁶ The EEZ should be included in the regulations. However, this situation might improve with the transposition of the MSFD.⁶³⁷

3.3.3 Regulatory objectives

In terms of Article 210-1 of the *Code de l'Environnement*, water belongs to the nation's collective "patrimony" and its protection, valorisation and development must be done in respect of the public interest. The concept of collective "patrimony" can be regarded as a derivative of the international principle of "common property",⁶³⁸ which refers primarily to areas beyond national jurisdiction in terms of international law and areas beyond private ownership in terms of national legislation. In the

633 Frangouides, Prat and Bailly *Le cadre national des politiques de gestion des zones côtières en France* 43.

634 Mainly in terms of regulation of navigation, ports, land-use and the use of coastal public domain. Art L321-1 of the *Code de l'environnement*.

635 As analysed in 2.3.2.

636 Also see 2.3.2 for further analysis of the implications of such limitation in terms of LBMP regulation.

637 Refer to 4.2.2 for a comprehensive legal analysis of the MSFD in terms of LBMP regulation.

638 Birnie and Boyle *International Law* 141.

French context, the common "patrimony" needs to be managed and used in the public interest. The state is then responsible for managing this common property on behalf of the nation. The state acts as the trustee, a situation which is similar to the approach adopted in South Africa environmental law, especially the NWA, where the state is designated as the trustee of the national water resource.⁶³⁹ The overall aim of water-related legislation in France is to ensure a sustainable and *équilibrée*⁶⁴⁰ management of water resources. The objectives of the Act are enunciated in Article 211-1 of the *Code de l'Environnement* and include, among others:⁶⁴¹

- To conserve aquatic ecosystems, *sites*⁶⁴² and wetlands;
- To protect water resource;
- To control pollution;⁶⁴³
- To restore water quality;
- To develop, mobilise and create water-resource protection;
- To valorise water resources as an economic resource;
- To promote the sustainable use of water resources;
- To protect sensitive and unique land/spaces/places;
- To maintain ecological equilibrium;
- To manage the use of land/space;⁶⁴⁴ and
- To promote and facilitate access to the sea shore.

LEMA affords great importance and priority to the management and preservation of wetlands, which management is legally qualified as a matter of public interest.⁶⁴⁵ Through the various provisions of the law, the importance of wetlands (mainly from

639 Refer to 5.3.1.1 for further information about the approach to the public trust doctrine in terms of South African environmental law.

640 There is no literal English translation for this term. Such a concept relates to the principles of: equity, fairness and equilibrium in water management and use.

641 Art L 211-1 of the *Code de l'environnement*.

642 The notion of a *site* refers to the aesthetic value of an area/location, and it is currently assimilated to the concept of landscape. It also refers to the visual appearance of an ecosystem. *Rom Droit et administration de l'environnement* 516.

643 Resulting from discharges, effluents, run-off, the direct or indirect disposal of substances or any others matter which might degrade or aggravate the degradation of water.

644 Especially in terms of tourism development and urbanisation.

645 Art L 211-1-1 of the *Code de l'environnement*.

an ecological perspective) is legally recognised and addressed. Another characteristic of French water law is the legal recognition of the economic and financial value of water resources,⁶⁴⁶ recognising water as an environmental good and service. The statute also recognises the interrelationships between water resources and climate change.⁶⁴⁷

The *Loi Littoral* is aimed at conserving and protecting the *Littoral*. The *Loi Littoral* determines the conditions of use of terrestrial and maritime spaces, and inland water.⁶⁴⁸ The aim is to provide legislative and administrative instruments and structures to ensure the protection and sustainable and improved development of the littoral. The regulatory objectives encompass protection of biological and ecological balances and the safeguarding of the natural sites and landscapes and the cultural and natural inheritance of the littoral.⁶⁴⁹ It also strives to manage sustainable development of the economic activities dependent on their proximity with coastal/marine waters.⁶⁵⁰ It strives to facilitate the implementation of research projects and innovation relating to the particularities and the resources of the littoral. The law provides for the regulation of urban development, town planning and activities taking place on the littoral, including the use of water, beach management and the use of maritime public space.⁶⁵¹ The *Loi Littoral* also provides for co-operative governance between central government and municipalities as well as between municipalities. The *Loi Littoral* is aimed at managing equilibrium between economic development and environmental protection. Previously, the law dealing with the littoral was based on the *Plan d'occupation des sols - POS* - (the land occupation plan), a land planning instrument, which meant that the shoreline was only a part of the land, without taking into account the maritime side.⁶⁵² The *Loi Littoral* is regarded as an essential legal development in French law in terms of

646 Romi *Droit et administration de l'environnement* 516.

647 Art L 211.11 of the *Code de l'environnement*.

648 Art L 321-2 of the *Code de l'environnement*.

649 Art L 321.1 of the *Code de l'environnement*

650 Including harbours, tourism, fishing, maritime transport, and marine culture. Art L 321.1 of the *Code de l'environnement*.

651 Art L 321-3 to L 321-7 of the *Code de l'environnement*.

652 Frangouides, Prat and Bailly *Le cadre national des politiques de gestion des zones côtières en France* 6.

coastal management.⁶⁵³ The regulatory objectives encompassed in French environmental law, as analysed above in terms of water resources and law, address pollution management, environmental protection, human health protection and the management of marine and coastal natural resources uses. Such objectives are aligned with internal best practice related to LBMP regulations demonstrated and analysed in Chapter 2.⁶⁵⁴

3.4 Main direct regulatory instruments

This section conducts a legal analysis of the main and most relevant direct instruments which are provided by French law for the regulation of LBMP, specifically the *Code de l'environnement* and its provisions in terms of water law, and the *Loi Littoral*.

3.4.1 Regulatory instruments based on the resource-directed approach

Most of the key regulatory instruments based on the resource-directed approach⁶⁵⁵ provided by the French regulatory framework pertaining to LBMP regulation are a direct transposition of the ones provided by EU environmental law, mainly the WFD,⁶⁵⁶ including its water quality objectives, the determination of good environmental status, and its environmental standards. A *Schema Directeur d'aménagement et gestion de l'eau* (SDAGE),⁶⁵⁷ which is an important French regulatory instrument, should set the environmental objectives and potentially the environmental standards for river basins.⁶⁵⁸ In terms of the resource-directed approach, it is important to note that the *Code de l'environnement* recognises the

653 Frangouides, Prat and Bailly *Le cadre national des politiques de gestion des zones côtières en France* 6.

654 The regulatory objectives should include pollution management, environmental protection, human health protection and the management of the use of marine and coastal natural resources. The ultimate goal of LBMP regulation may be regarded as the "reconciliation of development pressures with protection objectives". The management and regulation of the "legitimate and designated uses" of the marine coastal and marine environment is therefore going to be paramount to the effective regulation of LBMP. For further information refer to 2.3.3.

655 As analysed in 2.3.4.

656 Art L 211-4 and L 211-2 of the *Code de l'environnement*. Refer to 4.3.1.1 for the legal analysis of these instruments.

657 See 3.6.3 of this study for further information on SDAGE.

658 Art L 211-4 and L 211-2 of the *Code de l'environnement*.

economic and financial value of the water resources, recognising water as an economic asset,⁶⁵⁹ which is an important element in any water protection regime.⁶⁶⁰

3.4.2 Regulatory instruments based on the sources-directed approach

3.4.2.1 General requirements in terms of French water law

The *Code de l'environnement* prescribes that the general requirements for water management can be determined by a decision of the *Conseil d'Etat* (Council of state) relating to the following matters which are relevant in the context of the sources-directed approach:⁶⁶¹ water pollution management; protection and conservation measures; the regulation of products; and the control of activities.⁶⁶² The measures aimed at the preservation/protection of the quality of water and ecosystems are the most relevant in the context of the source-directed approach, as they might relate to the control and regulation, proactive or reactive, of agriculture-related pollution, effluents, other pollution, and the restoration of water quality. Preventive measures might also be implemented under this category. The maintenance-related measures concern all owners of land next to a water resource, who have a general obligation of regular maintenance of such water resources,⁶⁶³ which includes taking reasonable measures to maintain their good ecological status. Most of these will be sources-directed measures.⁶⁶⁴

3.4.2.2 Instruments prescribed by the basin district's programme of measures

The *Code de l'environnement*⁶⁶⁵ requires the development and implementation of a "Programme de Mesures" (*programme de mesures*) for each district river basin as

659 Art L 211.1 of the Code de l'environnement and Romi *Droit et administration de l'environnement* 516.

660 Refer to 1.1 and 2.2 for further information on this matter in terms of international best practice, especially in terms of the value of the marine and coastal ecosystem.

661 Art L 211.1, L 211.2, and L 211.3 of the *Code de l'environnement*.

662 Activity control might involve instruments based on the sources-directed approach and planning management.

663 This obligation can be compared with a duty of care for landowners to maintain water resources. See 5.5.1 for further information on the various duties of care implemented in South African law.

664 Art L 215-14 of the *Code de l'environnement*.

665 Art L 212-1 of the *Code de l'environnement*.

a component of a *Schema Directeur d'aménagement et gestion de l'eau* (SDAGE), which is one of the key French planning instruments in terms of water management and LBMP regulation. Such a programme is similar to the programme of measures prescribed by the WFD.⁶⁶⁶ A programme of measures combines different categories of direct instruments and it can consequently be categorised as a "combined" direct regulatory instrument. However, a programme of measures prescribes various sources-directed instruments to achieve the objectives set out in a SDAGE.⁶⁶⁷ A programme of measures contains two main types of "measures" (which in the context of this research may be qualified as regulatory instruments), namely fundamental/basic and supplementary/complementary measures. Fundamental/basic measures are measures which have to be taken in terms of EU water law,⁶⁶⁸ especially sectoral EU Directives in terms of water management and water pollution management, i.e. nitrates and urban waste water,⁶⁶⁹ which will require a regulatory instrument based on the sources-directed approach.⁶⁷⁰ Supplementary/complementary measures are determined and customised to the characteristics and situation of each river basin, and each programme will be different for each basin district, in accordance with local circumstances and priorities.

3.4.2.3 *Management of pollution from specific products and substances*

French water law, as prescribed in the *Code de l'environnement*, contains sectoral regulatory instruments and measures to manage the impacts on water resources from specific products, activities and sectors, including dangerous substances,⁶⁷¹ effluents,⁶⁷² sludge treatments and use,⁶⁷³ agriculture,⁶⁷⁴ oil,⁶⁷⁵ lubricants,⁶⁷⁶

666 Refer to 4.3.1.2 of this study for further information on the programme of measure prescribed by WFD

667 Drobenko *Droit de l'eau* 121.

668 As analysed in Chapter 4.

669 As analysed in Chapter 4.

670 Refer to Chapter 4 for further information about such Directives and their associated regulatory instruments, especially those related to the sources-directed approach.

671 Art R211-11-1 to R211-11-3 of the *Code de l'environnement*.

672 Art R211-22 to R211-24 of the *Code de l'environnement*.

673 Art R211-25 to R211-45 of the *Code de l'environnement*.

674 Art R211-48 to R211-53 and Art D211-54 to D211-59 of the *Code de l'environnement*.

675 Art R211-60 to R211-62 of the *Code de l'environnement*.

676 Art R211-60 to R211-62 of the *Code de l'environnement*.

detergents,⁶⁷⁷ fertilisers and nitrates,⁶⁷⁸ and listed activities. Such instruments and measures include prohibition; use and/or sale restrictions; specific technical requirements⁶⁷⁹ (proactive and reactive); and the regulation of activities (specific standards/criteria).⁶⁸⁰ For example, specific measures are required to prevent eutrophication and sediment management.⁶⁸¹ The Code also enables the regulation of the sale and distribution of products and equipment which might affect water quality.⁶⁸² The regulation of sludge management and the use of sludge are also important matters regulated by the Code.⁶⁸³ Effluent management is also addressed in the Code in a series of instruments based on the sources-directed approach.⁶⁸⁴ The Code also prescribes specific measures for run-off or leach management from the use of sludge for agriculture;⁶⁸⁵ other direct or indirect discharges (effluents, through run-off or stormwater);⁶⁸⁶ and the prohibition of the sale of detergents with phosphates. This approach seems to enable a focused regulatory approach for the management of specific sources of pollution.

Another important instrument in this context is the National Programme of Action regarding Water Pollution from Certain Dangerous Substances (*Programme national d'action contre la pollution des milieux aquatiques par certaines substances dangereuses*) which is aimed at preventing, minimising, and eliminating water pollution from such substances.⁶⁸⁷ In the context of this study and as per the categorisation of regulatory instruments determined in Chapter 2, this Programme can be categorised as a "combined" direct regulatory instrument,⁶⁸⁸ as it combines different direct instruments. It could also be qualified as an integrated regulatory

677 Art R211-63 to R211-64 of the *Code de l'environnement*.

678 Art R211-75 to R211-85 of the *Code de l'environnement*.

679 For example, R211.51 of the *Code de l'environnement*; technical requirements for sludge use.

680 For further information see Melquiol *Mémento de la réglementation environnementale Française* 80-85.

681 Art L 215-15 of the *Code de l'environnement*.

682 As part of general requirements, in terms of L 211-2 of the *Code de l'environnement*.

683 Art R211.25 and others of the *Code de l'environnement*

684 For example, in terms of Art R211-48 of the *Code de l'environnement* the discharge of effluent from agricultural sources is forbidden, and in terms of D211.55 of the *Code de l'environnement* strict control of the effluent derived from cattle is prescribed.

685 Art R211.25 and others of the *Code de l'environnement*.

686 Art R211.60 and others.

687 In terms of Art R211-11-1 and the succeeding articles of the *Code de l'environnement*.

688 Refer to 3.4.4.

instrument as it combines direct and indirect regulatory instruments. As a sources-directed instrument the Programme prescribes a list of substances in accordance with the substances identified in terms of the WFD, which list determines the scope of the Programme.⁶⁸⁹ Water quality standards (concentration limits) are determined for each listed substance. The water use authorisations (especially in terms of discharges into a water resource) have to take such standards into consideration.

Chemical products are also controlled in terms of the *Code de l'environnement*. A declaration is required for any new substances to enter the market, specific obligations are imposed on producers, distributors and users. The distribution of biocide products is also controlled.⁶⁹⁰

Some sectoral legislation related to mining, the extraction of natural resources, nuclear activities and waste-water treatment facilities also prescribes specific requirements which assist water pollution management from such sources.⁶⁹¹ The

689 Refer to 4.3.1 2(d).

690 Such provisions are a direct application of REACH. As previously stated, REACH is a European regulation on chemicals and their safe use (EC 1907/2006). It deals with the Registration, Evaluation, Authorisation and Restriction of Chemical substances. The new law entered into force on 1 June 2007. In terms of REACH, "all manufacturers and importers of chemicals must identify and manage risks linked to the substances they manufacture and market. For substances produced or imported in quantities of 1 tonne or more per year per company, manufacturers and importers need to demonstrate that they have appropriately done so by means of a registration dossier, which shall be submitted to the Agency. Once the registration dossier has been received, the Agency may check that it is compliant with the Regulation and shall evaluate testing proposals to ensure that the assessment of the chemical substances will not result in unnecessary testing, especially on animals. Where appropriate, authorities may also select substances for a broader substance evaluation to further investigate substances of concern. REACH also foresees an authorisation system aiming to ensure that substances of very high concern are adequately controlled, and progressively substituted by safer substances or technologies or only used where there is an overall benefit for society of using the substance. These substances will be prioritised and over time included in Annex XIV. Once they are included, industry will have to submit applications to the Agency on authorisation for continued use of these substances. In addition, EU authorities may impose restrictions on the manufacture, use or placing on the market of substances causing an unacceptable risk to human health or the environment. Manufacturers and importers must provide their downstream users with the risk information they need to use the substance safely. This will be done via the classification and labelling system and Safety Data Sheets (SDS), where needed". For further information see ECHA 2010 http://guidance.echa.europa.eu/about_reach_en.htm, and European Commission, *REACH in Brief 2007* which can be found on Europa 2007 http://ec.europa.eu/environment/chemicals/reach/pdf/2007_02_reach_in_brief.pdf.

