

## WP4 – Space planning to foster aquaculture activities

ACTION 1 : IEF methodology transfer

July 2019

# CONTEXT



### DIFFICULTIES of companies of the Finistère To ACCESS TO THE SEA

They are looking for sites to develop their activities and especially real-estate sites with sea-water pumping

### An OBSERVATION SHARED by all the local actors



### Paradoxically MANY PROSPECTIVES STRATEGIES rely on the ECONOMIC MARITIME POTENTIALS aquaculture, seaweed cultivation, blue biotechnologies

At all levels (European, national, local)

### DIFFICULTIES OF SEVERAL NATURES

A default of **VISIBILITY on the offers**A lack of **SUITABLE SITES**A problem of **LEGIBILITY on the** « process »
Problems of **ACCEPTABILITY**The legal COMPLEXITY

### a context of COMPETITION

The companies need to find suitable offers in a cost that they can support and in an acceptable calendar

# PRESS ARTICLES





# Aquaculture> 2 types of sites

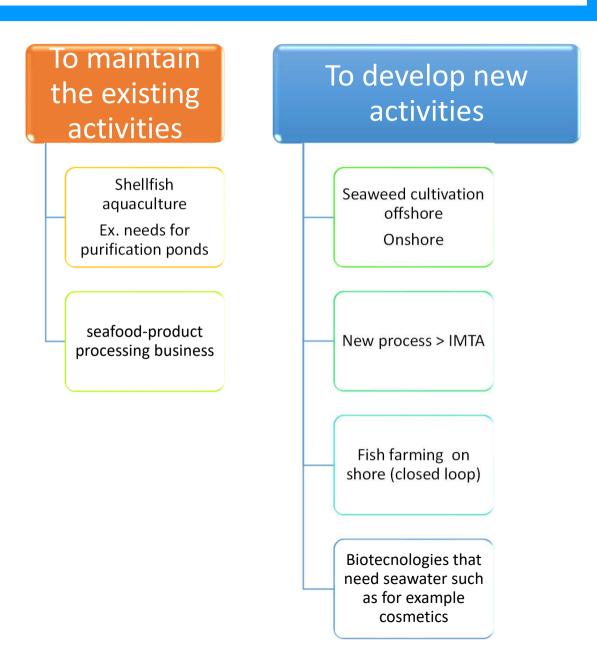


Land-based-sites with

## seawater pumping Compounds in the sea and/or ponds (submersibles or unsinkable) An activity at the INTERFACE sea/land Public/private domains Independant or linked Domaine public portuaire

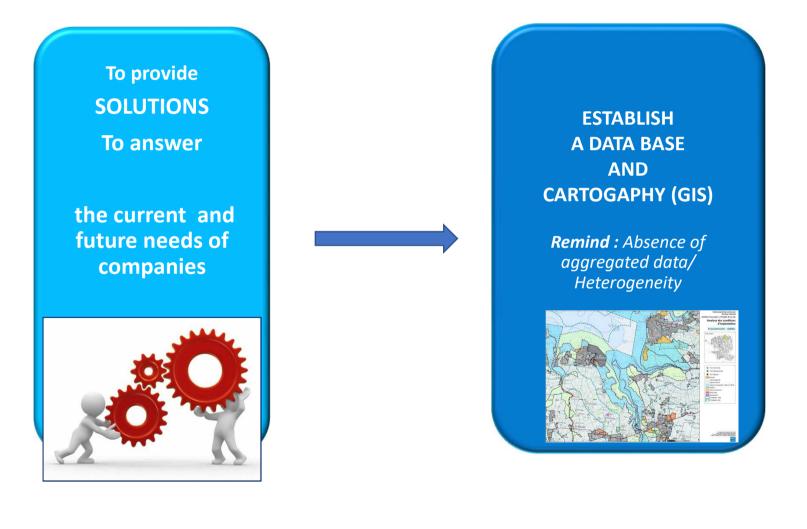
## **MAJOR ISSUES**







Decision taken to tackle the problem => Spatial approach can be a beginning



### Beginning of a concerted approach





\*Specification : In sum, we asked **To identify , map and caracterize Sea Access in Finistere** 

- To map the existing sites and the potential land/real estate spaces taking into account the constraints (legal and regulatory, environmental aspects and other aspects such as residential, tourism, agriculture...)
   = OVERVIEW of the situation
- To rank the areas where investments by public and / or private actors will have to focus as a priority in order to offer as soon as possible capacities for companies.
   = TO DEFINE AND STRUCTURE a strategy
- > To carry out this analysis in **a coherent and unified way** across the department.
- => TO MEET THE CURRENT AND FUTURE NEEDS OF COMPANIES.

