WP5
Pilot Sites: adaptation strategies and measures for increasing resilience to climate change

Activity 5.1:

Stakeholder engagement addressing plans and measure options

Deliverable 5.1.2

WP5 COORDINATION PLAN

Version n. 2

14/04/2020

WP5 COORDINATION PLAN

PROJECT CHANGE WE CARE

Work Package:	5
Activity:	5.1
Phase Leader:	Emilia-Romagna Region
Deliverable:	5.1.2

Version:	V3 Final	Date:	15/12/2020
Type:	Report		
Availability:	Public		
Responsible Partner:	Emilia-Romagna Region		
Editor:	Christian Marasmi		
Contributors:	Roberto Montanari		

Table of contents

0. FOREWORD

This document has been produced in the framework of the INTERREG Italy – Croatia CHANGE WE CARE Project. CHANGE WE CARE fosters concerted and coordinated climate adaptation actions at transboundary level, tested in specific and representative pilot sites, exploring climate risks faced by coastal and transitional areas contributing to a better understanding of the impact of climate variability and change on water regimes, salt intrusion, tourism, biodiversity and agro-ecosystems affecting the cooperation area. The main goal of the Project is to deliver integrated, ecosystem-based and shared planning options for different problems related to climate change (CC), together with adaptation measures for vulnerable areas, to decision makers and coastal communities. Additional

information and updates on the CHANGE WE CARE can be found at https://www.italy-croatia.eu/web/changewecare.

1.   Aims and content of the document

This document is the Coordination Plan of Work Package 5 and corresponds to the Deliverable 5.1.2 indicated in the Application Form. It is provided in order to guarantee a homogeneous approach in the different Pilot Sites and to represent a reference and support to the Partners responsible for the Pilot sites while preparing their respective Adaptation Plans to climate changes, taking stock of the main and site specific outcomes of WP3, state-of-art and trends, and of WP4, scenarios and challenges.

This document provides references on methodologies for stakeholder engagement and participatory processes realization, indications on the structure of the Adaptation Plans concerning strategies and measures for increasing resilience to climate change in the Pilot sites, together with guidelines for the organization of the workshops with stakeholders for sharing WP3 & WP4 outcomes, vision and strategies and for achieving effective contributions to the Plans formulation and implementation.

Moreover, it provides specific objectives, structure and key connections of activities, roles and responsibilities, time plan, milestones and expected deliverables, indications on monitoring activities on WP5 implementation.

This 2nd version is issued following the modification of the timeline of some Activities of WP3 and WP4 agreed with the JS (see the new timeline at page 14), the specification occurred on the focus area of the Delta Po in Veneto Region, and the delay given by the covid-19 health crisis in the beginning of 2020 in particular on the activities of WP5 related to Participation for stakeholder involvement in planning preparation and decision process.

2.   CHANGE WE CARE project and the objectives of WP5

CHANGE WE CARE fosters concerted and coordinated climate adaptation actions both at Pilot Sites and transboundary level. The project explores climate risks faced by coastal and transition areas contributing to a better understanding of the impact of climate variability and change on water regimes, salt intrusion, tourism, biodiversity and agro-ecosystems affecting the cooperation area.

The main goal is to deliver to decision makers and coastal communities in vulnerable areas, project specific Pilot Sites, integrated ecosystem-based and shared planning options together with adaptation measures for different problems related to climate change. Adaptation measures are expected to be developed in cooperation with local authorities and will be discussed with other stakeholders, compliant with ICZM and MSP principles.

The project also aims at defining a paradigm for transferring successful methods of analysis, development and implementation of adaptation measures from the pilot sites to other systems facing similar problems at the cross-border scale, by harmonizing procedures and data standards and bridging knowledge gaps for the final users.

A set on Pilot Sites, in five coastal systems, are considered encompassing a broad variability of geomorphological and ecological settings, physical drivers, and threats determining coastal vulnerability, representative of several cases in the cooperation area. Each Pilot Site is expected to be framed within the physical characterization of CC-driven modification of the Adriatic Sea basin, accounting for the interconnections set by processes acting over a larger scale, such as sea level rise, current circulation, erosion, rainfall and severe events, and affecting the local areas. The approach leading to the enhancing of adaptation capacity in the study area is based on the following steps:

1)   assessment of the present condition and recent trends in the pilot sites (WP3);
2)   the analysis of the main forcing acting on the coastal system and their expected evolution in CC scenarios (WP4);
3)   development of CC Adaptation and action Plans, aiming at enhancing the preparedness with

respect to CC impacts, increasing adaptation capacity and resilience in the Pilot sites, valuable throughout the whole cooperation area (WP5).