691 For further information consult Drobenko *Droit de l'eau* 159 and 3.8.

*Code de l'environnement*⁶⁹² also prescribes the development of a programme for the management of water pollution from nitrates.⁶⁹³ This programme implements the provisions of the WFD.⁶⁹⁴

3.4.3 Regulatory instruments based on planning management

This section outlines and analyses some of the key regulatory instruments based on planning management in terms of LBMP regulation in France, and encompasses an analysis of the following key planning instruments: *Schéma de mise en valeur de la Mer*,⁶⁹⁵ which strives to manage marine and coastal water use,⁶⁹⁶ the implementation of coastal zone management in France, the implementation of the basin districts management approach, zoning, property strategy for the conservation of the littoral, and traditional planning instruments.

The *Installations classées*⁶⁹⁷ and the water nomenclature⁶⁹⁸ are types of EIAs⁶⁹⁹ and they can therefore be regarded as activity management-related planning instruments.⁷⁰⁰ However, they are more comprehensive as they incorporate other categories of regulatory instruments based on the sources-directed approach. They are qualified in the context of this study as "integrated" regulatory instruments as they integrate direct and indirect regulatory instruments and they are separately analysed in 3.6.⁷⁰¹ The SDAGE and *Schémas d'aménagement et de gestion de l'eau*⁷⁰² (SAGE) are generally regarded as key water planning management instruments in France. However, SDAGE and SAGE can be qualified as "integrated regulatory instruments" in terms of the categorisation of regulatory instruments used in this study, as they integrate a diversity of direct and indirect regulatory instruments into a single consolidated regulatory instrument. In this context, they are not

692 Art R211-80 and L 214.4 of the *Code de l'environnement*
693 Refer to 3.8.2.
694 Refer to 4.6.3 for further information on this matter.
695 Valorisation scheme for the sea.
696 Scheme for the improvement of the sea.
697 Listed/classified installations.
698 See 3.6.
699 Refer to 2.3.4.1(d).
700 Refer to 2.3.4.1
701 Their analysis is not repeated here.
702 Scheme for water management.

regarded as instruments based only on the planning management approach, and they are therefore analysed in a separate section.⁷⁰³

3.4.3.1 Coastal zone management

It is important to note that in terms of French law, and more specifically the provisions of the *Code de l'environnement*, there is no direct reference to the concept of integrated coastal management as such.⁷⁰⁴ However, the *Loi Littoral* is generally regarded as the statute which sets out the principles and instruments of a regulatory and management system similar to integrated coastal zone/area management in France.⁷⁰⁵ In this context, the littoral is assimilated to the French coastal zone/area.⁷⁰⁶ Article L 321-1 of the *Code de l'environnement* recognises the specific characteristics of the coastal zone and acknowledges the need for a customised management framework for its protection, improvement and sustainable development, including its sustainable use. The protection of the littoral is recognised as a matter of public interest.⁷⁰⁷ One of the most relevant regulatory objectives⁷⁰⁸ in this context is the protection of ecological and biological equilibrium, erosion prevention and management, and the sustainable development of economic activities dependent on the littoral (including tourism, agriculture, marine aquaculture, and industries). French environmental law regulates the littoral protection (especially the maintenance of its natural state and the maintenance of its ecological equilibrium), coastal and maritime activities, the ownership and use of buildings and land on the littoral, and the development and planning of the littoral. The *Loi Littoral* prescribes the following planning principles for coastal zone development, which are applicable mainly to municipalities located in the littoral:⁷⁰⁹

703 Refer to 3.6.

704 Or integrated coastal zone/area management.

705 Frangoudes, Prat and Bailly *Le cadre national des politiques de gestion des zones côtières en France* 19.

706 Frangoudes, Prat and Bailly *Le cadre national des politiques de gestion des zones côtières en France* 19.

707 Art L 321-1 of the *Code de l'environnement*.

708 Refer to 2.3.3.

709 Mainly Art L 146-2 and L146-4 of the French urbanism code. For further information refer to Becet *Le droit de l'urbanisme littoral*.

- The extension of urbanisation in continuation of existing urban space.
- The integration of new urban space in the environment to avoid urban sprawl.
- The limitation of urbanisation in close proximity of the sea.
- The protection of green fields in the zone 100 metres inland from the high-water mark, prohibiting any construction in this zone with the exception of construction related to public services and/or economic activities requiring to be located close to the sea shore.
- The protection of "significant"⁷¹⁰ natural spaces, considering the importance of their landscapes and ecological interest.
- A general prohibition on building roads and/or access roads closer than 2000 meters to the sea shore, except in specific circumstances relating to specific topographic and urban constraints.
- Free access to the sea-shore.

The sustainable use, development and protection of the littoral has been a policy and regulatory priority in France since the late 1970s. Planning principles for coastal municipalities are set out in the *Code de l'Urbanisme*.⁷¹¹ In terms of the provisions of the Code the urbanisation of municipalities located on the littoral should take into consideration specific criteria to ensure sustainable coastal urban development.⁷¹²

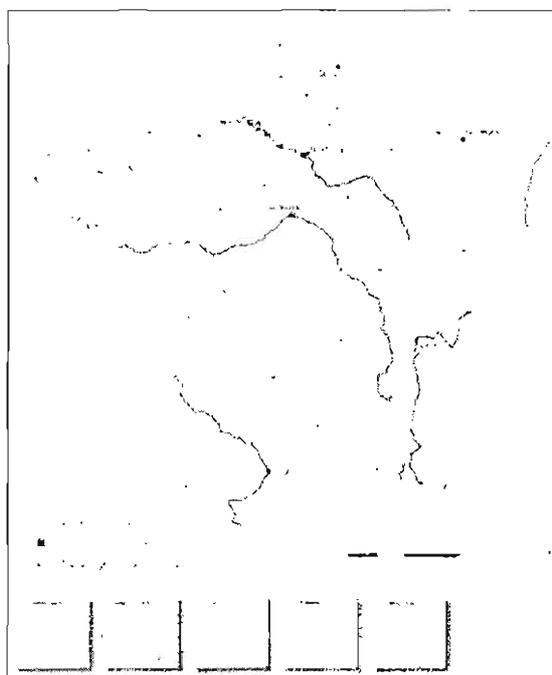
710 In French, *Remarquable*.

711 For further information refer to Bécet *Le droit de l'urbanisme littoral*; Prieur and Merckelbagh *La politique du littoral* and Le Roy *La loi Littoral*

712 Such criteria include supporting the capacity of the developed land to be developed in terms of the accommodation of a number of persons (taking into consideration the available accommodation and the capacity of the supporting services including sanitation); the protection of the littoral environment; the protection of the land and ecosystems which the littoral economic activities are relying on; and the condition of use of the littoral environment by the general public. Art L146.4 complements these initial criteria by adding new conditions applicable to the development of the littoral including (with some prescribed exceptions) the demand that urban development of the littoral must be conducted in alignment with existing urban development to avoid urban sprawl, and development close to the sea shore needs to be limited. Refer to 3.4.3.1 for further information.

3.4.3.2 Basin districts' approach

In compliance with the WFD,⁷¹³ French water law establishes basin districts as management units.⁷¹⁴ Legislation prescribes that marine waters should when relevant be linked and attached to their respective basin districts.⁷¹⁵ This is an attempt to adopt an ecosystem-based approach, respecting the ecologic interdependence between fresh and marine waters in the regulatory approach regarding water management. Such an approach, as previously stated, is very important in LBMP regulation.⁷¹⁶ The map below provides an overview of the different water management areas in France.



Map 1 Basin districts in France⁷¹⁷

713 Refer to 4.3.1.3(b) for further information on the WFD regarding this matter and Drobenko *Droit de l'eau*.

714 This approach is similar to that involved in the catchment management area established under the South African legislation. Refer to 5.3.3.2(d) of this study for further information on the South African regulatory approach on this matter.

715 Art L.212 of the *Code de l'environnement*.

716 See 2.3.4.

717 DIREN Ile-de-France 2010 <http://www.ile-de-france.ecologie.gouv.fr/spip.php?rubrique244>.

There are currently seven basin districts.⁷¹⁸ The current French water law, in compliance with the WFD requirements, prescribes the establishment of management and planning "master" plans at the basin district level (SDAGE⁷¹⁹ must be developed and implemented)⁷²⁰ and more detailed local programmes or management plans for a sub-basin district level, a specific sector, issue or type of water resource (SAGE).⁷²¹

3.4.3.3 Schéma de mise en valeur de la mer⁷²²

*Schéma de Mise en Valeur de la Mer des Communes Littoral*⁷²³ is principally a zoning instrument and can be referred to as a coastal zoning scheme which aims at allocating different (sea and land based) zones of the littoral to specific users.⁷²⁴ It is a single document for cohesive and integrated coastal management. A SMVM is defined as follows: "A SMVM covers a geographical and marine unit, with linked interests of concurrence or complementarity, in terms of protection, exploitation and management of the shore".⁷²⁵ It is one of the main French regulatory instruments to manage and determine the uses of the coastal environment. The scheme organises and rationalises the use of the land and sea in the specified zone. It also assists in the management of the potential conflicts among uses by proposing potential management approaches to resolve these conflicts, in alignment with the requirements of sustainable development of the coastal zone.⁷²⁶ The main categories of users include industrial development, ports and harbour activities, marine

718 There are only six management entities (*Agences de l'eau*) as the *Corse* and *Rhône-Méditerranée* Basins are managed by a single *Agence de l'eau*, they have their distinct SDAGEs for each basin.

719 Master plans for water management and development.

720 Refer to 3.6.3.

721 Drobenko *Droit de l'eau* 80-83.

722 Scheme for the improvement/valorisation of the sea.

723 It was created by a Law of 7 January 1983, and substantially modified by Art 235 of the Law of 23 February 2005 *Relative aux developpement des territoires ruraux*. For further information refer to Bécet and Le Morvan *Le droit du littoral et de la mer côtière*; Merckelbagh *La politique du littoral*.

724 For further information see Délégation interministérielle à l'aménagement et à la compétitivité des territoires *Bilan de la loi littoral and des mesures en faveur du littoral*.

725 Frangoudes, Prat and Bailly *Le cadre national des politiques de gestion des zones côtières en France* 32.

726 Frangoudes, Prat and Bailly *Le cadre national des politiques de gestion des zones côtières en France* 32.

aquaculture, and tourism and leisure activities.⁷²⁷ It can also prescribe specific requirements for the protection and sustainable development of the littoral. The scope of the Scheme is a terrestrial and maritime unit having interrelated interests, which will benefit from a single, coherent planning approach.

Its legal status is uncertain as it could be regarded as a regulation as well as a planning document.⁷²⁸ The adoption and development procedure of such a coastal scheme is decentralised and "deconcentrated", which gives more power to local government⁷²⁹ and deconcentrated (local) organs of state and government, allowing a more focused and customised approach.⁷³⁰ A scheme can be initiated by national government, but it will ultimately be adopted by local government.⁷³¹ A scheme can also be elaborated as part of a *Schéma de Cohérence territoriale* (SCOT),⁷³² which enables an integrated and coherent approach to the management of land-based and maritime activities, in accordance with the principle of integrated coastal zone management.⁷³³ Most local planning documents must comply with the provisions of a *Schéma de Mise en Valeur de la Mer*.⁷³⁴

Such an instrument (a scheme) has the potential to assist the effective implementation of integrated coastal management and the sustainable use of marine and coastal resources in France, and ultimately to assist in the cohesive

727 *Loi 83-8 du 07 Janvier 1983 Loi relative à la répartition de compétences entre les communes, les départements, les régions et l'Etat* Ministère de le Mer 2005 http://www.mer.gouv.fr/IMG/pdf/texteconsolide24-02-05_1_cle27ddab.pdf 1.

728 Déléation interministérielle à l'aménagement et à la compétitivité des territoires *Bilan de la loi littoral* 56.

729 Including for example municipalities or departments.

730 Frangoudes, Prat and Bailly *Le cadre national des politiques de gestion des zones côtières en France* 26-32.

731 Law of 7 January 1983, and substantially modified by Art 235 of the Law of 23 February 2005, *Relative aux development des territoires ruraux*.

732 Scheme for territorial coherence. At a regional and county level the most significant planning regime is that of the *Schémas de cohérence territoriale* (SCOT). The purpose of the SCOT is to delineate the major spatial development priorities for the area under examination over the medium to long-term. This is a public participation and cooperative governance process involving the various levels of government in the region or the department. The plan is subject to a public enquiry but, once approved, is valid for a period of ten years.

733 Sénat Carrefour Local 2006 http://carrefourlocal.senat.fr/vie_locale/cas_pratiques/schemas_mise_valeur_urbanisat/index.html.

734 Frangoudes, Prat and Bailly *Le cadre national des politiques de gestion des zones côtières en France* 26-32.

management and regulation of LBMP. To date, they have not been extensively used, but it is anticipated that their use might be extended following the 2005 amendment. The amendment has decentralised and deconcentrated to a greater extent the scheme's adoption and development process,⁷³⁵ enabling a more concerted local response and management. Since the amendment such schemes might be regarded as more relevant to local authorities and government.⁷³⁶ The *Schémas de Mise en Valeur de la Mer* are regarded today as the frame of reference for coastal management policies.⁷³⁷

3.4.3.4 Specific zoning instruments

Zoning is a common regulatory instrument in France,⁷³⁸ and some specific zoning instruments are relevant in the context of LBMP regulation. The most relevant zoning tools in this context include:

- The delimitation of "vulnerable zones", being zones which are affected by nitrates pollution from agriculture-related activities, as prescribed by EU law.⁷³⁹
- The delimitation of *zone humides d'intérêt environnemental particulier*⁷⁴⁰ (wetlands with a particular environmental interest) in order to allocate to them a special level of protection.

735 Modified by Art 235 de *the Loi n°2005-157 du 23 février 2005 relative au développement des territoires ruraux*.

736 CEDRE 2006 http://www.ifremer.fr/lerlr/bases_connaissance/mono_thau/thau/htm/smvm.htm.

737 Sénat Carrefour Local 2006 http://carrefourlocal.senat.fr/vie_locale/cas_pratiques/schemas_mise_valeur_urbanisa/index.html.

738 For further information about environment-related zoning instruments, refer to Morand-Deville *Droit de l'environnement* 158-159 and Morand-Deville *Droit de l'urbanisme* 87-99 and 40-55.