# **SCOPING EXERCICE**



#### Necessity to

### **DEFINE what is SEACCESS**

To avoid confusion

Because Sea Access in French often refers to equipment or infrastructures that permit to embark or unload/disembark such as slipways / dock sides

For our study, SEA ACCESS means

spaces on land

whether bare or built,

- with seawater pumping equipment, in working conditions or not, or which could be assigned priority to aquaculture and benefit later a seawater pumping
- cropping areas at sea, already licensing, or which could be licensed

### TO PRECISE THE ACTIVITIES CONCERNED

- **Production activities**= marine farming concessions as defined by the decret (concessions de cultures marines) : <u>Décret</u> <u>du 22 mars 1983</u> :
- Biosciences activities : cosmetics, nutrition, health, needing a seawater pumping

The spatial planning approach doesn't concern sailing or Renewable Marine Energies



## The study consortium chosen





Study and consultancy firm for local authorities and economic and institutional actors (construction, planning, environment and land domains)

> Representative of the study group

 Coordination of the study and direct interlocutor of the project manager



Brest Bretagne urban planning agency Expertise in planning, economy and land

> Creation and structuration of the databases

> Cartographic Atlas Development



Consulting firm specializing in aquaculture (design, engineering, project management, aquaculture projects, master plans ...)

> Business support on aquaculture

> Evaluation of the interest of the sites

> Technical analyzes of works / aquaculture interests

> Analysis of environmental conditions



Technical studies office in the fields of water engineering.

> Business support on the hydraulic technical analysis of pumping and piping

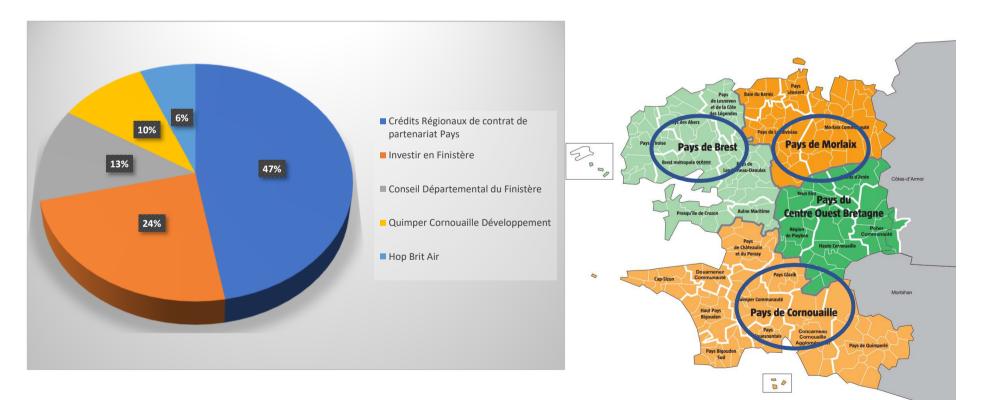
> Analysis of the installation conditions of works

### **CROSS DISCIPLINARY APPROACH**

# FINANCING



Cost of the study : 121 000 € TTC Financed by 5 actors => IEF led all the demands /managed the project the cost input has been shared according to the coastline ( because some funds are managed by local authority such as « maritime pays » -administrative authority )



16 monthes work : july 2016 > october 2017

## FEDERATED AND CONCERTED APPROACH



IEF managed the study but all decisions was taken by the steering comitte The other stakeholders have been concerted and co-decided some elements