Primary outcome of the project is to convey the up-to-date climate knowledge to policy makers, territorial planners, nature protection authorities, regional and local development agencies, territorial authorities etc. The key project results include:

i) a broader, more accessible knowledge base available to scientists, policy makers and technical and administrative operators in the cooperation area;
ii) a more accurate prognostic evaluation of the evolution of coastal and transitional systems under identified climate change scenarios, together with the development of response options shared with the stakeholders;
iii) citizen awareness raising about climate change impacts and possible adaptation measures planning;
iv) shared climate change adaptation planning criteria extended from the experiences in the five paradigmatic Pilot Sites towards the whole Program area;
v) contribution to the Specific Objective 2.1 "Improve the climate change monitoring and planning of adaptation measures tackling specific effects in the cooperation area".

WP5 main objective is the preparation of climate change Adaptation Plans for each Pilot Site containing the assessment of present state and of foreseen scenarios, the information on measures and intervention priorities, monitoring strategies and jurisdictional references.

These Plans represent the instruments indicating the vision, strategies and actions/measures on how to deal with climate change in the specific Pilots, but also a reference for methodology and experience to be transferred in different contexts of the whole Cooperation Area.

The Planning options presented will be the result of participated processes involving local authorities and stakeholders, whose inputs will be included in the Plans. The Adaptation Plans will also include actions/interventions (where appropriate) indicating the timeline and the financial strategy for the implementation of the envisaged activities and Monitoring Plans (taking stock also of WP4 indications) for observing and ensuring the durability of the Project outcomes and of the implementation of the Plan.

3.   WP5 outputs and contribution to Program results

Based on WP3 and WP4 outcomes, data, models and assessment on different aspects tackled, WP5 develops specific instruments and measures for the Pilot Sites, addressing local environmental and socio-economic priorities. Adaptation/management Plans will be formulated, with the contribution of local stakeholders, following the principles of the ICZM and MSP, in order to increase the system resilience to CC impacts.

In each Pilot Site adaptive methodology studies is carried out addressing the key socioeconomic aspects of anthropic activities and defining the most important ecosystem services. The major physical drivers of the environmental response to CC (e.g. relative sea level rise, changes in storminess and sediment supply, coastal erosion, salt-water intrusion) and their ecological implications will be explored, as well as spatial distribution and intensity of different human activities.

The main outputs of WP5 are the of Adaptation/management Plans for the Pilot Sites, that contribute to the Program Result **improving the sea-coast-inland systems resilience to climate change impacts throughout monitoring and planning of adaptation measures tackling specific effects,** valuable for

pilots sites and in general for the whole cooperation area.

The Adaptation/management Plans for the Pilot Sites are briefly outlined in the Application Form as follows.

Output 5.2

Indicative title: Adaptation/management Plan for Neretva River Delta

Partner responsible: PIDNC

Brief description: The Plan is expected to contain measures and intervention priorities for the pilot site. It will be introduced by a description of the area and the main elements of hazard related to climate change, with a statement of regional authority's commitment to this topic. The main results of WP3 and WP4 activities for Neretva River Delta will be summarized outlining present state and expected impacts due to climate change. On this base, adaptation strategies will be indicated, with special reference to freshwater and sediment management and anthropic uses of the site, together with recommendations for monitoring and assessment. An action plan will be enclosed identifying time perspective and responsible managers for the envisaged measures.

Start month: 09-2019   **Ending month:** 11-2021

Output 5.3

Indicative title: Adaptation plan / design of interventions / pilot interventions on Jadro River

Partner responsible: RERA

Brief description: This Plan is expected to provide local governance with a decision tool especially addressing environmental management of the area. This document will present the main results of the assessment (WP3) and prediction (WP4) activities, together with the identification of the main adverse impacts of climate change and priorities for adaptation, remediation and risk management and the recommendations for environmental assessment and monitoring. The document will contain an Action Plan identifying the actions to be pursued, the subjects in charge for their implementation and the timeline.

Start month: 09-2019   **Ending month:** 11-2021

Output 5.4

Indicative title: Adaptation plan / design of pilot interventions on Nature Park Vransko Jezero

Partner responsible: VRANPARK

Brief description: Based on the assessment of the present state and expected changes and on the outcomes of the decisional process, this document will provide a response strategy for the Vran Park area, addressing: i) Adaptive water management, for the preservation of the environmental flow; ii) Agriculture land use transfer to polyculture, perennial cultures resistant to salt intrusion, flooding and drought, and grazing; iii) Subsides from the Agri-environmental Scheme in the light of climate change and wetland habitat preservation. Operational aspects, responsible subjects and timeline for action implementation will be presented in the Action Plan enclosed in the document.

Start month: 09-2019   **Ending month:** 11-2021

Output 5.5

Indicative title: Adaptation plan / design of pilot interventions on Banco di Mula di Muggia

Partner responsible: RAFVG

Brief description: This Plan is expected to contain all the information concerning measures and intervention priorities for the study site, including the action plan, the assessment and monitoring strategies, and the jurisdictional references. The document will also provide an adaptive management plan for the geomorphological conservation/restoration of the sand bank and its back barrier area. Principles will be shared in connection with plans of similar environments, as the Neretva and Po Delta, in a perspective of habitat and biodiversity preservation (especially marine birds).