739 Drobenko *Droit de l'eau* 167. Two types of zones can be identified, A zones (groundwater and inland surface waters with a concentration of nitrate superior to 50mg/l) and B zones (coastal, marine, estuaries and inland waters which are affected or vulnerable to eutrophication, and which have a concentration of nitrate between 40 and 50 mg/l). For each zone, a programme of action needs to be developed to address the pollution or the risk thereof. Art R211-75 and following of the *Code de l'environnement*. This is a direct implementation of the provision of the EU Nitrate Directive analysed in 4.6.3 of this research.

740 Art L211-3 of the *Code de l'environnement*, which enables a specific protection regime for such a zone, might assist in the management of LBMP impacts on such zones, especially considering that coastal wetlands are ecosystems vulnerable to LBMP.

- *Zones stratégiques pour la gestion de l'eau* (strategic zone for water management) for which specific requirements, especially in terms of the use of water, might be established to protect the zones.⁷⁴¹
- *Zones soumises a des contraintes environnementales* (zone with specific environmental constraints).
- *Zones d'alertes*⁷⁴² (emergency zones), which are commonly established to manage pollution accidents and protect the environment at risk.
- French water law also provides the possibility of establishing quality norms (environmental objectives) for specific zones of marine and coastal waters according to the requirements of the use of water and the valorisation of the biological resources in these zones.⁷⁴³ It provides for the regulation and/or prohibition of certain activities in these zones to preserve water quality in accordance with the established norms.⁷⁴⁴

In addition, zoning instruments related to biodiversity and sensitive areas management and protection can also assist in the protection of specific zones of the French littoral zone. The most relevant include the designation of classified sites;⁷⁴⁵ the designation of national parks;⁷⁴⁶ the designation of national, regional⁷⁴⁷ and other natural reserves;⁷⁴⁸ the designation of sensitive environments and/or environments with a specific, recognised ecological interest;⁷⁴⁹ and the designation of marine natural reserves.⁷⁵⁰ Such zones should assist in the regulation of LBMP by preventing or controlling activities in such zones which could potentially be sources of LBMP. Moreover, the ecological objectives of such zones should assist in the management of the surrounding activities to ensure that they do not impact negatively on the protected zones. However, due to the limited scope of such zones

741 Art L211-3 of the *Code de l'environnement*.

742 Art R211-66 of the *Code de l'environnement*.

743 Art L 211-4 of the *Code de l'environnement*

744 Drobenko *Droit de l'eau* 121.

745 Art L341-1 and the following of the *Code de l'environnement*.

746 Art L331-1 and the following of the *Code de l'environnement*.

747 Art L333-1 to L333-4 of the *Code de l'environnement*.

748 Art L332-1 and the following of the *Code de l'environnement*

749 Art L342-1 of the *Code de l'environnement*.

750 Art L334-1 to L334-2 of the *Code de l'environnement* for marine protected areas and Art L334-3 to L334-8 for natural marine parks.

and their specific regulatory objectives (protection and conservation), their relevancy for LBMP regulation is limited, especially geographically to the specific zones to be protected.⁷⁵¹

3.4.3.5 *Conservatoire des espaces du littoral et des rivages lacustres* and its strategy

The *Conservatoire des espaces du littoral et des rivages lacustres* (the conservation organisation for the littoral and the sea-shore),⁷⁵² is an organ of state (a public establishment) which has been established to ensure the sustainable conservation and management of natural spaces and landscapes close to the littoral and lakes as well as to maintain ecological equilibrium in such zones.⁷⁵³ In order to do so and in relation to the conservation of the coastal zone, the littoral, this public establishment has a very particular approach and strategy which involves acquiring fragile or/and degraded coastal land (through mutual consent, donation and/or expropriation) in order to restore it and ensure its sustainable management and conservation. The restored land will then be given in management to a municipality, another *collectivités locale*, or a non-governmental organisation, which will have to manage it (and its use) in the public interest and according to prescribed management objectives.⁷⁵⁴ The rationale behind this approach is that it seems more efficient to own a portion of the coastal zone to be able to manage and conserve it efficiently. The mandate of the *Conservatoire du littoral et des rivages lacustres* is to collaborate with municipalities and other local public agencies in developing a "property policy" which involves the purchase of strategic coastal land, as explained above, to ensure

751 Including zones of special protection (ZPS) indicated in the framework of the application of the EU Birds Directive and the proposals for sites of community interest (pSIC), future special zones of conservation of the Habitats Directive; the natural reserve régional (PNR); *les sites classés et inscrits* (classified sites); *les parcs nationaux* (national parks), *les réserves naturelles et les réserves naturelles nationales de Corse et régionales* (natural reserves); *les réserves biologiques forestières ou domaniales* (biological forest reserves), *futur parcs naturels marins issus de la loi du 14 avril 2006* (natural marine parks).

752 It is an organ of state created by the *Loi Littoral* which has the mandate and the power to acquire and develop coastal land for the protection and sustainable development of the littoral.

753 For a complete analysis of the *Conservatoire du littoral et des rivages lacustres*, refer to Merkelbagh *La politique du littoral sous la Ve république* 246-254.

754 Art L 322.1 and the following of the *Code de l'environnement*

the protection and ecological equilibrium of the littoral, natural sites and landscapes in the coastal zone.⁷⁵⁵ The *Conservatoire* can also propose measures to regulate construction in certain parts of the coastal zone and close to the public maritime domain in order to protect the coastal zone.⁷⁵⁶ This strategic approach, even if not directly aimed at LBMP, can facilitate LBMP regulation and/or facilitate the protection of specific areas in the coastal zone from the impacts of LBMP.

3.4.3.6 *Traditional planning instruments and the coastal marine environment*

In addition to the 'specific' planning instruments analysed above, some traditional planning instruments are also relevant in terms of coastal zone management and, indirectly, LBMP regulation.⁷⁵⁷ This section provides an overview of such instruments. In terms of French law, the chief term used in the context of common planning *stricto sensu* is *urbanisation* (urban development), which refers to land use and planning, including residential development, industrial and agricultural development, tourism requirements in terms of land use, and other land uses.⁷⁵⁸ Various "traditional" planning instruments are encompassed in the French *Code de l'urbanisme*. It is important to note that the traditional French planning instruments are not aimed at managing pollution from *urbanisation* in the littoral *per se*. However, in the decision-making process they do take into consideration the possible pressures and impacts (which might include LBMP of the coastal and marine environment) from the related land uses on the littoral.⁷⁵⁹ Only the main planning instruments are mentioned in this section. They are not analysed in detail as their primary function is not to manage the pollution of coastal/marine waters. However, it seems important to mention them in this context, as they can assist in the proactive management of some of the main sources of LBMP located in the littoral. Traditional French *urbanisation* instruments which can assist in the regulation of LBMP include:

755 For further information about the conservatoire refer to Legrain *Le conservatoire du littoral*

756 Art L 322.1 to L 322.10-7 of the *Code de l'environnement*.

757 For further information about French planning/urbanisation law, refer to Morand-Deville *Droit de l'urbanisme*; Bécet *Le droit de l'urbanisme littoral*; Drobenko *Droit de l'urbanisme*; Davignon *Droit de l'urbanisme*; Bonichot *Droit de l'urbanisme*.

758 Sénat Carrefour Local 2006 http://carrefourlocal.senat.fr/vie_locale/cas_pratiques/schemas_mise_valeur_urbanisat/index.html.

759 Mesnard 2009 <http://vertigo.revues.org/index8226.html>.

- The *Plan local d'urbanisme*⁷⁶⁰ (the PLU – the local urbanisation plan).⁷⁶¹ It is the main traditional planning instrument for a municipality. It is a planning document with a medium-term timeframe, to manage and plan land use/urbanisation. One of the main attributes of a PLU is the possibility to designate zones which cannot be developed and/or where development is strictly limited. Such zones can be used to protect a zone of the littoral from specific pressures related to development, including LBMP. However, the PLU can be amended to modify such zones (either to increase or reduce their size) and consequently it is argued⁷⁶² that a PLU does not guarantee protection of the littoral, as economic pressures could lead a municipality to authorise development in a zone where construction was previously not allowed, by amending the PLU.
- The *Schéma de Coherence territoriale* (the SCT – the scheme for territorial coherence)⁷⁶³ is an integrated planning instrument which presents a sustainable development and planning plan/project for a community or group of communities,⁷⁶⁴ taking into consideration economic, demographic, environmental, agricultural, social, housing, transport, equipment and service requirements, including future requirements. Such schemes can relate to one or more littoral communities and they can also contain a specific chapter containing a *Schéma de mise en valeur de la mer*.⁷⁶⁵
- *Directives territorial d'aménagement*,⁷⁶⁶ which might prescribe specific conditions related to coastal zone development and facilitate integrated coastal zone management.⁷⁶⁷

760 Art L123-1 of the French urbanisation code.

761 Which replaced the Plan d'occupation des sols, loi Solidarité et Renouvellement Urbains (S.R.U). du 13 décembre 2000.

762 Frangoudes, Prat and Bailly *Le cadre national des politiques de gestion des zones côtières en France*. The argument refers to the Plan d'occupation des sols, but it can also apply to the PLU.

763 Art L122-1 to L122-19 of the French urbanisation code.

764 Communes.

765 Art L 122-1 of the French urbanisation code.

766 Art L 111-1-1 of the French urbanisation code.

767 Mesnard *L'approche stratégique française des instruments de la gestion intégrée des Zones côtières*.

It is important to note that the SCT and PLU traditionally applied only to land use. However, through courts' interpretation it is admitted that the "territory" of the littoral municipalities extends up to the limit of the territorial sea, which means that the scope of these documents might also include the development of maritime activities and uses within the limits of the territorial seas.⁷⁶⁸

3.4.4 Combined direct instruments

The combined direct regulatory instruments are a combination/mix of various categories of direct instruments, including instruments based on the resources, sources and planning management-directed approaches. In the context of this study, they are classified as combined direct regulatory instruments. As previously stated, SDAGE and SAGE could be described as combined direct regulatory instruments. However, as they include indirect regulatory instruments as ecosystem assessments or monitoring programmes, they are described in the context of this study as integrated regulatory instruments. The National Programme of Action against Water Pollution from Dangerous Substances (*Programme national d'action contre la pollution des milieux aquatiques par certaines substances dangereuses*)⁷⁶⁹ can be generally described as a "combined" direct regulatory instrument as it combines different direct instruments. It can also be described as an integrated regulatory instrument as it also combines direct and indirect regulatory instruments.

3.5 Main indirect regulatory instruments

This section aims to provide a legal analysis of the key indirect regulatory instruments in terms of LBMP regulation prescribed by French environmental law, the chief of which are ecosystem assessment, information management, monitoring, financial management, effectiveness assessment, compliance and enforcement.

768 Frangoudes, Prat and Bailly *Le cadre national des politiques de gestion des zones côtières en France* 12.

769 As analysed above in 3.4.2.3.

3.5.1 Ecological assessment and information management

In 2004 a comprehensive (initial) ecological assessment, "état des lieux", was conducted for each river basin in France.⁷⁷⁰ Those assessments are updated regularly using data collected through monitoring programmes.⁷⁷¹ The *Loi Littoral* promotes the development of research and innovation related to the coastal zone. The research fields include integrated coastal zone management and its uses; the uses of coastal and marine resources; the monitoring and improvement of water quality and ecosystems integrity; the protection of the coastal zone; the security of maritime navigation and operations; the treatment and prevention of pollution; adaptation to global change; coastal erosion management; coastal economic activities management; coastal tourism management; the development of marine renewable energy; and coastal and marine sediments management.⁷⁷² As a result, specific research and technical groups have been established and have become internationally renowned for their expertise regarding coastal zone-related issues.⁷⁷³ In this context, France has also developed a series of monitoring programmes and data management platforms, especially in terms of the requirements of the MFD and the MSFD.⁷⁷⁴ Some monitoring programmes are national, some regional,⁷⁷⁵ and some specific to a bay or a specific ecosystem, in terms of a SAGE, for example. There is a set of specialised monitoring instruments regarding specific pollutants (nitrates) or

770 Art R212-22 to R212-24 of the *Code de l'environnement*, such an approach is in compliance with the requirements of the WFD, refer to 4.3.2.1.

771 Art R212-22 à R212-24 of the *Code de l'environnement* such an approach is in compliance with the requirements of the WFD, refer to 4.3.2.1 and 4.3.2.3.

772 Art L321-1 of the *Code de l'environnement*.

773 For example, the *Centre de Documentation, de Recherche et d'Expérimentations sur les pollutions accidentelles des eaux* – the Centre for documentation, research and experimentation on accidental water pollution- (CEDRE) <http://www.cedre.fr/index-en.php>, and the *Institut français de recherche pour l'exploitation de la mer* – the French Research Institute for Exploitation of the Sea - (IFREMER) <http://www.ifremer.fr/francais/index.php>.

774 Such programmes include, for example, RNO (*Réseau National d'Observation de la qualité du milieu marin*, National monitoring network of the quality of the marine environment) which became ROCCH (*Réseau d'Observation de la Contamination Chimique du milieu marin*, national monitoring network for the chemical contamination of the marine environment).

775 Refer to 4.3.2.3 for further information about EU monitoring programmes and data management.

marine water pollution from specific activities (agriculture or mining).⁷⁷⁶ Most of the programmes are managed, directed, supervised or funded by the government. The indirect regulatory instruments pertaining to ecosystem assessment, information management, and monitoring are regarded as comprehensive, and most of them are aligned with international best practice.⁷⁷⁷ However, the lack of a comprehensive and integrated national evaluation and monitoring system for the quality of littoral and marine waters can be considered a potential limitation to the effective regulation of LBMP. The monitoring programmes can be regarded as fragmented, a fact which is not conducive to an integrated and holistic national monitoring programme and response in terms of LBMP. The lack of coordination and centralisation of monitoring programmes can make information management more difficult and ultimately impact negatively on public decision making in terms of LBMP. This fragmented situation might also lead to geographical disparities in monitoring practices between basins and/or municipalities. The lack of a national monitoring programme and consolidated data might reduce the effectiveness of the response by national government to the issue of LBMP due to the lack of data to inform decision making. However, such a situation might be addressed with the transposition of the MSFD and its associated provisions in this context, which should consolidate monitoring efforts for the coastal environment.⁷⁷⁸

776 Dronenko *Droit de l'eau* 55. For further information on the ecological assessment-related instruments and monitoring programmes in the French context, refer to Ifremer 2009 <http://www.ifremer.fr/francais/index.php>.

777 As previously indicated in Chapter 2, international best practice suggests the need to conduct an initial assessment of the ecological status of the coastal and marine environment, which should evaluate the conditions and features of the coastal and marine environment (the physical, biological and chemical characteristics). In accordance with international best practice, information management is an essential component of the regulatory framework to manage LBMP. International practice in this context relates to the types of information to be collected, the format, accessibility and communication of such information, and the reporting obligation. International best practice provides valuable guidance on the types of information to be collected through monitoring programmes, including data/information on resources to be protected (i.e.: the assessment of ecological status), the quantities of priority substances discharged (inputs); the authorisations, permissions and environmental impact assessments and audits applicable; legal and regulatory measures, action plans, programmes and other steps taken for the regulation of LBMP; and results achieved in the prevention, control, reduction or elimination as appropriate of any hot spots in the territory. For further information refer to 2.3.6.1.