### **Steering commitee**



### Local actors : public, profesionals and scientists



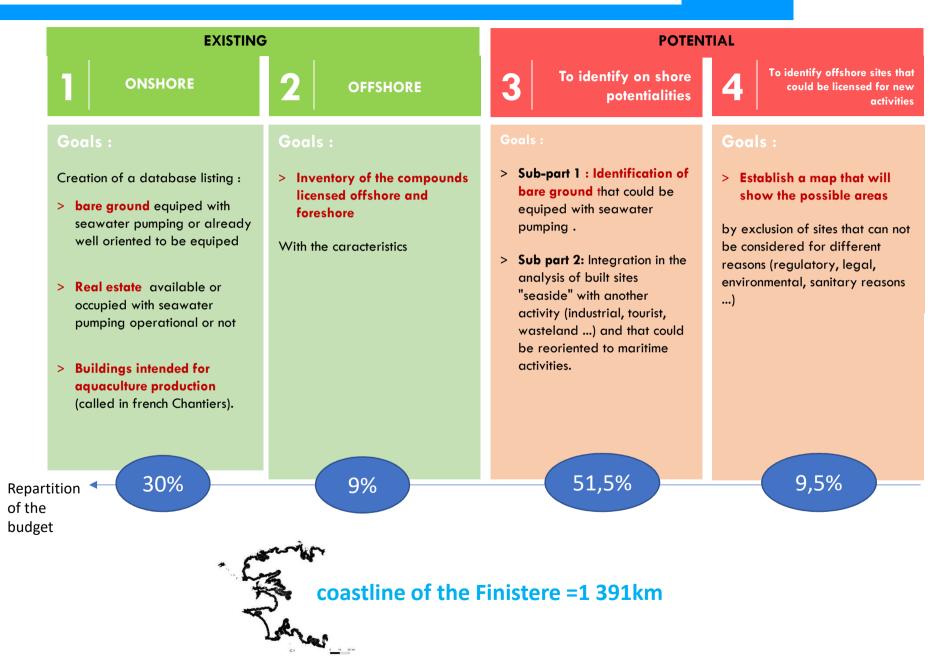
#### Co-decide

Involve in the construction of the tool

*Choose the studies consortium Co-decide* 

## **CONTENT of DATA BASE AND GIS**

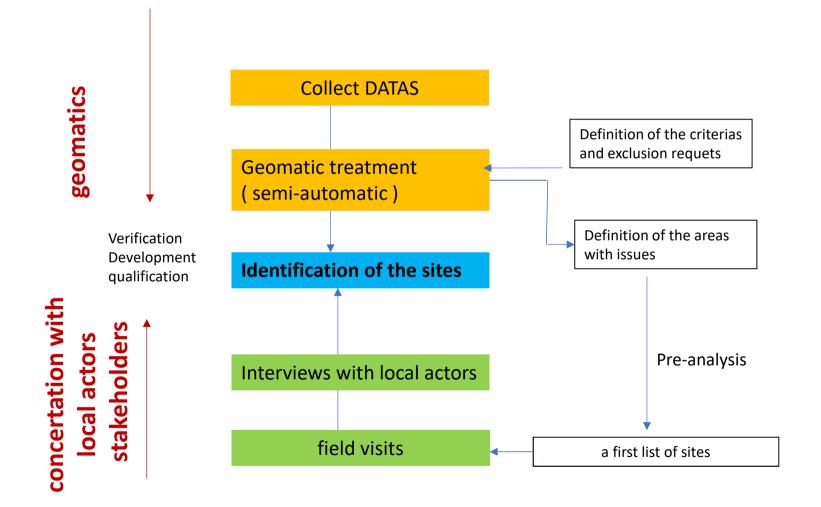




# **GLOBAL METHODOLOGY**

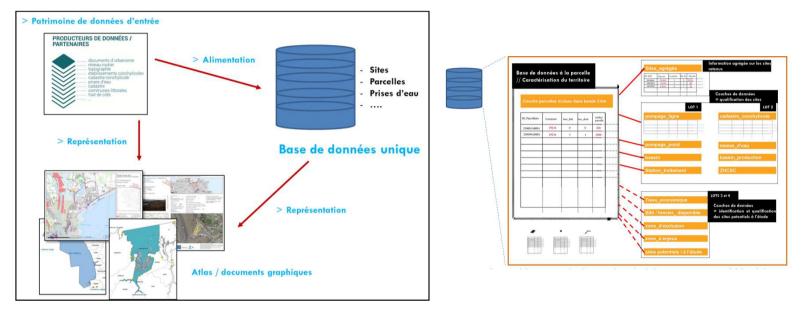


### **A DOUBLE APPROACH**



# PROCESS





A DATABASE that can be associated with other data-sources/GIS system

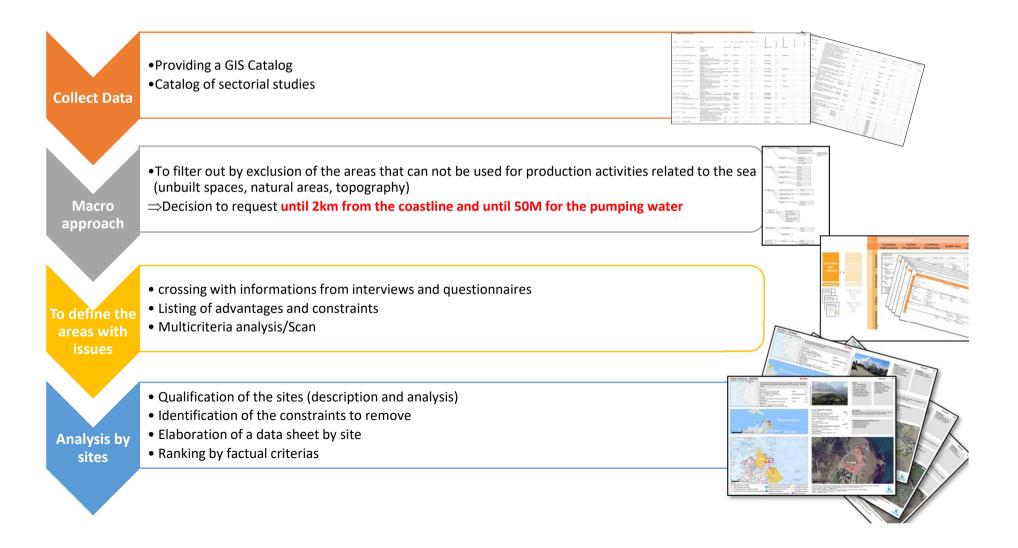
### Updatable

### linked to the functional and administrative entities

Masse d'eau ⊃ DCE	Bassins de production Bassin de production au sens du « schéma des structures » ZHCSC	Sites → Unités fonctionnelles	Parcelle       Cadastre       CM4       Création parcelles sur DPM hors CM4       Cadastre conchylicole
Données qualité d'eau : D Etat écologique Etat chinique	Localization des sites au sein des basina de production Données qualitilé d'aus : Classement sonitaire Données prospective : Classement sonitaire Dennées prospective : Papear autorisées	Formalisation de fiches par site : Description et qualification du tire Insertion dans son environnements	