Start month: 09-2019   **Ending month:** 11-2021

Output 5.6

Indicative title: Adaptation plan / design of pilot interventions on Po River Delta

Partner responsible: POPARK

Brief description: This plan will contain information on measures and intervention priorities for freshwater, wetland habitat preservation and sediment management, including Action Plans, the assessment and monitoring strategies and the jurisdictional references. The document will also provide an Adaptive management plan for the geomorphological conservation/restoration of coastal wetlands, lagoons and barrier island system. In conceptual connection with the approaches implemented on Neretva Delta and Banco di Mula di Muggia, this will address the protection of geomorphological variability over large areas of the delta region, encompassing the relevant features of the deltaic environment in a perspective of habitat and biodiversity preservation.

The identification of specific sites on which to focus for the Adaptation plans, due to the complexity of the Po Delta, encompasses different territorial competences between Emilia-Romagna and Veneto region and between respective regional Park Managing Bodies, including different responsibility for Adaption Plans jurisdictional framework and implementation. Thus, however making analyses on the Po Delta as a whole in WP3 and WP4, the activities of WP5 will be developed in deep on two focus areas, Sacca del Canarin and Sacca di Goro, considered as paradigmatic for the whole Po Delta.

Start month: 09-2019   **Ending month:** 11-2021

Beyond the specific contents expected for each Pilot site, due to peculiar site characteristics and issues to be tackled, the Adaptation Plans will be organized according with a given structure as defined in the following **chapter 4**.

Furthermore, the process leading to the preparation of the Adaptation/management Plan will be strictly connected with the definition and fine-tuning of a common methodology for stakeholder engagement and decision making (**see chapter 8**), that will also provide a most relevant legacy for coordinated actions in the cooperation space.

4. Overall structures of Adaptation Plans for the Pilot Sites

The main output for this WP is a set of Adaptation/management Plans for the Pilot Sites, where the shared knowledge base on the present and expected dynamics of coastal systems in the cooperation area and Pilot sites, built in WP3 and WP4, is conveyed.

The definition of such Plans will be pursued by means of participatory processes determined in order to get all information available, sharing and consensus to make the Plan effectively implementable in a collaborative way by all subjects and decision makers involved.

Although conformed to the local environmental and socio-economical needs, the Adaptation/ management Plans will contain:

1) A statement of the Pilot Sites Managing Authorities' commitment to address Climate Change, outlining the jurisdictional framework in which the envisaged interventions and policies are set (even if the Managing Authority corresponds to the project Partner or not);

2) An overall description of the Pilot Site state-of-art and the main results of the assessment of the present state and trends (WP3 assessments) including the related uncertainties and/or the needs for additional information or knowledge system further implementation;

3) The description of expected scenarios related to specific physical and biological aspects (coming from WP4 analysis) for the Pilot Site, including the related uncertainties, with the description of the environmental and socio-economic implications of the impacts of climate change;

4) The identification of a shared vision, an overall strategy, intervention options and priorities, also in the light of existing local, regional, national or European instruments, adaptation measures and plans. The main steps of the decisional process undertaken should also be mentioned;

5) An Action Plan identifying the actions to be implemented, time framework, appointed subjects for their execution, the identified financing channels or a possible financial strategy;

6) A Monitoring plan for a follow-up assessment of the foreseen Action Plan outcomes, based on the common strategies defined in WP4.

Aiming at tackling the effects of climate change, the Adaptation/management Plans for the Pilot sites will be designed on a decadal perspective and supported by competent Authorities committed in promoting the implementation of the Plans. In the case of Po Delta, where different Specific Sites are individuated to focus on, given the interregional competences referred to the different SS, the Adaptation Plan will be partly composed by PP2-POPARK for the one individuated in Emilia-Romagna (Sacca di Goro) and by PP3-RVENETO for the one individuated in the Veneto regional territory (Sacca del Canarin)

Besides providing a solid knowledge base for an aware decision-making, the legacy of WP3 and WP4 should also allow to pre-emptively take into account possible adjustments of the identified planning options, taking account uncertainty assessment, warranting the Plans flexibility as well as their full efficiency throughout the whole duration of their time span.

The establishment of participatory processes and local Coordination Boards with transparent and common decision practices among a heterogeneous community of stakeholders, scientists, policy makers, and technical/administrative operators, have the aim to foster the consolidation and improvement of these procedures for the implementation of the Pilot Site Adaptation Plan as well as for upcoming planning actions at different scales in the cooperation area and beyond.

It is appropriate to call here the process and the Principles of integrated Coastal Zone Management (ICZM), necessary to operate with a unitary and integrated vision of the various anthropic and natural elements that interact on the coastal and transitional systems, with particular emphasis on tackling the problem of adaptation to climate change.

The ICZM Protocol for the Mediterranean (of the Barcelona Convention) establishes an approach, principles and "indications behavior" for public administrations, economic actors, businesses, stakeholders, citizens, in order to achieve a good degree of sustainability development of coastal areas through an integrated planning process.