778 Refer to 4.3.2.

3.5.2 Financial management

France has developed various financial management instruments in terms of water management which are relevant for LBMP regulation.⁷⁷⁹ Financial management instruments have various administrative and regulatory sources and levels of application (national, regional and local).⁷⁸⁰ Under the influence of EU Law, French financial management instruments strive to be aligned with the principles of integrated environmental costs, the recovery of costs and the polluter-pays principle.⁷⁸¹

Financial planning takes place at the national, regional, departmental and municipal level. The various integrated instruments (SDAGE, SAGE, *contrats de baie* and others) have specific provisions in terms of financial planning.⁷⁸² The *9èmes programmes d'intervention des agences de l'eau (2007-2012)* (9th programme of intervention of the water agencies) also encompasses specific information in terms of financial planning and provisions related to water management. In terms of financial provision, the three main sources of finance are EU funding,⁷⁸³ national funding⁷⁸⁴ and users'/polluters' contributions. Regarding national financial funding,⁷⁸⁵ the instruments are multiple, emanating from various ministries. In terms of financial provisions from the national state to *collectivités territoriales*, two main types of instruments exist: *dotations globales d'équipement* and *financements contractualisés*.⁷⁸⁶ Specific national funds also exist.⁷⁸⁷ The *Collectivités territoriales*

779 Art R213-48-1 to R213-48-15 of the *Code de l'environnement*.

780 Dronenko *Droit de l'eau* 252.

781 Dronenko *Droit de l'eau* 252.

782 See 3.5.2 for further information.

783 For example from the European programmes for the environment, specific loans, the LIFE programme, and financial provisions from European structural programmes (i.e.: agriculture).

Dronenko *Droit de l'eau* 250.

784 Dronenko *Droit de l'eau* 252.

785 The 2008 budget of the MEEDDM was 20 milliards of Euros. However, the average annual budget of the MEEDDM has often been regarded as too limited to ensure efficiency in terms of the wide range of its mission.

786 Global finance allocation for equipment, which relates to finance allocations to departments, municipalities or groups of municipalities for specific infrastructural development (mainly related to water services in terms of the municipalities). Contractual financing for specific programmes or contracts, for example, relating to nitrate pollution from agricultural activities (*programme de maîtrise des pollutions d'origines agricoles*) or *contrats de baie*, Dronenko *Droit de l'eau* 252.

(mainly regions and departments) also have their own instruments in terms of financial provisions.⁷⁸⁸ The *agences de l'eau* (water agencies) have specific mechanisms in terms of financial provisions. The nature, scope and functioning of some financial instruments related to the *agences de l'eau* are to some extent prescribed and determined by parliament,⁷⁸⁹ which could be regarded as a limitation of the level of financial independency of the *agences de l'eau* but could also be regarded as a means to ensure a certain level of consistency between them.

France has established a variety of water-related taxes and user charges in tandem with an offset subsidy for waste water treatment, which has become the backbone of water pollution control in France.⁷⁹⁰ The overall goal of the financial instruments is to facilitate the implementation of the polluter-pays principle, to make polluters pay for water pollution, and to provide financial aid for those who prevent water pollution. Water-related taxes in France are used to raise revenue but also to achieve specific behaviour, especially in terms of pollution prevention. The *agences de l'eau* manage most of the market-based instruments related to water. They have a fair level of independence and liberty to determine the scope and modalities of the market-based instruments that they want or need to establish. However, this liberty has been criticised, due the inequality faced by different water users and polluters in terms of the market-based instruments implemented by different *agences de l'eau*, which can differ considerably.⁷⁹¹ In this context the law enumerates various categories of charges⁷⁹² which must be levied by the *agences de l'eau*, in terms of LBMP regulation the most relevant are charges for water pollution, charges for diffuse pollution, charges for water intake, and charges for the protection of the aquatic environment.⁷⁹³ The law also enumerates "complementary taxes", which the *agences*

787 For example, *le fond national de solidarité pour l'eau* (the solidarity fund for water) or *le fond de garantie des risques liés à l'épandage agricole des boues d'épuration* (the guarantee fund for risks related to waste water sludge uses in agriculture), Dronenko *Droit de l'eau* 255.

788 Dronenko *Droit de l'eau* 256-258.

789 Dronenko *Droit de l'eau* 256-528.

790 Dronenko *Droit de l'eau* 256-528.

791 Dronenko *Droit de l'eau* 266.

792 *Redevances*.

793 As per Art L 213-10 to L 213-11-17 and the associated regulatory provisions of the *Code de l'environnement*. Also see Dronenko *Droit de l'eau* 256-528.

de l'eau might implement if they want, including, as the most relevant ones in terms of LBMP, a tax on the production of sludges and a tax on stormwater management. In this context, the total sum of the water charges to be levied and collected by each *agence de l'eau* is set out in a "pluri-annual intervention programme geared toward developing water resources and reducing pollution".⁷⁹⁴ The programme determines all expenditures to be met by each *agence de l'eau* within a fixed time frame, for the duration of the intervention programme. The amount is fixed according to the expenditure required by each *agence de l'eau* to achieve its priority objectives and targets, mainly in terms of the SDAGE.⁷⁹⁵ There is also a national general tax, the *taxe générale sur les activités polluantes* (the general tax on pollution activities). Its application and scope, however, remain marginal.⁷⁹⁶ Pollution charges are levied each year on the basis of the average daily quantity of pollution generated during the month of maximum discharge. Several pollutants are taken into account in assessing domestic and industrial water pollution levels, including suspended solids, oxidisable substances and nitrogen. For industrial establishments, the pollution generated is either measured or estimated at a flat rate.⁷⁹⁷ Local municipalities are responsible for managing drinking water and water treatment services. Users' water bills cover most of the expenditure relating to investment in and operation of the necessary equipment. French water law also prescribes specific grants, subsidies and financial assistance for pollution management actions and installations to be developed by the private sector and municipalities. Subsidies for measures aimed at improving or safeguarding water quality may also be granted. There is also a compensation system, the subsidy for waste water treatment to offset the water pollution charge for those persons or bodies who treat waste water before discharging it into rivers and lakes. The water agencies provide an average of two million Euros of financial aid

794 IISD 1995 <http://www.iisd.org/greenbud/france.htm>.

795 The *agences de l'eau* establish the water charges to be collected based on a compulsory declaration made to them by all persons or bodies liable for the charge. The water charges can be divided into two groups - pollution and use charges.

796 Dronenko *Droit de l'eau* 267.

797 The *agences de l'eau* establish the water charges to be collected based on a compulsory declaration made to them by all persons or bodies liable for the charge. The water charges can be divided into two groups - pollution and use charges.

each year as part of their action programmes.⁷⁹⁸ Overall, the financial management instruments are considered to be comprehensive and aligned with international best practice.⁷⁹⁹

3.5.3 Effectiveness assessment

The main provisions in this context are articles R212-22 to R212-24, which prescribe that three years after the publication of the programmes of measures, a *synthèse de la mise en oeuvre* (a synthesis regarding the implementation of the programme), should be conducted by identifying the difficulties encountered during the implementation of the programme of measures. It can also propose, if necessary, additional measures to improve the situation. Such an approach is aligned with the requirements of the WFD.⁸⁰⁰ However, the provisions of the *Code de l'environnement* in this context can be considered as limited and not sufficiently detailed to be aligned with international best practice.⁸⁰¹

3.5.4 Enforcement and compliance

In terms of enforcement mechanisms, French water law has a comprehensive and rather complicated enforcement system. Various actors have enforcement powers

798 They aim to reconcile water management with economic development and respect for the environment. This public establishment of central government contributes by its actions to water pollution control and the conservation and restoration of aquatic environments. Ministry of Ecology and Sustainable Development: 2006 http://www.gpa.unep.org/documents/national_report_france_1_english.pdf.

799 Refer to 2.3.4.2(c).

800 Refer to 4.3.2.4 for further information.

801 International best practice provides guidance on the criteria to evaluate the effectiveness of instruments and measures implemented to regulate LBMP. The effectiveness assessment should inform on environmental effectiveness; economic costs and benefits; equity (are the costs and benefits of the strategy or programme being shared fairly?); flexibility in administration (can the strategy or programme adapt to changes in circumstances?); effectiveness in administration (is the management of the strategy or programme cost-effective and accountable?); timing (is a timetable in place to ensure that the strategy or programme begins to produce results?); and inter-media effects (will the achievement of the objectives of the strategy or programme create a net environmental benefit?). The French regulatory provisions in this context are regarded as too limited to enable effective assessment. Refer to 2.3.4.2(b) for further information on guidance from international best practice on this point.

(both general⁸⁰² and specific⁸⁰³) at the different territorial levels.⁸⁰⁴ The existence of such a diversity of enforcement authorities might seem to be a limiting factor, but it could also facilitate enforcement. French law also prescribes criminal and administrative sanctions for infringement of the regulations.⁸⁰⁵ One of the most relevant in terms of LBMP is the following:

Throwing, discharging or letting run out, in surface, underground or sea waters within the limit of territorial waters, directly or indirectly, unspecified substances whose action or reactions involves, even temporarily, harmful effects on health, or damage to the flora or fauna, or the significant modifications of the normal mode of supply water, or the limitations of use of the bathing zone, is punished by two years of imprisonment and a 75.000 Euros fine. When the operation of rejection is authorised by decree, the provisions of this subparagraph apply only if the regulations of this decree are not respected.

Administrative, penal and civil actions may be instituted for non-compliance with water legislation.⁸⁰⁶

3.5.5 Other indirect regulatory instruments

No legal provisions related to capacity building could be found. French environmental law however has very comprehensive provisions for stakeholder engagement and public participation, especially in terms of the SDAGE, SAGE, *quasi contractual instruments*⁸⁰⁷ and *Schéma de mise en valeur de la mer*.⁸⁰⁸ There are also limited general legal provisions regulating incidents/emergency management which are relevant in the context of LBMP regulation. However, specific emergency instruments can be found in the authorisations delivered in terms of water nomenclature and *installations classées*.

802 For example, both the mayor and municipal police have specific enforcements powers in terms of water-related matters, Drobenko *Droit de l'eau* 145-147.

803 For example, DRIREs have specific enforcement powers in terms of water pollution from *installations classées*, and DRASS has specific enforcement powers in terms of the management of the quality of bathing water. Drobenko *Droit de l'eau* 145-147.

804 Regional, departmental and municipal. Drobenko *Droit de l'eau* 115-117.

805 Art L216-1 to L 216-14 of the *Code de l'environnement*. Some sanctions include imprisonment and a fine of up to 150 000 Euros (for non-compliance with the requirements of the water nomenclature - operating without the requested authorisation).

806 Drobenko *Droit de l'eau* 145-147.

807 Refer to 3.6.5.

808 Refer to 3.6.4.

3.6 Integrated regulatory instruments

There are regulatory instruments which combine and integrate (into one single instrument) direct (resource-, source- and management-based direct instruments) and indirect instruments (mainly ecological assessment, public participation, and monitoring). In the context of this study, they are categorised as "integrated regulatory instruments". The French framework pertaining to LBMP regulation encompasses a number of integrated regulatory instruments which are analysed in this section.

3.6.1 Water nomenclature

The *Code de l'environnement* prescribes the functioning of the water nomenclature, which is a concept similar to EIAs but more evolved.⁸⁰⁹ The nomenclature identifies specific activities or type of activities which have specified impacts on water. Such activities are then listed and therefore submitted to a specific regulatory regime.⁸¹⁰ The "water nomenclature" establishes a system to identify installations, facilities, construction, and activities which, due to their impact on water resources, require proactive control.⁸¹¹ The nomenclature is focused on the impacts of specific activities on water, and that it is different from the more general system of the *Installations Classées*, which is discussed in the section below.⁸¹² The nomenclature excludes domestic water use.⁸¹³ It takes into consideration specific elements in the listing of activities, including the most relevant ones in the context of LBMP: risks and the impact of pollution on water resources, direct or indirect discharge / disposal / effluents in water resources, and the impact of pollution on fisheries.⁸¹⁴ The

809 Art L 214.1 and the following articles of the *Code de l'environnement*. Such a system can be compared with the EIA system and listed activities in South Africa. Refer to 5.3.3.1 of this study for further information on the EIA system in South Africa.

810 Such categories are included in the *Code de l'environnement* in a table annexed to Art R.214.1. The main categories in terms of LBMP include the intake of water, discharge, marine impacts, and the impact on the aquatic environment and fisheries.

811 Art L 214.1 of the *Code de l'environnement* and Drobenko *Droit de l'eau* 138.

812 Drobenko *Droit de l'eau* 137.

813 Art L 214.1. Most domestic uses of water are excluded from the Nomenclature. However, the Nomenclature prescribes general conditions for domestic use, which does not require authorisation and/or declaration due to its limited impact on water resources.

814 Drobenko *Droit de l'eau* 136.

nomenclature prescribes two types of proactive control, namely a declaration or an authorisation procedure, depending on the activities.⁸¹⁵ A very detailed governmental and public consultative process to ensure co-operative governance in the management and implementation of the nomenclature is prescribed.⁸¹⁶ Specific conditions might be imposed for activities which need authorisation. The conditions might encompass source-based instruments (e.g. BAT and BEP),⁸¹⁷ monitoring, risks management, incident management, or reporting. Specific obligations may also be imposed for the decommissioning of existing facilities and activities.⁸¹⁸ Authorisations may be withdrawn or amended.⁸¹⁹

3.6.2 *Classified installations*

The law on the *installations classées* (classified installations), *loi du 19 juillet 1976 relatif aux installations classées pour la protection de l'environnement (ICPE)* (the law of classified installations for the protection of the environment)⁸²⁰ is also relevant in terms of water pollution and LBMP regulation. A similar approach to that of the EIAs system is followed. Installations (and not activities) are classified and listed. Once listed, installations have to undergo a "declaration" or "authorisation" process. The regional representative of the state, the *Préfet de Région* (prefect of the region) is responsible for the process.⁸²¹ Moreover, for each installation, *arrêtés* or *circulaires* determine per type of installation their specific conditions of operation, standards, applicable BAT and BEP and other requirements, including specific requirements and conditions in terms of waste water and stormwater management, which might assist LBMP regulation, especially from waste water, from such installations.⁸²² The

815 Art L 214.3 of the *Code de l'environnement*.

816 Art L 214.4 of the *Code de l'environnement*.

817 As prescribed by international best practice and analysed in Chapter 2.

818 In particular, rehabilitation and the obligation to avoid any impact on water resources. L 214-3-1 of the *Code de l'environnement*, Art L 214.3 of the *Code de l'environnement* and Drobenko *Droit de l'eau* 142.

819 Art L 214.4 of the *Code de l'environnement*.

820 Which has been codified in Book V, title 1 of the *Code de l'environnement*.

821 Drobenko *Droit de l'eau* 157-159.

822 *Arrêtés ministériels sectoriels ou dans l'arrêté ministériel du 2 février 1998*. Such requirements might also include specific obligations in terms of the distance to keep between installation and water courses, public participation processes, operational and construction

arrêtés and *circulaires* (two types of regulatory norms) and generally all *installations classées* need to comply with the objectives and principles of French water law⁸²³ and be compatible with the dispositions of the SDAGE and SAGE.⁸²⁴ If an authorisation is required, the applicant will have to conduct a "risk/danger assessment" and "impact assessment" which will have to provide information regarding the following relevant matters in terms of LBMP: the management of used water/effluents, and waste management.⁸²⁵ The emissions, including emissions to inland waters and coastal waters, from such installations must be disclosed and their related impacts assessed.⁸²⁶ The financial and technical capacity of the applicant to take the necessary measures to manage pollution is also considered in the authorisation process.⁸²⁷ The responsible person⁸²⁸ has to provide an annual declaration on all emissions released in water and the air.⁸²⁹ In terms of the relationship between this general regime and the water nomenclature discussed above, the installations which are listed as classified installations under the *installations classées* do not have to undergo the process required in terms of the water nomenclature. However, the *installations classées* have to comply with the general requirements prescribed by the provisions of the *Code de l'environnement* related to water pollution management.⁸³⁰ The aim of this regulatory regime is to implement integrated pollution prevention and control through a proactive authorisation or declaration process. The most recent development regarding this regime involves the creation of a third intermediary level of proactive control, a

requirements, monitoring obligations, and other specific or general requirements including closure and rehabilitation.