Données à la parcelle : Schelle de travail pour la définition des sites existants et potentiels Gualification des sepaces pour interrogation de la base & d'argon 2 et, le ca échéant, selon critières de pondération por filières I Identification de zones à enjeux

## **Specific works for the potential sites LAND**

- $\Rightarrow$  In addition, necessity to lead specific studies
- ⇒ We used a criteria grid organised by « families » (cf next slide) mobilised at different stages and used to select and qualify the potential sites

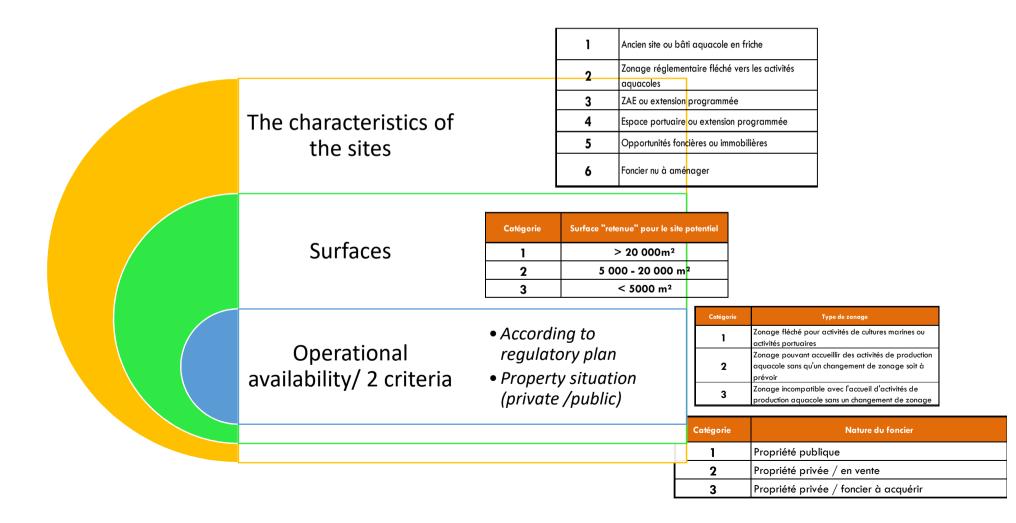


### 6 families of criterias used to filter

Regulatory Constraints	<ul> <li>Urbanism</li> <li>Legislation</li> <li>Easement</li> <li>Protected areas</li> </ul>
Facilty to settle	<ul> <li>Regulatory</li> <li>Politics</li> <li>logistics</li> <li>Possibilities of transformation</li> </ul>
Operational conditions	<ul> <li>Topography</li> <li>Risks</li> <li>Situation of the land</li> </ul>
Seawater pumping conditions	<ul> <li>Cost for the connection</li> <li>Lenght until the foreshore/low tide</li> <li>Pooling of equipment</li> </ul>
Water quality	•Quality •Physical characteristics
The risk of conflicts	