"Sustainable" is a much used, but rarely defined term. In the case of the Mediterranean a sustainable coast is one that is:

Resilient - resilient to future uncertainties of climate change, including rising sea levels, warming and drought; resilient to climate variability such as extreme storms, floods, waves, etc.; resilient to earthquakes and erosion; resilient to negative impacts of human processes, including the pressure of tourism and urban development on the coast.

Productive - productive financially in traditional, modern and future economic sectors; supporting the economic aspirations of the coastal community; providing a competitive asset to the local economy, high in natural and economic values - increasing GDP and alleviating poverty.

Diverse - ecologically diverse: a rich mosaic of marine and terrestrial ecosystems; diverse rural and urban landscapes, old and new; a diverse economy - providing a diverse, but

Figure 1 – Scheme of the ICZM process
http://www.coastalwiki.org/wiki/ICZM_Process_diagram

distinctly Mediterranean experience; a diverse society – providing conditions for a rich mixture of social groups, open to the outside world, etc.

Distinctive - retaining the cultural distinctiveness of coastal areas, including their architecture, customs and landscapes, recognizing the Mediterranean as the "cradle of civilization" - providing a distinctive marketing image on which to attract investment.
Attractive - retaining the attractiveness of the coast, not only to visitors but also to investors and local people to promote a self-sustaining cycle of sustainable growth.

Healthy - free from pollution from land and marine-based sources, with clean fresh and marine waters and the air - providing a healthy environment for people, natural resources such as fisheries, and wildlife.

The above should be used as a checklist to help set up also an Adaptation plan, strategy or program, for the Pilot Site. These criteria should be addressed in a balanced way, in a way that maximizes mutual benefits and minimizes the risk of detrimental consequences.
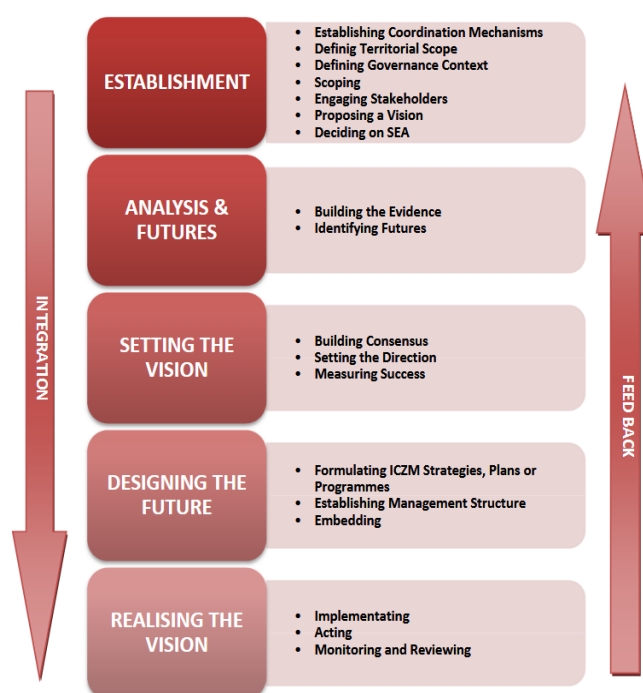
5.   WP5 Road Map: structure, Activities and Deliverables

WP5 is structured in 6 Activities, from 5.1 to 5.6, of which from 5.2 to 5.6 are related to Pilot Sites as in Table 1. PP1-RER is the WP Leader and coordinates the activities of this phase of the project.

WP/Activity	Title (as in the Application Form)	Partner responsible	Partners involved (with various roles)
WP5	Pilot Sites: adaptation strategies and measures for increasing resilience to climate change	RER Roberto Montanari	ISMAR, RVENETO, PIDNC, RERA, VRANPARK, RAFVG, POPARK, ISPRA, IOF, IZOR
Task 5.1	Stakeholder engagement addressing plans and measure options	RER Christian Marasmi	RERA, PIDNC, VRANPARK, RAFVG, POPARK, RVENETO, ISMAR, ISPRA, IOF, IZOR
Task 5.2	Adaptation Plan and design of interventions on Neretva River	PIDNC Margarita Polzer	VRANPARK, RERA, RAFVG, POPARK, RVENETO, ISMAR, ISPRA, IOF, IZOR
Task 5.3	Adaptation Plan, design of interventions, pilot interventions on Jadro River	RERA Mili Novac	ISMAR, ISPRA, VRANPARK, PIDNC, IOF, IZOR
Task 5.4	Adaptation Plan, design of interventions, pilot interventions on Nature Park Vransko Jezero	VRANPARK Norma Fressel	ISMAR, ISPRA, PIDNC, RERA, IOF, IZOR
Task 5.5	Adaptation Plan, design of interventions, pilot interventions on Banco di Mula di Muggia	RAFVG Antonio Bratus	ISMAR, ISPRA
Task 5.6	Adaptation Plan, design of interventions, pilot interventions on Po River Delta	POPARK Maria Pia Pagliarusco	RER, RVENETO, ISPRA, ISMAR, AdDPo (river Po District Authority, as Observer)