823 Art 211.1 of the Code de l'environnement.

824 Drobenko *Droit de l'eau* 153-156 and CPEPESC 2007 <http://www.cpepesc.org/Loi-sur-l-eau-application-aux.html>.

825 Drobenko *Droit de l'eau* 153-156 and CPEPESC 2007 <http://www.cpepesc.org/Loi-sur-l-eau-application-aux.html>.

826 Drobenko *Droit de l'eau* 153-156.

827 Drobenko *Droit de l'eau* 153-156 and CPEPESC 2007 <http://www.cpepesc.org/Loi-sur-l-eau-application-aux.html>.

828 The person in control of the installations as specified in the application form.

829 Drobenko *Droit de l'eau* 153-156 and CPEPESC 2007 <http://www.cpepesc.org/Loi-sur-l-eau-application-aux.html>.

830 Art L211-1 to L211-13 and associated regulatory articles.

simplified authorisation process, *l'enregistrement*.⁸³¹ The objective of this is to rationalise and customise the depth of proactive controls in consideration of the potential level of impacts of the proposed installations.⁸³² Prescribed general requirements (which might include direct or indirect measures and instruments) are being developed for the listed installations which have to undergo *enregistrement*.

3.6.3 *Schéma Directeur d'aménagement et gestion de l'eau*

Each basin district must have a *Schéma Directeur d'aménagement et gestion de l'eau* (SDAGE).⁸³³ A SDAGE sets the "fundamental orientations" regarding water management and development for a river basin district.⁸³⁴ The SDAGE is a framework planning document which aims to determine the fundamental principles, approaches and objectives (quality, quantity and others) regarding protection and sustainable development of the water resource in the relevant basin district.⁸³⁵ Each SDAGE must contain:⁸³⁶

- A comprehensive assessment of the activities and their impacts on the water environment.
- An economic analysis of water uses in the respective basin.
- Registers of the zones submitted to a special environmental protection regime in terms of EU legislation.
- Quantitative and qualitative objectives for each category of water resource (surface, artificial and groundwater) in order to reach a good chemical and/or ecological state and to prevent water deterioration, which objectives must

831 Ordonnance taken by the government in terms of Art 27 of the *loi n° 2009-179 du 17 février 2009 pour l'accélération des programmes de construction et d'investissement publics et privés*.

832 It is anticipated that the duration for an *enregistrement* procedure will be around four to five months, compared with more than twelve months for installations listed for authorisation.

833 Art L 212.1 and the following articles in the *Code de l'environnement*.

834 Drobenko *Droit de l'eau* 84 and Art L 212.1 and the following articles of the *Code de l'environnement*.

835 Drobenko *Droit de l'eau* 84.

836 Drobenko *Droit de l'eau* 84.

have been reached before 2015, except in special circumstances set out by the legislation.⁸³⁷

- Means and measures to reach the abovementioned objectives.
- Information on water user charges, distinguishing at least between industrial, agricultural and domestic uses.
- Measures to prevent water deterioration.
- Measures to improve and protect the quality and quantity of water resources to comply with the set objectives.
- Identification of the sub-basin districts and territorial marine waters for which a SAGE is required.
- Administrative programmes and measures which must be compatible with the SDAGE.

The elaboration process of the SDAGE is regulated and the legal requirements provide for a comprehensive public participation process and co-operative governance.⁸³⁸ The elaboration process needs to start about three years before the effective date of the SDAGE. A specific preliminary document needs to be developed as the initial step of the elaboration process, "*le document des enjeux*" (the situation analysis document), which sets out the priority challenges and issues to be addressed for the river basin.⁸³⁹ The SDAGE also provides for financial planning related to water management, including the organisation of the practical implementation of the polluter-pays principle.⁸⁴⁰ The SDAGE organises the financial implications for water users (who are mainly categorised under agricultural, industrial and domestic users). However, Drobenko⁸⁴¹ notes that such incorporation in the SDAGE might impair the territorial coherence regarding the implementation of the

837 Art L 212-1 states that if the objectives cannot be reached for technical, financial or ecological reasons by 2015, an extension might be granted and derogatory objectives might be set by the SDAGE.

838 Drobenko *Droit de l'eau 81 and Projet de SDAGE – Consultation du Public 15 Avril – 15 Octobre*.

839 Drobenko *Droit de l'eau 83-85 and Projet de SDAGE – Consultation du Public 15 Avril – 15 Octobre*.

840 Drobenko *Droit de l'eau and Projet de SDAGE – Consultation du Public 15 Avril – 15 Octobre*.

841 Drobenko *Droit de l'eau 83-85*.

polluter-pays principle, as the interpretation and application of the principle might differ from basin district to basin district.

The SDAGE binds only the state and not private entities, a fact which can be regarded as a weakness of the scheme. The SDAGE has two types of legal status. The first one is regarding water related matters. All administrative (governmental) programmes and decisions related to water⁸⁴² must be "compatible"⁸⁴³ (aligned) with the provisions of the relevant SDAGE. With respect to administrative programmes and decisions which do not relate to water, it seems that they do not have to take into consideration the provisions of the SDAGE.⁸⁴⁴ However, other statutes⁸⁴⁵ prescribe that most of the fundamental urban planning documents⁸⁴⁶ (at departmental and municipal level) must be "compatible"⁸⁴⁷ with the provisions of the SDAGE. The SDAGE does not directly bind private persons. Private persons/entities do not have to comply with the provisions of a SDAGE, however, in some circumstances they can challenge administrative decisions and/or documents that are not compatible with the provisions of the SDAGE.⁸⁴⁸ The SDAGE does not create rights. It sets priority areas for action in the water sector, and sets objectives and measures necessary to achieve such objectives. As previously stated, a SDAGE has to contain the following documents: a programme of measures, an *Etat des lieux* (an analysis of the *status quo* – an ecosystems assessment), a management plan and a monitoring plan. The SDAGE⁸⁴⁹ has been reviewed to ensure compliance with EU

842 They might include decisions/programmes in terms of the water nomenclature, *installations classées*, or some planning and strategic documents related to water pollution.

843 The "compatibility" criterion is commonly used in planning law in France. The norms considered here have to be compatible with the norms/principles established by the SDAGE. Drobenko *Droit de l'eau* and SDAGE RMC, Volume 1, *La strategie generale du SDAGE* 1996 12.

844 Drobenko *Droit de l'eau* 83-85.

845 Code de l'Urbanisme.

846 I.e. schema de coherence territoriale, plan locale d'urbanisme.

847 The criterion of "compatibility" is regarded as less stringent than a requirement of "conformity". Drobenko *Droit de l'eau* 87.

848 Projet de SDAGE – Consultation du Public 15 Avril – 15 Octobre (SDAGE project : public consultation).

849 As adopted in 1996.

legislation, and the "new SDAGE" was adopted in 2009 for use in each river basin. These new SDAGEs will apply from 2010 to 2015.⁸⁵⁰

The *Code de l'environnement*⁸⁵¹ required the development and implementation of a programme of measures (*programme de mesures*) for each district river basin as a component of a SDAGE. This programme is similar to the programme of measures prescribed by the WFD.⁸⁵² It combines different categories of direct and indirect instruments. The programme will prescribe specific instruments including regulatory provisions, financial incentives and/or negotiated measures, and voluntary measures to reach the SDAGE objectives,⁸⁵³ which are determined by each responsible authority for the SDAGE.⁸⁵⁴

3.6.4 Schéma d'aménagement et gestion de l'eau

The *Schéma d'aménagement et gestion de l'eau* (SAGE) is a planning and management document for a sub-basin district, hydrographical unit, aquifer system, a catchment, or another relevant and coherent geographical water resource unit.⁸⁵⁵ A SAGE sets general objectives for use, valorisation, and protection (from a qualitative and quantitative perspective) of water resources.⁸⁵⁶ The SAGE must contain:⁸⁵⁷

- *Le plan d'aménagement et de gestion durable*⁸⁵⁸ (a plan for sustainable development and management). This document must assess and present the current ecological status of the area, the challenges to be addressed, the financial requirements and financial resources available, and the conditions necessary to reach the management objectives.⁸⁵⁹ It must also contain the following elements which are relevant in the context of LBMP regulation: the

850 For further information consult <http://www.gesteau.eaufrance.fr/sdage.html>.

851 Art L 212-1 of the *Code de l'environnement*.

852 Refer to 4.3.1.2 of this study for further information on the programme of measures prescribed by WFD.

853 Drobenko *Droit de l'eau* 121.

854 The Préfet coordinateur de Bassin, Drobenko *Droit de l'eau* 121.

855 Drobenko *Droit de l'eau* 81.

856 Drobenko *Droit de l'eau* 81.

857 Art L 212.5 of the *Code de l'environnement*.

858 Sustainable development and management plan.

859 Art L 212.5 of the *Code de l'environnement*.

identification of wetlands (including strategic zones), erosion zones, and zones affected by diffuse pollution from agriculture related sources.

- *Le règlement* (the directive).⁸⁶⁰ This document prescribes the priority of water uses and the measures necessary to protect and conserve water resources.
- *Les documents cartographiques* (mapping documents). These documents are established taking into consideration the various objectives and should assist in the monitoring of progress. They represent the different water categories and their quality and quantitative objectives, the uses of water and their respective impacts, the different zones, the localisation of effluents, protected sites, and risks zones.

A SAGE must be compatible with the relevant SDAGE of the river basin concerned, and must take various local programmes and strategic documents into account.⁸⁶¹ The *règlement* and *documents cartographiques* are binding for public or private entities. All administrative decisions related to water and within the scope of the SAGE must be compatible with the SAGE as well as with most of the local urban documents and programmes.

3.6.5 Quasi-contractual instruments

The French regulatory framework incorporates innovative integrated regulatory instruments referred to as quasi-contractual instruments, which are very relevant for the regulation of LBMP.

3.6.5.1 Contrats de baie (Bay Contract)

The first legal introduction of contractual (or quasi-contractual) instruments to manage water was introduced by a *circulaire* (a circular, an administrative document) in 1981.⁸⁶² The *Circulaire du 30 Janvier 2004 relative aux contrats de rivière et de baie*⁸⁶³ reformed the legal regime of such instruments. These instruments enable

860 A Directive or set of rules.

861 Art L 212.5 of the *Code de l'environnement*.

862 Circular.

863 Circular related to rivers and bays contracts.

participatory and co-operative water governance.⁸⁶⁴ Public and private stakeholders participate in the development of these contracts on a voluntary basis. The development process is regulated by the abovementioned *Circulaire*, which strives to ensure efficient local consultation, effective co-operation and consensus in the development of the document. The scope of *un contrat de baie*⁸⁶⁵ is a specific delimited coastal and marine area, and might include the related catchment (mainly from an impact perspective). The project owner will traditionally be a municipality or group of municipalities.⁸⁶⁶ A *comité de baie* (a bay committee) is constituted to implement and operationalise the *contrat de baie*. The *Circulaire* sets out a comprehensive participatory process and prescribes which stakeholders have to be consulted and the level of consultation required.⁸⁶⁷ The *Circulaire* also sets out the approval process, which is divided into two phases: the "candidature process and contract proposal" and the "approval process" (ultimately a *contrat de baie* is approved by the *comite de bassin*). However, despite the name, these contracts are not private law contracts and do not have the same binding effect on the parties.⁸⁶⁸ First of all, only the financial partners are bound by the contract. The obligations relate only to the financial arrangements outlined in the contract.⁸⁶⁹ There is supposedly no binding obligation in terms of compliance with the objectives and actions set out in the *contrat de baie*. The only legally required monitoring and control deals with the financial aspects of the contract. This is considered a weakness and Drobenko⁸⁷⁰ supports the position that a proper contract should be concluded with binding obligations, and that such an instrument is therefore more a collective financial programme for an agreed programme of objectives and actions.⁸⁷¹ The objectives can be qualitative or quantitative. They may encompass objectives related to:⁸⁷²

864 Drobenko *Droit de l'eau* 109.

865 Bay contract.

866 Bay contract.

867 The circulaire du 30 Janvier 2004 relative aux contrats de riviere et de baie and, Drobenko *Droit de l'eau* 110.

868 Drobenko *Droit de l'eau* 112.

869 Drobenko *Droit de l'eau* 112.

870 Drobenko *Droit de l'eau* 111.

871 Drobenko *Droit de l'eau* 111.

872 Drobenko *Droit de l'eau* 111.

- Pollution management: measures to restore water quality, including pollution prevention and minimisation programmes for industries and the management of diffuse pollution from agriculture-related sources.
- Maintenance work related to the coastal zone, necessary to reach or maintain water quality.
- Quantity management-related measures.

In terms of LBMP, the *contrat de baie* is the most relevant contractual instrument. Such contracts have been widely used in France to facilitate concerted and integrated water management of specific coastal area like bays, estuaries, or other sensitive coastal areas.⁸⁷³

*Le contrat de baie de Toulon*⁸⁷⁴ illustrates the importance of such an instrument in terms of LBMP regulation. The *contrat de baie* de Toulon covers the territory of fourteen municipalities (as illustrated in the map below) and includes the bay of the municipality of Toulon and the relevant catchment (delimited in blue in the following map).

The contract encompasses the following objectives, which are the most relevant to LBMP regulation.⁸⁷⁵

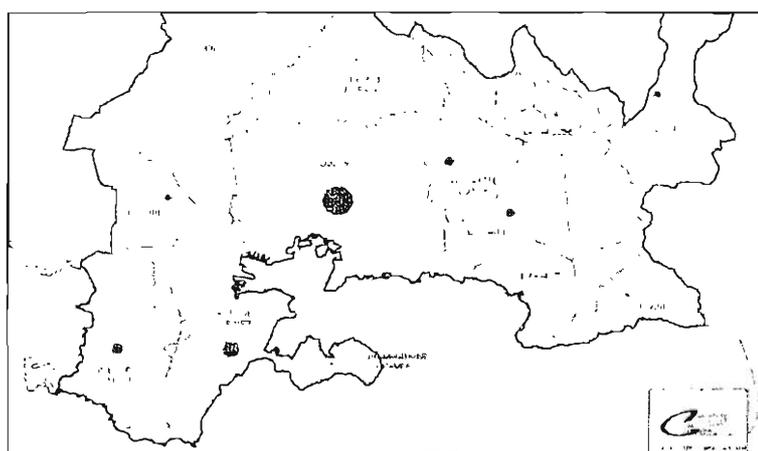
- The restoration of an aquatic environment (i.e. bathing water quality, marine aquaculture water quality, flora and fauna, a coastal zone/littoral, the reduction of toxic pollution).
- The valorisation of the patrimony and economy of the bay (i.e. the maintenance of port industrial activities, the maintenance and development of the required environmental conditions for tourism, the management of water uses, the development of a code of good practice, the promotion of public awareness).