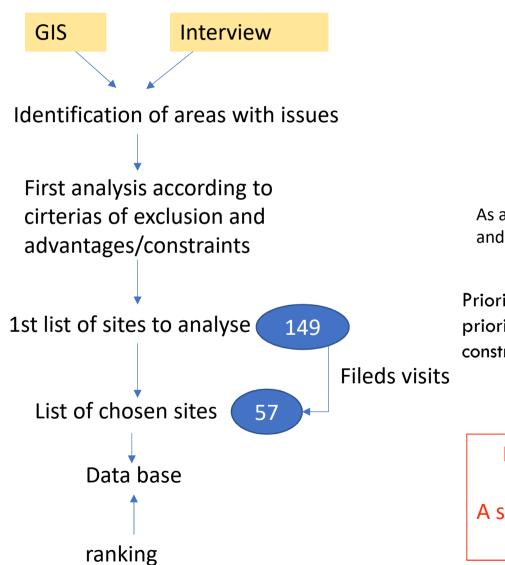
# The ranking

A unique ranking is not logical : one site can suit for fishfarmers but not shellfish ... => Decision to have various ranking



# RESULTS





As a reminder, integration of existing available sites and wastelands

Prioritization and evaluation of selected sites to highlight priority sites according to typology (site configuration, constraints encoutered, operational availability)

Finally, 57 potential sites (on shore ) have been identified A sheet has been edited for each of them with a ranking

# Specific works for the potential sites / OFFSHORE

#### Identification of areas that remain by exclusion

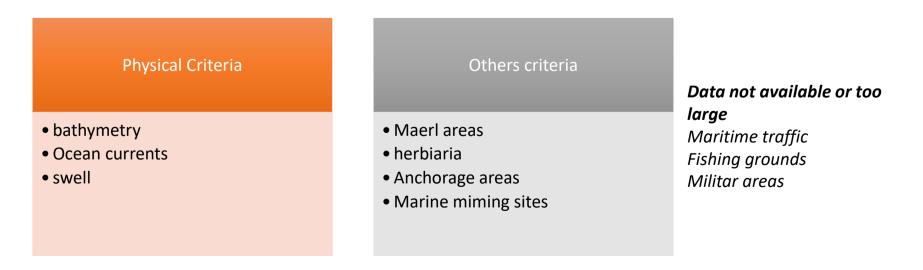
*= it is a first approach ( 9% of the global study) because* it exists other work in progress which goal is to define more precisely

1<sup>st</sup> step : the first step carried out was to define, by family, the criteria to be taken into account according to their impact opposite to the establishment of aquaculture activities.

Given the diversity of activities that can be envisaged, exclusionary reasoning has not deliberately been too restrictive and will have to be refined by sector according to the specific characteristics of each type of activity.

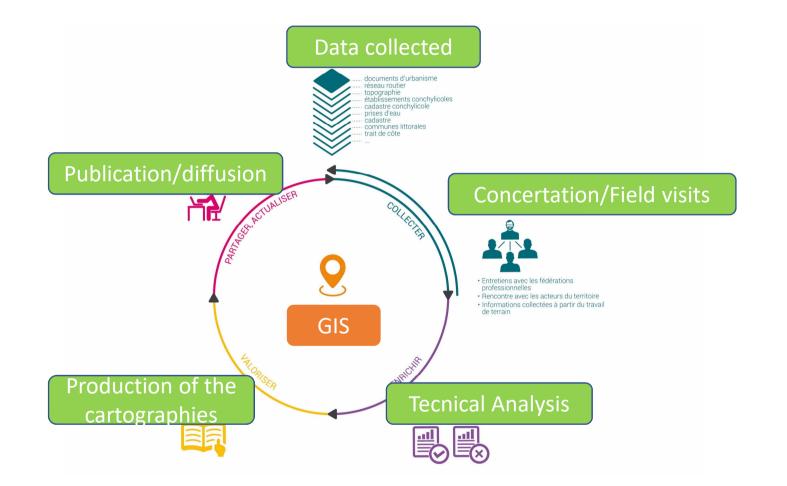
Once the criteria have been identified, the next step has been to prioritize these criteria in the form of "excluding", informative (assets, constraints) or to be considered on a case by case basis depending on the sites, species and cultivation methods.