Table 1 – *Activities of WP5, with role and reference person of CWC partners*

The driving elements that pinpoint the **roadmap of WP5 implementation** are:
1. **Stakeholder mapping and analysis**, months 06-08 2019: all Partners responsible for Pilot Sites, tasks 5.2 to 5.6, are expected to identify all relevant actors and stakeholders for the Pilot Site, in relation also to the issues to be tackled;
2. **Design of the Participatory Process**, months 09/2019 – 05/2020: all Partners responsible for PS, possibly with the support of an expert facilitator (external or internal), are expected to design /set up a dedicated participatory process in relation to the issues to be tackled, the nature and characteristics of the stakeholders, main local actors, citizens and associations;
3. **Implementation of the Participatory Process,** months 09/2020 – 02/2021: all Partners responsible for PS, possibly with the support of an expert facilitator (external or internal), are expected to implement the designed process along the 6 months, including 3 Participatory Workshops in presence or via online support as Webinars, or other ways and tools as indicated in the following pages, and all other means designed/foreseen (as local coordination meetings, public meetings, online virtual squares, blogs, online consultations tools in general, etc.) following the developments of WP3 and WP4 and their specific outcomes for the Pilot Sites;
4. **Completion of the Adaptation Plans for the Pilot Sites,** months 02/2020 – 05/2021: starting from a "preliminary document" prepared by each Partner responsible for the PS taking into account the findings of WP3, to feed the start of the Participatory Process, the Adaptation Plans will be

develop taking into account further outcomes of WP3, WP4 and of the Participatory process itself, including shared vision, objectives, measures/ actions/ interventions, possible resources/financing, roles and commitments for its implementation beyond the end of CWC project.

5.1 Stakeholder mapping consists in collecting information on all possible subjects involved (reference people) and classifying them by type, policy/decision maker, technical structure or academic body, beneficiary, citizen committee, etc. and relevance in relation to the issues to be tackled. In order to make a comprehensive frame, basic information should be at least the following:

- ☐ Individual professional identification and contacts /
- ☐ Geographic Location /
- ☐ Institution, organization, body name/
- ☐ Type of body (public, private, local, national, international)/
- ☐ Function of the person/
- ☐ Domain of expertise/
- ☐ Area, sector, field of intervention/

5.2 Design of the Participatory Process is based on stakeholders involved and issues to be tackled and can take elements from indications of **chapter 8.** It should be supported by an expert mediator/facilitator, the same that will support the process and conduct the Participatory Workshops.

5.3 Participatory workshops shall be organized by each Partner responsible for PS, depending on their territorial competence. Almost 3 Participatory Workshop for each site on the following topics:
1. **Climate change impacts on the Pilot Site**, at month 13, **February 2020**
2. **Scenarios for the Pilot site and adaptation measures**, at month 18, **June 2020** (anticipated in respect to AF indication month 20, that would it be August 2020 given the project start on 01 2019);
3. **Planning options for the Pilot Site**, at month 23, November 2020 (anticipated in respect to AF indication month 25, that would it be January 2021).

In the case of Po Delta, where different Specific Sites are individuated to focus on, given the interregional competences referred to the different SS, they shall be organized by PP2-POPARK for the one individuated in Emilia-Romagna (Sacca di Goro) and by PP3-RVENETO for the one individuated in the Veneto regional territory (Sacca del Canarin).

5.4 A Preliminary Document to feed appropriately the start of the Participatory Process, should be prepared in advance to PP start by the Partner responsible and by other competent Authorities directly involved by territorial competence and institutional mission, and it should contain at least:

- ✓ **Pilot Site description:** what are the conditions now? giving a "picture" on the situation and the issues to be tackled, considering the outcomes of WP3 assessments on the Pilot Site the direct experience of the other Authorities;
- ✓ **Vision for the Pilot Site**: which future we would like for this area? giving possible "pictures" of the area in the future, according with overall planning and functions of the area, protection and valorization policies, local community's needs, etc.;
- ✓ **Strategies and objectives:** indicating strategies and measures/actions for achieving those objectives deriving from that vision for the area, to be shared and better specified in the Participatory Process;
- ✓ **Possible measure, tools, actions:** what we suggest doing in this frame? draft ideas in line with proposed strategies and objectives, to achieve improvements of protection levels and valorization for the area, to be shared and better specified in the Participatory Process.

The aim of the preliminary document is to bring concrete inputs to the Participatory Process, to avoid starting "from a scratch", stimulating reactions, sharing vision and objectives, and then building on it together for preparing the Adaptation Plan for the Pilot site, with stakeholders and local communities involved.

Deliverables expected in WP5 are indicated in the following table, with some minor changes due to opportunities given by the project start in January 2019, as explained above.