873 Drobenko *Droit de l'eau* 112.

874 For further information consult Communauté d'agglomération 2009 <http://www.contratdebaie-lpm.org/intro.html>.

875 Communauté d'agglomération 2009 <http://www.contratdebaie-lpm.org/contratbaie/contratbaie.html>.

- The reduction of pollution discharge (from urban waste water, storm water, industrial activities in the bay, port-related activities, marine aquaculture and agricultural activities).
- The protection and maintenance of the natural environment (the littoral/coastal zone).
- The management of the use of water in the bay.



Map 2 Geographical scope of the *contrat de baie de Toulon*⁸⁷⁶

Contrats de baie have proven to be an efficient "voluntary" instrument to facilitate the focused management of LBMP in localised coastal areas.⁸⁷⁷

3.6.5.2 Other quasi contracts

The *Contrat d'agriculture durable* (the contract for sustainable agriculture) is also a voluntary instrument. It aims mainly at reducing pollution from agriculture-related sources. It was created by the *Loi d'orientation agricole*,⁸⁷⁸ July 1999. It incorporates considerations and obligation regarding water management from a qualitative and

876 For further information consult Communauté d'agglomération 2009 <http://www.contraidebaie-tpm.org/intro.html>.

877 Dröbenko *Droit de l'eau* 111.

878 Law for the orientation of agriculture.

quantitative perspective⁸⁷⁹ and provides financial assistance to enable the farming community to reach the objectives set in the contract. It adopts a pluri-annual approach, as its duration is normally five years. It is legally qualified as an administrative contract.⁸⁸⁰

The *Contrat Natura 2000* is also relevant to the context of the coastal environment but has limited relevancy in terms of LBMP. This concerns owners of rights on the land included in the defined perimeters (geographical boundaries) for the contract (a site Natura 2000)⁸⁸¹ who can conclude a contract with the administrative authority. The contract prescribes a set of objectives regarding the maintenance and/or restoration of the determined zone/environment. It also has a duration of five years.⁸⁸²

3.7 National institutional structure

The institutional structure regulating LBMP is directly influenced by the general French administrative and governmental structure,⁸⁸³ which has a long political, administrative, and institutional history.⁸⁸⁴ As previously described,⁸⁸⁵ the organisation

879 It will regulate the intake of water for agricultural uses, from a quantity and quality perspective. It will also address the issue of waste water, effluents and run-off from agricultural activities, mainly from a quality perspective, ensuring the management of potential pollution.

880 3.8 below provides further analysis of the existing direct instruments in terms of LBMP from agriculture-related activities.

881 Related to the EU Natura 2000 Network, which represents more than 26,000 protected areas covering all of the EU Member states and a total area of around 850,000 square kilometres, representing more than 20 percent of total EU territory. This vast array of sites, known as Natura 2000 sites, found its legal basis in the Birds Directive and the Habitats Directive. The aim of the network is to ensure the long-term survival of Europe's most valuable and threatened species and habitats. It is comprised of Special Areas of Conservation (SAC) designated by Member states under the Habitats Directive, and also incorporates Special Protection Areas (SPAs) which they designate under the Birds Directive. Natura 2000 is not a system of strict nature reserves where all human activities are excluded. Whereas the network will certainly include nature reserves, most of the land is likely to continue to be privately owned and the emphasis will be on ensuring that future management is sustainable, both ecologically and economically. Natura 2000 applies to Birds Sites and to Habitats Sites, which are divided into bio-geographical Régions. It also applies to the marine environment. Europa 2008 http://ec.europa.eu/environment/nature/index_en.htm and Scottish Natural Heritage 2009 <http://www.snh.org.uk/about/Directives/ab-dir03.asp>.

882 Drobenko *Droit de l'eau* 113.

883 As described in 3.7.

884 For further information consult Assemblée nationale Rapport d'information and La documentation Française Le rapport de la Mission.

885 As described in 3.1.

of the French territorial administration system encompasses four main territorial divisions and their associated administrative divisions: the national state, the *Régions*, the *Départments*, and the *Communes*. Table 5 provides an overview of such institutional organisation. In addition to these four levels there are the inter-communal co-operation structures.⁸⁸⁶

Each territorial and administrative authority has specific powers and administrative autonomy and none is superior to the other. None of them may exercise direct or indirect control over either of the others.⁸⁸⁷ Table 5 provides an overview of the general administrative and territorial organisation in France, which strongly influences the environmental institutional framework in terms of LBMP regulation. Also consult Annexure 2 for further information. In terms of the water-related institutional framework, the *Loi* of 1964⁸⁸⁸ establishes the basis of a "decentralised approach" to water management in France, providing more power to *collectivités territoriales*, especially municipalities, in terms of water management, including LBMP.⁸⁸⁹ This institutional framework is directly relevant in terms of LBMP regulation.

886 As described in 3.7.

887 The national state only exercises a control of legality of the administrative acts taken by the *collectivité territoriales*, Ministère du logement et de la ville 2008 <http://www.eukn.org/binaries/france/home/territorial-organisation-of-the-French-administration.pdf>.

888 Loi n° 64-1245 du 16 décembre 1964 relative au régime et à la répartition des eaux et à la lutte contre leur pollution. Refer to 3.2.

889 For further information see *La documentation Française* 2004 <http://www.vie-publique.fr/politiques-publiques/politique-eau/index/>, Launay, *Rapport d'information Gestion de l'eau* and Dronenko *Droit de l'eau*, 60.

| Territorial Divisions | Administrative Division | Representatives <i>unappointed by the State</i> <i>(b) Elected by the citizens</i> <i>(c) Appointed by the Mayors</i> |
|---|--|---|
| French national territory | — THE STATE | — The President of the French Republic (1) |
| The grouping of several departments | — THE REGIONS (26) | — The Prefect of the Region (1) Regional Councils (represented by a President) (b) |
| The grouping of several districts | — THE DEPARTMENTS (100) | — The Prefect of the Department and the sub-prefects (assigned with specific missions for the prefect) (b) and in each department the prefects delegated to promote equal opportunities of Departmental Councils (represented by a President) (b) |
| The grouping of several cantons | — THE DISTRICTS (32*) | — The Deputy-Prefect of the District (a) |
| Department's Consistories The grouping of several consistories | — THE CANTONS (3700) | — |
| The grouping of several communes | — INTER-COMMUNAL STRUCTURES (33, 636 communes grouped together in 4914 of the communes.) | — The President (c) |
| The smallest part of the French territory | — THE COMMUNES (36,690) | — The Mayor (b) |

Table 5. Administrative and territorial organisation in France⁸⁹⁰

Table 6 provides an overview of the key institutional actors in terms of water management (including LBMP) and their respective roles.

890 *Ministère du logement et de la ville* 2008 <http://www.eukn.org/binaries/francc/home/territorial-organisation-of-the-French-administration.pdf>.

| | STATE (CENTRAL AND DECONCENTRATED) | COLLECTIVITÉS TERRITORIALES | SPECIALISED INSTITUTIONS | OTHER STAKEHOLDERS |
|----------------|--|-----------------------------|---|---|
| NATIONAL LEVEL | <p>MAIN MINISTRY</p> <ul style="list-style-type: none"> • <i>Ministère de l'écologie, du développement durable, des transports et du logement</i> MEDDTL (Ministry of ecology, sustainable development, transport and housing). <p>This ministry's main functions (which are relevant in terms of LBMP regulation) relate to water management, enforcement, <i>installations classées</i>, technological risk management, protection and management of the sea, and environmental coordination with other ministries.</p> <p>OTHER RELEVANT MINISTRIES</p> <ul style="list-style-type: none"> • <i>Ministère de la travail, emploi et de la santé</i> (Ministry for work, employment and health) • <i>Ministère de l'Agriculture, de l'Alimentation, de la Pêche, de la Ruralité et de l'Aménagement du territoire</i> (Ministry for agriculture, food, fisheries, rural development and development of the territory) • <i>Ministère de l'économie, des finances et de l'industrie</i> (Finance, economy and industry ministry) | | <ul style="list-style-type: none"> • <i>Comité national de l'eau</i> (National committee for water) • <i>Office national de l'eau et des milieux aquatiques</i> (National office for water and the aquatic environment) • <i>L'agence des aires marines protégées</i> (Agency for marine protected areas) • <i>Le conservatoire de l'espace littoral et des rivages lacustres</i>⁸⁹² (Organisation for the conservation of the littoral and sea shore) • <i>L'Institut français de recherche pour l'exploitation de la mer (IFREMER)</i>⁸⁹³ (French institute for research and exploration of the sea) | <ul style="list-style-type: none"> • NGOs • Water users • Technical experts • Academics • Private sector • International and regional stakeholders <p>Participation mainly through national coordinating structures, e.g. <i>Comité national de l'eau</i> and <i>Office national de l'eau et des milieux aquatiques</i></p> |

892 Refer to 3.4.3.5.

893 Refer to 3.5.1.

| | | | | |
|----------------|--|---|---|---|
| | <p>COORDINATING STRUCTURES</p> <ul style="list-style-type: none"> • Le comité interministériel pour le développement durable (Inter-ministries committee for sustainable development) <p><i>President</i> : Prime Minister</p> <p><i>Mission</i> : overall cooperative governance in terms of sustainable development</p> <ul style="list-style-type: none"> • La Mission Interministérielle pour l'eau (Inter-ministries mission for water)⁸⁹¹ <p><i>President</i> : Environmental Minister</p> <p><i>Mission</i> : coordination between the different ministries and relevant departments which intervene and/or have an interest in the water sector. It has a mainly advisory function regarding decisions (technical and financial) programmes, projects, law and policies which relate to water.</p> | | <ul style="list-style-type: none"> • L'agence de l'environnement et de la maîtrise de l'énergie (ADEME) (Agency for the management of the environment and energy) • L'agence française de sécurité sanitaire de l'environnement et du travail (AFSSET) (French agency for health, security of the environment, and the work environment) • L'agence nationale pour la gestion des déchets radioactifs (ANDRA) (National Agency for the management of radioactive waste) | |
| REGIONAL LEVEL | <p>MAIN STATE REPRESENTATIVE</p> <ul style="list-style-type: none"> • The Préfet de Région (Prefect of the region): represents the interests of the state at the regional and local level, ensures implementation of the laws, the respect of public order, and administrative control of <i>collectivités territoriales</i>. It directs state actions and coordinates state interventions in | <ul style="list-style-type: none"> • Les Régions (The regions) • Conseils généraux (General councils) | <p>BASIN LEVEL</p> <ul style="list-style-type: none"> • Comité de bassin (Basin committee): responsible for the development, implementation and review of the SDAGE. | <ul style="list-style-type: none"> • NGOs • Water users • Technical experts • Academics |

891 La documentation Française 2008 <http://www.vie-publique.fr/documents-vp/mie.shtml>.

| | | | | |
|--|--|--|--|---|
| | <p>the water sector at the regional level. It is assisted by a technical committee including representatives from <i>collectivités territoriales</i>, users, NGOs and technical experts.</p> <p>SECTORAL STATE REPRESENTATION</p> <ul style="list-style-type: none"> • Regional Direction - <i>Les directions régionales de l'environnement, de l'aménagement et du logement (DREAL)</i>,⁸⁹⁴ (Regional direction of the environment, planning and habitation) - <i>Les directions régionales de l'environnement (DIREN)</i>, (Regional environmental direction): the main role is in terms of water management.⁸⁹⁵ - <i>Directions régionales de l'industrie, de la recherche et de l'environnement (DRIRE)</i>, (Regional direction for industry, research and environment): their role is important in terms of pollution management from <i>installations classées</i>.⁸⁹⁶ | | <ul style="list-style-type: none"> • <i>Agences de l'eau</i> (Water agencies): financial management entities in the water sector.⁸⁹⁸ | <ul style="list-style-type: none"> • Private sector • International and regional stakeholders <p>Participation mainly through the <i>Comité de Bassin</i></p> |
|--|--|--|--|---|

894 This new Régional direction was legally created in February 2009 by the décret relatif à l'organisation et aux missions des directions régionales de l'environnement, de l'aménagement et du logement (DREAL). DREAL will replace the directions régionales de l'environnement (DIREN), directions régionales de l'équipement (DRE) et des directions régionales de l'industrie, de la recherche et de l'environnement (DRIRE), combining the three respective competences and jurisdictions in one umbrella body. So far 9 DREAL has created the following in 2009 Champagne-Ardenne, Haute-Normandie, Midi-Pyrénées, Nord-Pas-de-Calais, Pays de la Loire, Picardie, and Provence - Alpes - Côte d'Azur. The others will be created in 2010 and 2011. The aim is to facilitate integrated and "transversal" environmental management and sustainable development. MEEDDM 2009 http://www.developpement-durable.gouv.fr/Art.php3?id_Art=4424. The next stage of integration under DREAL is scheduled for 2010 for the remaining Région.

895 La documentation Française 2008 <http://www.vie-publique.fr/documents-vp/diren.shtml>.

896 La documentation Française 2008 <http://www.vie-publique.fr/documents-vp/drire.shtml>.

898 They aim to reconcile water management with economic development and respect for the environment. This public establishment of central government contributes by its action to water pollution control and the conservation and restoration of aquatic environments, Ministry of Ecology and Sustainable Development 2006 http://www.qpa.unep.org/documents/national_report_france_1_english.pdf.

| | | | | |
|--|---|--|--|--|
| | <ul style="list-style-type: none"> - <i>Directions régionales de l'équipement (DRE)</i>, (Regional directions for equipment), which are very relevant in terms of infrastructure developments to assist water management and manage water pollution, especially in terms of urban waste water related installations. - <i>Direction régionale des affaires sanitaires et sociales (DRASS)</i>, (Regional directions for health and social affairs): It main role revolves around water quality for human consumption and bathing. - <i>Direction régionale de l'Alimentation, de l'Agriculture et de la Forêt (DRAAF)</i>, (Regional direction for food, agriculture and forest) <p>COORDINATING ENTITIES</p> <ul style="list-style-type: none"> • <i>Préfet de Coordinateur de Bassin (Basin coordinator)</i>⁸⁹⁷ • <i>Commission Administrative du Bassin</i> (Administrative commission of the basin) | | | |
|--|---|--|--|--|

897 Art L 231-7 of the *Code de l'environnement*.

| | | | | |
|--|---|---|--|--|
| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">LOCAL LEVEL: DEPARTMENTS AND MUNICIPALITIES</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">including grouping of municipalities</p> | <ul style="list-style-type: none"> - <i>Les directions départementales de l'agriculture et des forêts (DERAF)</i>, (Departmental directions for agriculture and forest), which have the main responsibility in terms of water management at the departmental level.⁸⁹⁹ - <i>Les directions départementales de l'équipement (DIR)</i>, (Departmental directions for equipment) - <i>Les directions départementales des affaires sanitaires et sociales (DASS)</i>, (Departmental directions for sanitary and social affairs) - <i>Directions Départementales de l'Équipement (DDE)</i>, (Departmental directions for equipment) - <i>Directions Départementales de l'Équipement et de l'Agriculture (DDEA)</i>, (Departmental directions for equipment and agriculture) <p style="text-align: center;">COORDINATING ENTITIES</p> <ul style="list-style-type: none"> • <i>Missions Interservices de l'eau (MISE)</i> (Inter-services missions for water) | <ul style="list-style-type: none"> • <i>Communes</i> (Municipalities) • <i>Groupements of communes</i> (Groups of municipalities) • <i>Maire</i> (Mayor) | <p style="text-align: center;">SUB BASIN LEVEL</p> <ul style="list-style-type: none"> • <i>La commission local de l'eau.</i> (The local water commission): responsible for the development, implementation and review of the SAGE. Created by the Préfet. | <ul style="list-style-type: none"> • NGOs • Water users • Technical experts • Academics • Private sector • International and regional stakeholders |
|--|---|---|--|--|

Table 6. French governance framework relevant for LBMP regulation.