As part of this study, only the exclusion parameters were then mobilized.



To sum up

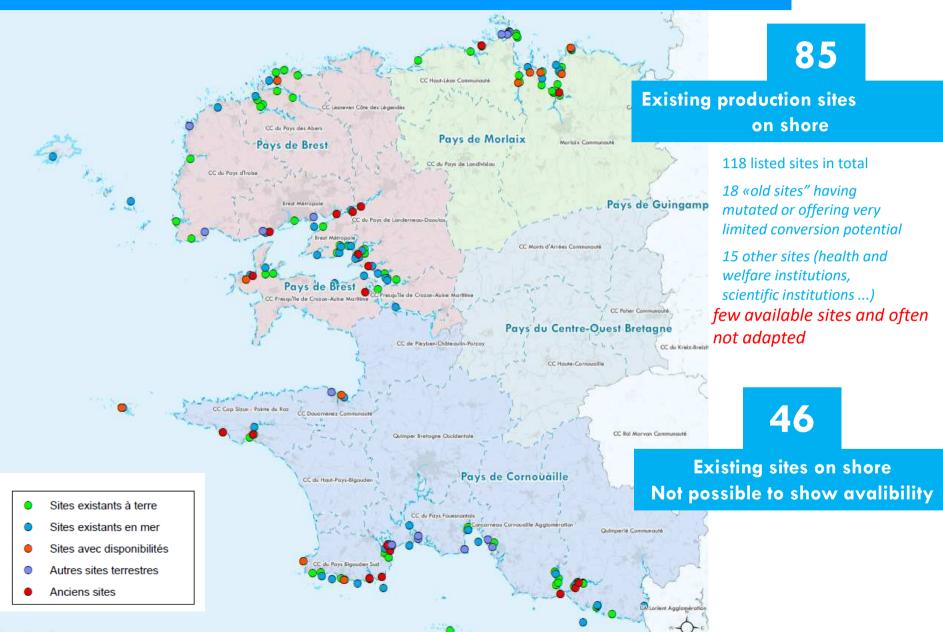




=> TO ESTABLISH AN AUDIT OF EXISTING SITES AND A PROSPECTIVE VISION on shore /off shore of the sea areas dedicated to marine culture activities

**RESULTS** 





21.2

### Example of sheet

#### Beg an Diben

Commune : PLOUGASNOU EPCI : Morlaix Communauté

Masse d'eau : FRGC09 / Perros-Guirec - Morlaix (large) Bassin de production conchylicole :

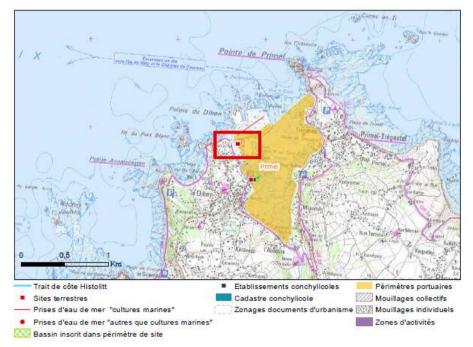
Num. : 5 / Finistère nord - eaux profondes Identifiant du site : 29188002

Etat : 2 - Site actif avec disponibilités

Type(s) d'activité(s) : Mareyage







#### FONCIER / IMMOBILIER / URBANISME Surface du site :

7 864 m<sup>2</sup> 1 310 m<sup>2</sup> Emprise bâtie au sol en domaine cadastré : Nombre d'entités bâties cadastrées : 5

Nombre de propriétaires de parcelles bâties hors DPM : 1 Typologie des propriétaires des parcelles hors DPM : Public : 100 % Privé : 0 % Pers. morale : 0 %

Espace économique : ZAE du Port du Diben Nord

Document d'urbanisme en vigueur (Avril 2017) : PLU 29/07/2010 Approuvé le :

#### CARACTÉRISTIQUES TECHNIQUES ET PHYSIQUES Nombre de prises d'eau de mer alimentant des bassins situés "hors DPM" : Nombre de bassins inscrits dans le périmètre de site : Équipements d'accès à la mer : Cale / Terre plein / Bord à quai Altitude mini : 5 m