Deliverable Code	Title	Responsible Partner	Delivery Month
5.1.1	**Stakeholder mapping**: data base containing the list of identified stakeholders in each Pilot Site	RER	M06 (06-2019)
5.1.2	**WP5 Coordination Plan**: reference document on organizational and content aspects implementation	RER	M06 (06-2019)
5.1.3	**3 workshops** organized in each Pilot Site: w1) Climate change impacts on the Pilot Site; w2) Scenarios and adaptation options; w3) Planning options for the Pilot site.	RER + all PilotS responsible	w1- M21 (09-2020) w2 - M23 (11-2020) w3- M32 (07-2021)
5.1.4	**Participatory process outcomes**: framework/ collection of indications of participatory processes transferred in the Pilot Sites Adaptation Plans.	RER	M33 (09-2021)
5.2.1	**Neretva Delta Decision Process Final Report**: summary of the outcomes of the participatory phase.	PIDNC	M32 (08-2021)
5.2.2	**Data platform and GIS database**: current status and predictions and possible climate change impacts on the Pilot site	PIDNC	M30 (06-2021)
5.2.3	**Adaptation / management Plan for Neretva River Delta**	PIDNC	M35 (11-2021)
5.3.1	**Jadro River Decision Process Final Report**: summary of the outcomes of the participatory phase.	RERA	M32 (08-2021)
5.3.2	**Adaptation/management plan for Jadro River**	RERA	M35 (11-2021)
5.4.1	**Vransko Jezero Decision Process Final Report**: summary of the outcomes of the participatory phase.	VRANPARK	M32 (08-2021)
5.4.2	**Adaptation/management Plan for Vransko Jezero**	VRANPARK	M35 (11-2021)
5.5.1	**Banco di Mula di Muggia Decision Process Final Report:** summary of the outcomes of the partic.phase	RAFVG	M32 (08-2021)
5.5.2	**Adaptation Plan for Banco di Mula di Muggia**	RAFVG	M35 (11-2021)
5.6.1	**Po River Delta Decision Process Final Report:** summary of the outcomes of the participatory phase	POPARK	M32 (08-2021)
5.6.2	**Adaptation plan for Po River Delta focus areas: Sacca del Canarin and Sacca di Goro,**	POPARK	M35 (11-2021)

*Table 2 – List of Deliverables by tasks, responsible partners and month of delivery. Deliverables 5.6.1 and 5.6.2 imply a co-responsibility due to territorial competences as indicated in **chapters 4 and 5**.*

6. Timetable and main Connections between Activities

The core of WP5 is the preparation of the Adaptation Plans for the Pilot Sites, given a state-of-the-art assessment on the main issues concerned with climate change (WP3 outcomes) and analysis of future scenarios under climate change effects and trends for the Pilot Sites (WP4 outcomes). The Pilot Sites selected by institutional Partners (Nuts II & III) strongly committed with those areas by territorial competence and institutional mission, are located as follows:

1. Neretva River Delta Natural Protected Area
2. Jadro River and Kastela Bay
3. Vran Lake Natural Protected Area
4. Banco di Mula di Muggia Natural Protected Area
5. Po River Delta Protected Area

More details on the Pilot sites are reported in Appendix 1

The development of the Adaptation Plans, also throughout Participatory Processes, and the decision process itself, will be in parallel with the development of activities of WP3 and WP4.
Particular connections, feeding WP5 development, are expected by quite all Tasks of the state assessment (WP3) and scenario analysis phases (WP4), following the 6 steps below indicated.

WP5 Tasks interested in WP3 & WP4 outcomes		WP3 and WP4 Tasks outcomes	Month of delivery by WP3 & WP4
5.1	Design participatory process and preliminary document	3.1, 3.2, 3.4 - Hydro, Geomorph, Habitat 3.3 - Sediments	M16 (04-2020) M22 (10-2020)
5.1	**1st Participatory Workshop /Webinar** (on climate change impacts on the Pilot Site)	3.5, 3.6 - Assessment of relations and knowledge gaps filling strategies 4.1 evolution of hydro physical assets	M18 (06-2020) M16 (04-2020)
5.2-5.6; 5.1	**Adaptation Plans** progress & **2nd Participatory Workshop/ Webinar** preparation	4.2 evolution of morphology at multi-decade scale (RAFVG)	M22 (10-2020)
5.2-5.6; 5.1	**Adaptation Plans** progress & **3rd Participatory Workshop/ Webinar** preparation	4.3 evolution of coastal & transitional eco-system (ISPRA)	M23 (02-2021)
5.2-5.6;	**Adaptation Plans** in progress	4.4 definition of common Monitoring and Observation system (IOF)	M21 (03-2021)
5.1	**3rd Participatory Workshop/ Webinar**	4.5 Training (2 steps) on use and treatment of observation data & numerical model fields (CNR)	M22 (04-2021) M23 (05-2021)

Table 3 – Connections between WP3/WP4 activities outcomes and WP5 activities

The timetable of WP5 (Figure 2, following) visualizes the arrangement and development of activities and their connections.