899 Décret n.2003.1082 de 14 November 2003 regarding les attributions et à l'organisation des directions départementales de l'agriculture et de la forêt.

As demonstrated in Tables 7 and 8, there are many administrative and territorial levels, horizontal and vertical, which can make integrated management challenging due to the number and variety of governmental spheres and institutional entities having to effectively communicate and interact with one another in order to ensure integration. The situation creates regulatory overlaps and gaps as well. Moreover, there does not seem to be a lead agency in terms of LBMP regulation at each governmental level.⁹⁰⁰ It is also argued⁹⁰¹ that current administrative structures in terms of water management are not aligned with the ecological characteristics of individual river basins, thus preventing effective implementation of the ecosystem-based approach. This limits the effectiveness of LBMP regulation in France.⁹⁰² There are also some institutional overlaps and/or gaps in terms of mandates, functions and powers which might impact on effective integration between combating water pollution and the health sector mandate. The institutional framework in France is regarded by some experts as vertically and horizontally fragmented,⁹⁰³ especially the institutional framework for water management and regulation.⁹⁰⁴ This affects the integrated management and regulation of LBMP because of the lack of efficient co-operation between the different relevant institutional spheres and entities.⁹⁰⁵ State intervention is divided mainly into three levels which are interconnected, the national, the regional and the departmental levels. There are specific entities on each level which assist state interventions in terms of water pollution management, including LBMP regulation. The main features of the French institutional framework reside in the following elements:

-
- 900 As analysed in Chapter 2, there should be a lead agency for LBMP regulation and management.
- 901 Délégation interministérielle à l'aménagement et à la compétitivité des territoires Secrétariat, Bilan de la loi littoral, 27.
- 902 Refer to 2.3.1 regarding the importance of the ecosystem-based management approach to the regulation of LBMP.
- 903 Launay Rapport d'information Gestion de l'eau and Dronenko *Droit de l'eau* 60.
- 904 Délégation interministérielle à l'aménagement et à la compétitivité des territoires Secrétariat Bilan de la loi littoral 27.
- 905 Refer to 2.3.5 which demonstrates the importance of co-operation for effective LBMP regulation.

- A strong, large and integrated new environmental Ministry, the *Ministère de l'Ecologie, du Développement durable, des Transports et du Logement (MEDDTL)*, the establishment of which marks a unique approach in Europe and probably internationally, aims at facilitating institutional integration and integrated⁹⁰⁶ management in terms of sustainable development.⁹⁰⁷
- The national coordinating state structures, especially the *Mission Interministérielle de l'eau*, which should assist cooperative and integrated water governance.
- The newly created integrated state entities at the *région* level, *les directions régionales de l'environnement, de l'aménagement et du logement (DREAL)*, (the regional directorate for the environment, planning and habitation),⁹⁰⁶ which has the potential to assist cooperative governance and integrated environmental management due to its cross-sectoral approach between the environment, development and housing.
- The lack of a specific and dedicated departmental state entity for the environment (and water management), which is regarded as an institutional gap.
- The role and structure of the *collectivités territoriales*.
- The role and structure of the different specialised institutions at the different territorial levels, especially the *Comités de Bassin* and *Agences de l'eau*.

The French institutional framework in terms of LBMP demonstrates a willingness of government to ensure integrated management and regulation. This is especially true in the case of the creation of the DREALs, which aims to implement integrated,

906 "Decloisonné" is used by the MEEDDM to describe its approach. MEEDDM 2009 http://www.developpement-durable.gouv.fr/rubrique.php3?id_rubrique=799.

907 MEEDDM 2009 http://www.developpement-durable.gouv.fr/article.php3?id_article=4424.

908 Under the authority of the *préfet de région*, the DREAL (one by Région) has the following functions relevant to regulating LBMP: the development and implementation of environmental policy especially regarding pollution prevention, the control of industrial activities, transport, climate change, biodiversity, planning and development, energy, littoral management, EIA, water, the integration of sustainable development objectives in other policies, and public awareness and education. MEEDDM 2009 http://www.developpement-durable.gouv.fr/article.php3?id_article=424.

multidisciplinary and horizontal management for sustainable development.⁹⁰⁹ Such an institutional structure is regarded as an innovation at the EU and most probably internationally.⁹¹⁰ Even before this latest development, the institutional framework related to water in France was regarded as an institutional model for ensuring administrative and government co-operation and collaboration, public participation, and effective (technical and financial) decentralisation at the local level to the *collectivités territoriales*.⁹¹¹ The *comités de bassin* (composed of public representatives from deconcentrated administration, *collectivités territoriales* and users) are also regarded as a manifestation of decentralised and integrated water management at the river basin level in France,⁹¹² especially in terms of the development of the SDAGE, which in itself is an integrated regulatory instrument.⁹¹³ The *Comité de bassin* (basin committee) is regarded as the primary institution of territorial management.⁹¹⁴ The composition of the *commissions locale de l'eau* also reflects participatory and collaborative water governance, including public and private stakeholders. The six *agences de l'eau*, which are public establishments with an administrative status (*Etablissements Publics de l'Etat à caractère Administratif* (EPA) under the supervision of the *Ministère de l'Ecologie, du Développement durable, des Transports et du Logement* (MEDDTL), are also very important in water management. They have to contribute to the achievement of the objectives set in French water law.⁹¹⁵ In order to do so, their main type of intervention is financial assistance and management. They also provide assistance for the development of planning and integrated instruments⁹¹⁶ including SDAGE and SAGE, and they have an important role in terms of information management, public awareness and information, and ecological assessment.

909 MEEDDM 2009 http://www.developpement-durable.gouv.fr/article.php3?id_article=4424.

910 MEEDDM 2009 http://www.developpement-durable.gouv.fr/article.php3?id_article=4424.

911 *La documentation Française* 2005 <http://www.vie-publique.fr/politiques-publiques/politique-eau/acteurs/>.

912 *La documentation Française* 2004 <http://www.vie-publique.fr/politiques-publiques/politique-eau/index/> and Launay Rapport d'information sur la gestion de l'eau sur le territoire.

913 Refer to 3.6 for further information.

914 Dronenkø *Droit de l'eau* 67.

915 Refer to 3.4.3 and 3.6.

916 Refer to 3.4.3 and 3.6.

3.8 Main regulatory priorities

Based on the identified French regulatory framework, this section analyses the key regulatory regulatory priorities in terms of LBMP.

3.8.1 Regulatory priorities set out in the Code de l'environnement

The *Code de l'environnement* refers specifically to the following regulatory priorities: dangerous substances, effluents, sludge, oil and lubricants, detergents, and other polluting discharges.⁹¹⁷ A review of the provisions of the *Code de l'environnement* demonstrates that sludge management, including use and disposal thereof, is a major concern in terms of water pollution regulation, including LBMP.⁹¹⁸ In terms of activities, the water nomenclature identifies the main activities to be regulated in terms of water pollution, including LBMP.⁹¹⁹ Agriculture-related activities and waste water treatment facilities are also priority sources of water pollution, including the pollution of coastal waters. In terms of sensitive environments, wetlands⁹²⁰ are specifically protected as well as areas affected by nitrates pollution⁹²¹ and other areas which are regarded as requiring specific protection.⁹²² The sections below provide a concise legal analysis of the most relevant legal provisions pertaining to LBMP regulation from the following regulatory priorities: agriculture and sanitation (including waste water).

3.8.2 Agriculture

French water law allocates a predominant place to the management of the use of water and the environmental impacts on water resources from agriculture-related activities.⁹²³ In compliance with EU law,⁹²⁴ various programmes of action (in terms of

917 Refer to 3.4.2.3.

918 Refer to 2.3.6.2.

919 Refer to 3.6.1 of this study for further information on the activities encompassed in the water Nomenclature

920 Refer to 3.3.2 and 3.4.3.4.

921 Refer to 3.4.3.4.

922 Refer to 3.4.3.4.

923 For further information about the management of water pollution related to agricultural activities refer to Langlais *Les déchets agricoles et l'épandage* and Doussan *Activité agricole et droit de l'environnement*.

nitrate pollution and "vulnerable zones")⁹²⁵ and a code of good practice⁹²⁶ have been developed to address environmental impacts from the agricultural sector, which contribute towards LBMP regulation from this sector. Another instrument is the *Contrat d'agriculture durable* (the sustainable agriculture contract).⁹²⁷ This contract aims to implement a project which will contribute to the management of agriculture-related impacts on the environment and water resources, both from a quantity and quality perspective. The regulatory approach adopted is a collaborative and voluntary process based on mutual assistance from the government (especially financial assistance) and the targeted private sector. In terms of the *Code de l'environnement*, specific authorisations are required for the commercialisation of pesticides. The use and application of pesticides is also regulated, including specific requirements and initiatives in terms of waste management related to pesticides.

3.8.3 Sanitation, including waste water management

As per EU legislation, as described in Chapter 4 of this research, sanitation requirements especially in terms of the collection, treatment and disposal of waste/used water and stormwater, is a priority. The relevant provisions⁹²⁸ are not found in the *Code de l'environnement*, but in the *Code des Collectivités Territoriales*.⁹²⁹ Municipalities have an obligation in terms of the development of the necessary infrastructure as per EU requirements for water services.⁹³⁰ Local government (a municipality, for instance) will mainly be in charge of determining

924 Refer to 4.6.3.

925 Refer to 3.4.3.4 of this study for further information on the vulnerable zones.

926 Art R211-78 of the *Code de l'environnement* sets out the *Code de bonne conduite agricole pour protéger les eaux contre la pollution des nitrates d'origine agricole* (Code of good agricultural practices to protect water against nitrate pollution from agriculture). Compliance with this code is facultative. It addresses matters including but not limited to: the use of fertilisers, effluents, management (treatments, storage and disposal), and the type of culture and cattle.

927 Established by *loi d'orientation agricole*, July 1999 and *le décret de 2003 relatif aux contrats d'agriculture durable* (the law related to agricultural contract). Also refer to 2.6.5.2 for further information on such contracts.

928 Which are in alignment with the provision of the EU Waste Water Directive. Refer to 4.6.1 for further information.

929 Art L 2224-8.

930 Refer to 4.6.1.

specific objectives in terms of the quantity and quality of used water (including stormwater).

3.9 Conclusion

3.9.1 Law principles

The legal analysis leads to the conclusion that the following key law principles are entrenched in French environmental law:

- General environmental law principles: the precautionary principle, integrated management, the polluter-pays principle, sustainable development, adaptive management, the participatory/participative approach, equity and prevention.
- Environmental law principles related to "sustainable resources management": the equitable and sustainable use of water resources, integrated river basin/watershed management, the integrated ecosystem-based approach and the integrated territorial approach.
- Environmental law principles related to "coastal and marine management": integrated coastal area/zone management and ocean-land-atmosphere connections.

French environmental law incorporates most of the key law principles contained in international best practice in terms of LBMP regulation.⁹³¹

3.9.2 Regulatory scope

The regulatory scope encompasses all land-based sources of pollution. The overall geographical scope of the regulatory regime pertaining to LBMP, in terms of protection, encompasses basin districts, the sea-shore, the littoral, groundwater, internal waters, wetlands, estuaries and the territorial seas to some extent. The

931 In terms of the law principles which need to be incorporated in the regulatory regime, international best practice recommends the incorporation of specific principles as analysed in Chapter 2.

French approach is mostly aligned with international best practice.⁹³² The fact that the exclusive economic zone and high seas are excluded from the scope can be regarded as a limitation of the regulatory regime.⁹³³ The fact that the littoral is not clearly defined can also be a regulatory problem, as it might create legal uncertainty which can be abused by developers. In this context, the legal establishment of a clear coastal zone might be recommended. However, the landward geographic delimitation of the Littoral is regarded as very comprehensive and progressive, especially as it includes Littoral municipalities and to some extent some other inland municipalities.⁹³⁴

3.9.3 Regulatory objectives

In terms of the regulatory objectives, the French regulatory framework pertaining to LBMP encompasses environmental protection, pollution management, human health protection and the management of uses. These are aligned with international best practice in this context.⁹³⁵

3.9.4 Regulatory instruments

The French regulatory regime provides various direct and indirect instruments relevant for LBMP regulation.⁹³⁶ The resources-directed instruments are regarded as comprehensive as they prescribe the establishment of environmental objectives and standards for marine and coastal waters and the determination of good

932 In terms of international best practice, as analysed in Chapter 2, it is advised that the marine and coastal environment to be protected should include as a minimum the following components: the seashore; internal waters; the relevant coastal watershed/catchments/river basins, including watercourses (up to the freshwater limit); the territorial seas; the Exclusive Economic Zone (EEZ); estuaries; coastal lagoons; coastal wetlands; the sea bed and sub-soil of these waters; the environment (the living resources, ecosystems and others) associated with these marine and coastal areas and if possible the high seas. In terms of the land-based sources of marine pollution which should be regulated, all direct and indirect sources of pollution on the territory should be included, even the sources or potential sources far inland.

933 See 2.3.2.

934 Refer to 3.4.3.1.

935 The regulatory objectives should include pollution management, environmental protection, human health protection and the management of the uses of marine and natural coastal resources. The ultimate goal of LBMP regulation may be regarded as the "reconciliation of development pressures with protection objectives". Therefore the management and regulation of the "legitimate and designated uses" of the marine coastal and marine environment is going to be paramount to the effective regulation of LBMP. Refer to 2.3.3 for further information.

936 As analysed in Chapter 2.

environmental status. This approach is aligned with international best practice.⁹³⁷ The recognition of water resources as economic assets is regarded as progressive, as well as the importance given to wetlands (as matters of public interest).

In terms of sources-directed measures, the "general requirements" approach enables the establishment of minimum norms and requirements in terms of water pollution. In addition to these general requirements, the regulatory framework provides for the focused and customised regulation of substances, activities, developments and products in order to manage water pollution, including LBMP, from such sources. The main sources-directed measures are also regarded as comprehensive and aligned with international best practice.⁹³⁸

The basin district's programme of measures, which is as a result of the implementation of the WFD, is also an innovative integrated regulatory instrument which enables integrated LBMP regulation. The concept of having "programmes" to manage pollution from specific substances is also interesting, enabling the design of a customised management response in terms of a specific source of water pollution and LBMP. The specific source-directed instruments addressing LBMP from agriculture-related sources, including the development of a voluntary code of conduct associated with financial incentives, are also relevant and they might be useful in the South African context.

This analysis demonstrates that France has placed significant emphasis on the development of planning instruments in terms of water management, including LBMP. Of specific importance are the planning principles for coastal development, the *Schémas de mise en valeur de la mer* (an innovative instrument) and the zoning instruments. The incorporation of coastal and marine considerations into traditional planning instruments is also regarded as a useful regulatory approach to manage LBMP mainly from coastal development.