#### Altitude maxi :

#### ENVIRONNEMENT

Zonages environnementaux présents sur le site : ZNIEFF 2 / ZICO / SITE INSCRIT



Étude financée par : le Consell régional de Bretagne (dans le cadre des contrats de partenariat des Pays de Brest, Moriaix, Comouaille), Investir en Finistère, le Conseil départemental du Finistère, Quimper Cornoualle Développement, HOP ! Version du 25 septembre 2017 Sources : © IGN SCAN25© 2015 - ORTHO 2015 - E-mégalls Bretagne - DDTM du Finisitere - DREAL Bretagne -ADEUPa - Quimper Cornouallie Développement - Moriaix communauté

Contact : contact[at]investir29.fr



#### Fiche N°: 2

10 m





### Example of sheet

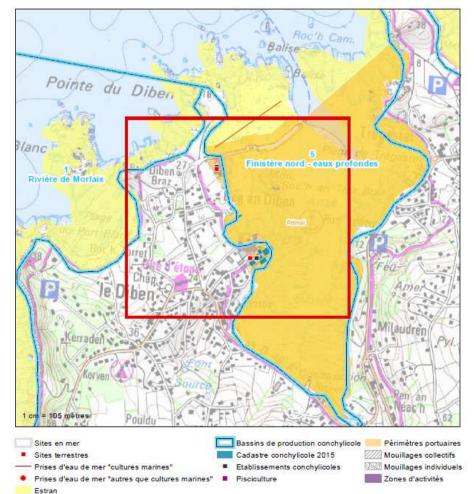
#### Pointe du Diben

Identifiant du site : 1

Masse d'eau : GC09 / Perros-Guirec - Morlaix (large)

Bassin de production conchylicole : Num. : 5 / Finistère nord - eaux profondes

Schéma des structures / Planification Espèces autorisées par bassin de production : Se rapporter aux tableaux situés en annexe



SURFACE	
Surface totale des concessions du site :	437 m²
Nombre de concessions :	1
Surface moyenne des concessions :	437 m²
QUALITÉ D'EAU	
Classement microbiologique pour les coquillages :	NR
CARACTÉRISTIQUES PHYSIQUES	
Nombre de concessions au-delà de l'estran :	0
Surface totale des concessions au-delà de l'estran :	0 m²

#### ENVIRONNEMENT

10	en alexandra.	
Natures d	l'exploitation	Dépot bassin submer
D	épot bassin insubmersibi	e



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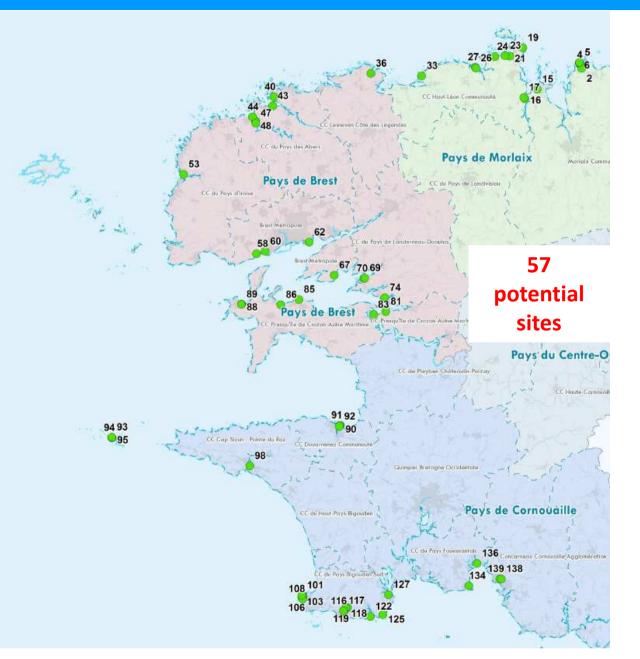


# Cartography and sheets on the website <u>https://www.accesmerenfinistere.fr/Accueil-865-0-0-0.html</u>



# **POTENTIAL/ON SHORE**





Private information = presentation on demand

A sheet by site cf next slide

### Example of sheet

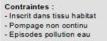
L'Abbesse - 29188x01

#### RETENU

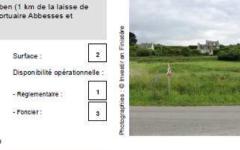
#### Document de travail - Ne pas diffuser