Figure 2 - Overall timetable of CHANGE WE CARE showing details of WP5, timeline changes in WP3 and WP4 due to delays of different nature, extensions in `RED` already agreed with JS the past year, and further timeline changes in WP5 (in `BLU`) about participatory workshops/webinars organization, due by the health crisis covid19 occurred in beginning 2020.

	WARNING: THIS DOCUMENT IS ONLY MEANT TO PROVIDE SUPPORT TO WORK PLANNING. PLEASE REFER TO THE AF FOR OFFICIAL INFORMATION	Proj start 01/01/2019	Legend:
	CHANGE WE CARE		O - Public event; **X** - Project meeting, d - Deliverable/Deadline
		WPL /AR	INVOLVED PARTNERS
PROJECT TASKS			
WP0	**Project preparation**	*CNR*	
WP 1	**Project Management and coordination of activities**	*CNR*	
Act. 1.1	Start-up activities	CNR	All Partners
Act. 1.2	Day to day project management, coordination and internal communcation	CNR	All Partners
Act. 1.3	Steering and monitoring of the project implementation	CNR	All Partners
Act. 1.4	Financial management	CNR	All Partners
WP 2	**Communication activities**	*RERA*	
Act. 2.1	Start-up activities	RERA	All Partners
Act. 2.2	Promotional and dissemination material	RERA	CNR + All Partners
Act. 2.3	Local, national and international events	RERA	CNR + All Partners
Act. 2.4	Networking activities	RERA	All Partners
WP 3	**Improving the knowledge base: status and recent trends of coastal and transitional system processes**	*IOF*	
Act. 3.1	Hydrological, thermo-haline physical and meteo-marine climate setting	IOF	RDV,UNIZAG, CNR, RAFVG, RER
Act. 3.2	Geological and geomorphological setting and recent history	RDV	RER, PIDNC, IOF, RAFVG, UNIZAG
Act. 3.3	Characterization of water and sediment fluxes from the mainland	VRANPARK	RER, RDV, UNIZAG, RAFVG, POPARK
Act. 3.4	Habitats and biodiversity mapping and aquatic ecological quality elements: status and trends	ISPRA	POPARK, PIDNC, VRANPARK, UNIZAG, IOF
Act. 3.5	Relationship between hydro-morphological factors and intertidal and transitional habitats	CNR	ISPRA, VRANPARK, POPARK, PIDNC, UNIZAG
Act. 3.6	Integrated observational and modelling strategies for filling identified knowledge gaps	UNIZAG	CNR, IOF, ISPRA, VRANPARK, POPARK, PIDNC
WP 4	**Evolution dynamics in Pilot Sites and Northern/Central Adriatic under climate change**	*ISPRA*	
Act. 4.1	Evolution of key hydrological and physical quantities and fluxes.	CNR	RERA, RER, IOF, UNIZAG
Act. 4.2	Morphological evolution at the multi-decadal scale	RAFVG	RER, UNIZAG, ISPRA, VRANPARK, IOF, PIDNC
Act. 4.3	Evolution of coastal and transitional aquatic ecosystems at the multidecadal scale	ISPRA	POPARK, VRANPARK, UNIZAG, PIDNC
Act. 4.4	Definition of common monitoring and observation system on the identified significant parameters	IOF	CNR, UNIZAG, ISPRA, RDV, PIDNC, POPARK
Act. 4.5	Training activities on use and treatment of observational data and numerical model fields	CNR	All Partners
WP 5	**Pilot Sites: adaptation strategies and measures for increasing resilience to climate change**	*RER*	
Act. 5.1	Stakeholder engagement addressing plans and measure options	RER	PIDNC, RERA, VRANPARK, RAFVG, POPARK
Act. 5.2	Adaptation plan - design of interventions interventions on Neretva River	PIDNC	All interested Partners
Act. 5.3	Adaptation plan / design of interventions / pilot interventions on Jadro River	RERA	All interested Partners
Act. 5.4	Adaptation plan / design of interventions / pilot interventions on Nature Park Vransko Jezero	VRANPARK	All interested Partners
Act. 5.5	Adaptation plan / design of interventions / pilot interventions on Banco di Mula di Muggia	RAFVG	All interested Partners
Act. 5.6	Adaptation plan / design of interventions / pilot interventions on Po River Delta	POPARK	All interested Partners

The right portion shows a Gantt chart with "Month - *Date(auto)*" spanning months 1 to 36 (01/19 through 12/21), with deliverable (d), public event (O) and project meeting (X) markers across the activity timelines.

7. Indication on training activities on the use of data & models

The "*Training on the use of observational data and numerical model fields*", Activity 4.5 programmed for the months of October and November 2020, aims at maximizing the outreach of the Project activities in terms of knowledge base and new approaches and methodologies for the use of observational and numerical model data in coastal and transitional environments.

To this purpose, CNR-ISMAR will organize two full-day training events respectively in Italy (Venice) and in Croatia (Split), specifically addressed to partners, stakeholders, and administrative and technical operators in the cooperation area whose involvement in the project activity will be previously identified.