937 Refer to 2.3.4.

938 Refer to 2.3.4.1 for further information.

However, the particularity of the French approach resides in the integrated regulatory instruments (water nomenclature, SDAGE, SAGE and *Contrats de baies*), which are regarded as very cohesive and comprehensive instruments to facilitate LBMP regulation. The water nomenclature enables proactive LBMP management through the identification of activities in terms of their impact and/or potential impact on water resources, including coastal and marine waters, and the establishment of a proactive control through the authorisation or declaration procedure. Such proactive control enables a dedicated and sophisticated management of water pollution. However, the fact that there are two processes, the water nomenclature and the *Installations classées*, raises some questions. The first question is if water resources management focused proactive control is really the most effective approach. The second question is if the parallel existence of the two processes might not complicate the regulatory framework and make it too burdensome. In terms of the integrated instruments, it seems that combining direct and indirect instruments into one consolidated regulatory instrument is an effective and efficient regulatory approach in terms of LBMP pollution. The integrated instruments, by their nature and by their content, require stakeholders to have an integrated and cohesive approach to water management and pollution control, especially in the context of LBMP regulation. The financial management provisions of each integrated instrument are also regarded as very comprehensive and progressive. The development of such instruments requires a multidisciplinary and collaborative approach. The legal status of such instruments is also important. However, it is considered that the regulatory instruments might be insufficient in terms of the management of the use of water, with the exception of the *Schémas de mise en valeur de la mer* and *contrats de baies*.

In terms of indirect regulatory instruments, France seems to place strong emphasis on financial instruments. These are aligned with international best practice addressing financial planning, mobilisation and provision of finance.⁹³⁹ These market-based instruments, especially the users' charges and taxes in terms of water management and water pollution control, including LBMP, seem comprehensive. The

939 Refer to 2.3.4.2(c), which demonstrates the importance of financial management in terms of LBMP regulation.

instruments relating to ecological status assessment, monitoring and data management also seem comprehensive and aligned with international best practice.⁹⁴⁰

3.9.5 Institutional structure

The institutional structure, as previously stated, is characterised by a "decentralised approach", providing more power to *collectivités territoriales*, especially municipalities, in terms of water management, including LBMP regulation, which is aligned with international best practice in this context.⁹⁴¹ Another characteristic of the institutional framework is the strong and large integrated environmental ministry, *the Ministère de l'Ecologie, du Développement durable, des Transports et du Logement (MEDDTL)*. The institutional structure is fragmented (vertically and horizontally) but various initiatives have been established to address such fragmentation and improve coordination and collaboration. Various coordinating entities have been created at various governmental levels, but they are only "advising entities" and their powers seem rather limited. However, the newly created integrated state entities at the regional level, *les directions régionales de l'environnement, de l'aménagement et du logement (DREAL)*, are considered as an achievement in terms of integrated environmental management. It is also important to note that the lack of a specific and dedicated state entity at the departmental level for environmental management (including water management) is regarded as a limitation, as it might result in a limited or/and ineffective (as not adequately informed) intervention of national government at the departmental level. It might also make co-operation more difficult at the departmental level, as national government representation is not directly present and does not have practical knowledge and understanding of the challenges on the ground.

940 Refer to 2.3.4.2 regarding guidance from international best practice and 3.5 for an analysis of such indirect instruments.

941 Refer to 2.3.5.

3.9.6 Regulatory priorities

French environmental law identifies regulatory priorities, including substances (i.e. nitrates), activities (i.e. water nomenclature) and environments (i.e. vulnerable areas or areas protected by the *Conservatoire du Littoral*). Moreover, in most cases the regulatory framework prescribes a specific, focused legal regime to address such regulatory priorities. This approach is aligned with international practice in this context.⁹⁴²

3.9.7 Overall assessment

There is no direct reference to LBMP in French environmental law. There is, however, a cohesive approach to water pollution and littoral management which plays a critical role in this context. The codification of environmental law in France is regarded as progress in terms of the harmonisation and integration of environmental legislation and ultimately for sustainable development in France.⁹⁴³ French water law also provides for cross references with various other statutes,⁹⁴⁴ which prescribe provisions relevant for the protection and use of water resource. This approach makes it possible to address the fragmentation of sectoral legislation and improve the implementation of a comprehensive regulatory framework for water resources management. Such an approach is aligned with the EU approach, which also uses cross-references between Directives.⁹⁴⁵ However, this aspect of French water law has also been criticised, the argument being that it would have been more appropriate to integrate the various provisions of the different statutes directly in the relevant sections of the environmental code dealing with water.

942 The identification of national priorities is regarded as an essential element of the regulation of LBMP. In this context the identification of regulatory priorities is advocated. Current international best practice provides guidance only. Each country will have to develop a customised regulatory framework which best suits its situation, challenges and development priorities. Refer to 2.3.6.

943 This has been a long process. It started in 1992. Integrating and harmonising all of the different regulatory provisions from different sectoral legislation developed at different times into one single document was laborious work. Senat 2010 <http://www.senat.fr/> and Lamouroux 2001 <http://www.carn.info>.

944 Especially the provisions of the *Code de l'Urbanisme* and others provisions contained in the *Code de l'environnement*, such as those related to the *installations classées*.

945 Refer to Chapter 4 for further information.

The regulatory framework in terms of water management in France, including LBMP, is still very sectoral and fragmented. It is argued that there is lack of integration between the "land vision" and "sea vision" of the littoral, which should be regarded and managed as one single entity, taking into consideration all of the land- and sea-related characteristics.⁹⁴⁶ Some concerns have also been raised in terms of the slow and/or inadequate implementation of the *Loi Littoral*. For example, it took twenty one years (since the entry into force of the *Loi Littoral* of 1964) to establish the list of the municipalities "contributing to the littoral economic and ecological equilibrium".⁹⁴⁷ It also took twenty one years to determine the list of estuaries to be protected and to confirm their protection under the *Loi Littoral*. Some experts have raised the need to implement better environmental laws and to reinforce their provisions.⁹⁴⁸ Moreover, due to the vagueness of the law, especially the *Loi Littoral*, the original level of protection (as envisaged by the drafters) has been altered. Municipalities have been able to use gaps and/or discrepancies in the law to serve their political ambitions, sometimes authorising unsustainable development on the littoral, as an easy way to ensure a healthy economic development of their municipality.⁹⁴⁹ This phenomenon is referred to as the *dépeçage progressif* (progressive dismantlement) of the *Loi Littoral*.⁹⁵⁰ The adaptation of the interpretation of the legal rule in consideration of development/urbanisation needs has also been observed. It has also been argued that regulations which are too specific and precise could affect the level of flexibility and adaptability required for water management in France, especially to take local circumstances into consideration. An expert is also of the opinion that the law does not sufficiently regulate, guide and "arbitrate" the uses of water.⁹⁵¹ The proliferation of regulatory texts without integrating them is regarded as a limitation to the coherence of the overall regulatory system in terms of water management, and ultimately in terms of LBMP regulation. Table 7 provides an overview of the French regulatory framework pertaining to LBMP.

946 Délégation interministérielle à l'aménagement et à la compétitivité des territoires *Bilan de la loi littoral* 27.

947 Refer to 3.2 of this study.

948 OECD.

949 Berland 1992 <http://www.ecologie-et-progres.com/95-BERLA.htm>.

950 Berland 1992 <http://www.ecologie-et-progres.com/95-BERLA.htm>.

951 Berland 1992 <http://www.ecologie-et-progres.com/95-BERLA.htm>.

OVERVIEW OF THE FRENCH REGULATORY FRAMEWORK IN THE CONTEXT OF LBMP

| | |
|---|---|
| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">NON-REGULATORY</p> | <ul style="list-style-type: none"> • <i>Code de l'environnement</i>: Articles L210-1 and following and Articles L321-1 and the following; • <i>Loi sur l'eau et les Milieux Aquatiques of 2006 (LEMA)</i>; • <i>Loi relative à l'aménagement, protection and la mise en valeur du littoral, 1986 amended in 2005 (Loi Littoral or Littoral Law)</i>; • <i>Loi N° 64-1245 du 16 décembre 1964 relative au régime et à la répartition des eaux et à la lutte contre leur pollution</i>; • <i>Loi N° 92-3 of January 3, 1992 (also referred to as the water law) consolidates the water regulatory framework</i>; • <i>Loi N°95-101 of February 2, 1995 (Loi Barnier) prescribes the reinforcement of the regulatory provisions in terms of water management</i>; • <i>Loi N°2004-338 of April 21, 2004 transposing the WFD</i>; and • <i>Code de l'Urbanisme</i>. |
| | <ul style="list-style-type: none"> • General environmental law principles: the precautionary principle, integrated management, the polluter-pays principle, sustainable development, adaptive management, the participatory/participative approach, equity and prevention. • Environmental law principles related to "sustainable resources management": an equitable and sustainable use of water resources, integrated river basin/watershed management, an integrated ecosystem-based approach and an integrated territorial approach. • Environmental law principles related to "coastal and marine management:" integrated coastal area/zone management and ocean-land-atmosphere connections. |
| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">REGULATORY SCOPE</p> | <p>What is regulated?</p> <p>Direct and indirect sources, point and diffuse sources, activities, substances, emissions/discharges, installations and other factors which might pollute or contribute to the pollution and/or degradation of the coastal and marine environment.</p> <p>Where does the regulatory regime apply?</p> <ul style="list-style-type: none"> • Marine side (protection): surface water, ground water and marine waters up to the outer limits of territorial waters (LEMA) • Land side (control of sources): French territory (LEMA) and land/marine activities in the littoral zone (coastal municipalities) and to some extent neighbouring municipalities to littoral municipalities |

- Ensure a sustainable and balanced and equitable management of water resources. The objectives of the Act are enunciated in article 211-1 of the Environmental Code;
- The conservation of aquatic ecosystems, sites and wetlands;
- The protection of water resources;
- Pollution control;
- The restoration of water quality and regeneration;
- The development, mobilisation and creation of water resource protection;
- The valorisation of the water resource as an economic resource;
- The promotion of the sustainable use of water resources;
- The protection of sensitive and unique land/spaces/places;
- The maintenance of ecological equilibrium;
- The management of land/space use;
- The promotion and facilitation of access to the sea shore;
- The management of the balance between economic development and environmental protection;
- The conservation and protection of the littoral;
- The protection and sustainable and improved development of the littoral;
- The protection of biological and ecological balances and the safeguarding of natural sites and landscapes and the cultural and natural inheritance of the littoral; and
- Management of the sustainable development of economic activities dependent on the proximity of coastal/marine waters.

- Environmental objectives;
- A general requirement for "good surface water status" to cover all surface waters (including coastal and marine waters); "good ecological potential;"
- Determination, to be established by 15 July 2012, of good environmental status for the marine waters associated with the establishment of a series of environmental targets and indicators;
- "Good surface water chemical status" and "Good ecological status" requirements;
- Two types of environmental quality standards are set for priority substances: "annual average concentrations" and "maximum allowable concentrations";
- The recognition of water as an economic asset;
- Wetlands which are legally qualified as a matter of public interest; and
- The establishment of quality norms (environmental objectives) for specific zones of marine and coastal waters according to the requirements of the uses of water and the valorisation of the biological resources in these zones.

- General requirements, relating to the following matters: water quality; norms/objectives; management of water uses; management of water pollution; protection and conservation measures; products regulation; activities control; and enforcements measures;
- Maintenance measures aimed at preservation/protection of the quality of water and ecosystems might relate to the control and regulation, proactive or reactive, of agriculture-related pollution, effluents, other pollutants and the restoration of water quality;
- Basin Districts' programme of measures: prescribe specific instruments, *inter alia*, regulatory provisions, financial incentives and/or negotiated measures/voluntary measures;
- Management of pollution from specific products and substances, including prohibition; use and/or sale restrictions; financial assistance; specific technical requirements (proactive and reactive) and regulation of activities; declaration and/or authorisation system;
- Regulation of the sale and distribution of products and equipment which might affect water quality;
- Regulation of sludge management and use; effluent management; run-off or leakage management from the use of sludge for agriculture; strict control of oil, lubricants and detergents; direct or indirect discharge (effluents, through run-off or stormwater drains); and the prohibition of the sale of detergents with phosphates;
- National programme of actions regarding water pollution from dangerous substances, including water quality standards established for listed substances;
- Control of chemical products which require a declaration for new substances, specific obligations for producers, distributors and users, and control of the distribution of biocide products; and
- Programme for the management of water pollution from nitrates.

- Planning principles for the coastal zone development;
- Integrated coastal management;
- Basin districts approach;
- *Schéma de mise en valeur de la Mer* (Scheme for the improvement/valorisation of the sea);
- Zoning;
- Property strategy of the *Conservatoire des espaces du littoral et des rivages lacustres*;
- Traditional planning instruments relating to the coastal marine environment; and

- Programmes of mesures.

INDIRECT

Instruments in support of direct instruments and measures, facilitating the control and management of LBMP

- Ecological assessment: *état des lieux*; marine research and monitoring operations, marine-related research;
- Monitoring, data management, reporting and notification: The *Loi Littoral* has as its objective the development of research and innovation related to the coastal zone. Specific monitoring and research programmes related to: integrated coastal zone management and its uses; the uses of coastal and marine resources; the monitoring and improvement of water quality and ecosystems integrity; the protection of the coastal zone; the security of maritime navigation and operations; the treatment and prevention of pollution; adaptation to global change; coastal erosion management; coastal economic activities management; coastal tourism management; the development of marine renewable energy; coastal and marine sediments management; specialised monitoring in terms of specific pollutants (nitrates) or marine water pollution from specific activities (agriculture or mining). But there is no national monitoring programme in terms of the coastal and marine environment;
- Performance assessment of measures;
- Public participation;
- Financial management: principles of integrated environmental costs and the polluter-pays principle. Instruments related to financial planning and financial provisions. Specific water protection-related taxes and market-based instruments; and
- Compliance and enforcement.

INTEGRATED REGULATORY INSTRUMENTS

- *Water nomenclature*
- *Installation classes (classificatory installations)*
- *SDAGE*
- *SAGE*
- *Contrats de baies (Bay contracts) and*
- *Contrat d'agriculture durable (Contract for sustainable agriculture)*

- "Decentralised approach" to water management in France, providing more power to *collectivités territoriales*, especially municipalities, in terms of water management, including LBMP;
- Fragmented (vertically and horizontally);
- The national coordinating state structures, especially the *Mission Interministérielle de l'eau*. (Inter-ministry water mission);
- A strong and large integrated environmental Ministry, the MEDDTL;
- The newly created integrated state entities at the regional level. *les directions régionales de l'environnement, de l'aménagement et du logement* (DREAL, regional directorate for the environment, planning and habitation);
- The lack of a specific and dedicated departmental state entity for the environment (and water management);
- The role and structure of *collectivités territoriales* (territorial collectivities); and
- The role and structure of the different specialised institutions at the different territorial levels.

| | | |
|--|-------------------|---|
| | SUBSTANCES | Dangerous substances, effluents, sludges, oil, lubricants, detergents, fertilisers, nitrates, and other polluting discharges. |
| | ACTIVITIES | Agricultural activities, industrial installations and activities, constructions, discharges, urban waste water management-related activities from the Water nomenclature. |
| | AREAS | Wetlands and zones vulnerable to nitrates. |

Table 7. Overview of the French regulatory framework in terms of LBMP regulation.