#### Fiche N° :

2









Surface du site :			7 616		
Emprise bâtle au sol en domaine cadastré :			0		
Nombre d'entités bâties cadastrées :					
Nombre de	propri	étaires de p	arcelles bâtle	s hors DPM :	
Typologie d	les pro	priétaires de	es parcelles h	ors DPM :	
Public :	0 9	/ Privé :	100 % / Pe	rs. morale :	0.96
Espace éci	nomi	que :			
Document	ďurba	nisme en vig	ueur (Avril 20	117):	P
Approuve I	e :				29/07/20
CARACTÉ	RISTI	UES TECH	INIQUES ET	PHYSIQUES	
Équipemer	ts d'ad	cês à la me	F :		C
Attitude mit	11:	6 m / Alth	tude maxi :	15 m	
ENVIRON	EME	NT			
Zonages el ZNIEFF 2		tementaux p	présents sur le	este:	

#### Avis global

Atouts :

- Proxi, immédiate mer

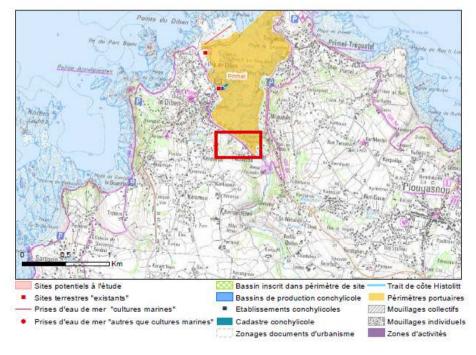
- Zonage compatible

- Proxi, act, maritimes

- Infrastructure support PE

Site bénéficiant de la proximité d'activités maritimes. Pompage possible à marée haute. Risque conflits d'usages.

Prochaines étapes et contraintes à lever : - Etude faisabilité pompage et rejet - Qualité d'eau à vérifier



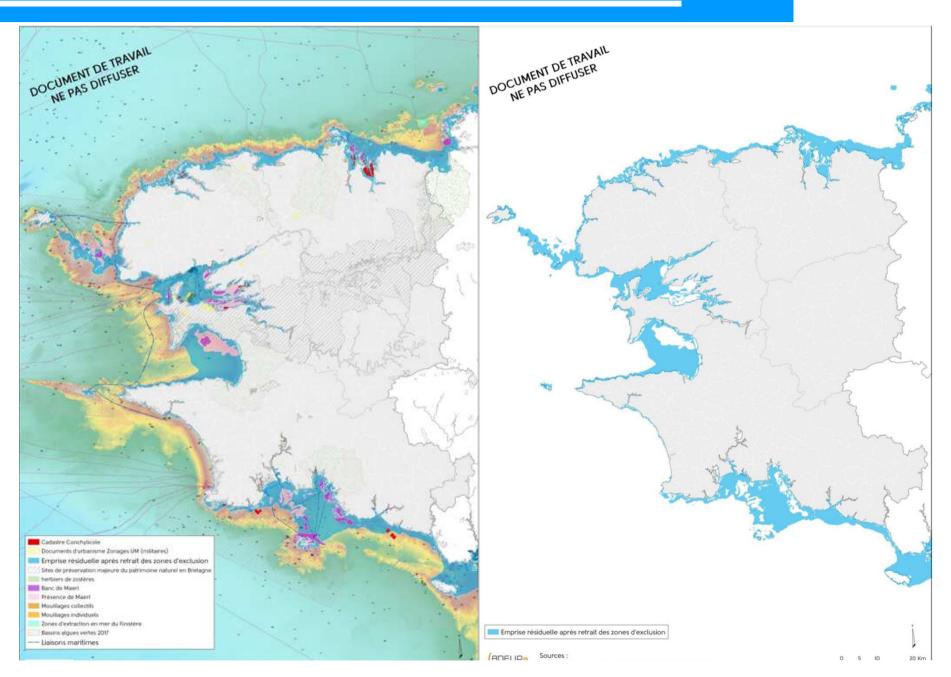


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# **POTENTIAL/OFFSHORE**





# Conclusions

### Need to PRESERVE THE EXISTING

IEF contributes to public inquiries for local urban plans

// to help to raise public and political awareness

### The challenge of arriving at CREATING NEW SITES

The 57 sites are not going to be equipped

=> current work with the professionals/local authority to select the best sites

The challenge of getting possibilities where there are no more

Next step for our project Acces2Sea

- Evaluation of the current situation in each country
- Evaluation of the interest of trasnferring
- ⇒ Fill the questionnaire on line (can be one answer by country) BEFORE september 6th
- => Each partner will have to present its current situation during the workshop (10/15 min by country)
- (I am working on the program)
- Thanks !