Nonetheless, the accessibility will be guaranteed free of charge, on-line if not physically, to general public in order to enhance the dissemination of the knowhow achieved.

Special emphasis will be dedicated to the advantages and possibilities provided by data interoperability, adopted as a guiding principle throughout the whole Project activities.

The two training events will have similar structure and contents, with details to be defined during the Project implementation based on the requests and feedbacks coming from stakeholders and coastal operators. As a general overview, the first draft schedule will include:

- Overview on Python programming for data analysis: basic concepts and dedicated modules as Pandas, Scypy, etc. (Python is a high-level, object-oriented programming language, suitable, among other uses, to develop distributed applications, scripting, numerical computation and system testing);

- Introduction to the most common data formats for meteo-oceanic quantities (netcdf, grib) and tools for their visualization and management (e.g. ncview, panoply, cdo, nco, etc.);

- Interdisciplinary repositories for marine and coastal zones (e.g. CMEMS, Emodnet, EUMETSAT-CODA);

- Presentation of the data produced and made available within CHANGE WE CARE, their formats and management;

- Analysis of specific applications from study areas in the Country hosting the training.

Hands-on sessions will be proposed in order to allow the attendees to get acquainted with the contents of the training. In order to allow the attendees to carry out the hands-on session on their own PCs avoiding possible compatibility issues, a virtual machine with the working environment will be made available before the event together with indications for its installation.

The training material, including the powerpoint presentations and a short manual for data management, will also be made publicly available in the Project OwnCloud.

8. Indications for setting-up and run a Participatory Process

8.1 Definition – A participatory process is a way to involve citizens, stakeholders, and communities in general in defining plans and taking decisions that affect them, making it easier to implement since they are defined together, in a participated way.

For this reason, the process must always "be linked" to a well-identified need, because if it really serves to achieve a result, defining it through an active participation of stakeholders it means that the result will most likely be "used" and that the process will have an impact.

Participation works where it represents the answer to a real need / problem that affects not only those who promote the process, but also potential participants.

Furthermore, it is important that there is no pre-established or 'pre-packaged' solution to resolve the issue, nor a preference for one option over another: there should be a genuine willingness to open up to dialogue on the object identified. This does not mean delegating the responsibility of a decision to the participants, but taking their demands into real consideration and, in the event of a decision that is different from them, being prepared to motivate this choice in a transparent manner.

8.2 Cases of Participatory Processes – There are basically two cases in which it makes sense to start a participatory process:

A) When the contribution of other subjects is required:

A.1) In the case of co-produced Policy: it is necessary that the recipients of a specific policy, in addition to putting their different points of view and interests on the table, are actually involved in the implementation of the process; also contributing effectively to the solution of the problems. To this end, it is essential to correlate the specific skills of the sectors, and / or actors involved. The objective will be achieved if we can achieve that there is no distinction, but rather cooperation and integration, between decision makers and recipients.

A.2) In the absence of cognitive elements: in cases where you do not have certain cognitive resources, or you only have partial information and to proceed, it is necessary to involve other (technical) subjects able to integrate them with their contribution.

B) In the presence of conflict:

Hardly a political choice will not dissatisfy someone: citizen, group or stakeholder that is. The participatory process aims, in fact, to resolve conflicts and disputes. Conflicts related to the theme (to the object, or to the context) concerning the participatory process can be managed according to two distinct modes.

1. To avoid interferences that could compromise the work, which is thus carried out with discretion and discretion. However, this choice often ends up by exacerbating the conflict, as people sooner or later realize that administrators have made crucial decisions on issues that concern them without consulting them.

2. On the contrary, provoke in advance the reactions of the stakeholders and potential opponents through an early communication, which arouses interest around the project (precisely because it puts them in front of the task of having to argue and question their positions and problems that are at the root of them), can induce them to think about the problem, and not only on a specific solution, and then push them to engage in the formulation of new and innovative ideas and proposals.

8.3 Benefits that can be expected – The Participatory Processes can:

- improve the quality of public policies, closer to the real needs of all those involved, thanks to their ideas and suggestions, through which a more complete knowledge of a given reality or of a given territory can be achieved;

- empowering and motivating citizens, and local actors/stakeholders, in implementing the choices taken collectively, particularly in the case of policies that need to be co-produced;
- activate processes of active citizenship able to strengthen social cohesion and a sense of belonging;
- managing and reducing conflicts, increasing trust in institutions and countering the lack of legitimacy and consensus;
- Increase the level of transparency and openness of the work of the Administration promoting it.

8.4 Phase of the policy in which the process is inserted and the level of participation – In the start of a Participatory Process it is necessary that the Administration establishes explicitly the objectives and conditions within which the process takes place, stipulating a real "Participatory Pact" with the subjects involved: in order to avoid misunderstandings and disappointments from them.

A process of participation must fit properly within the institutional process envisaged by the public policy of reference.

Level of participation	Description
INFORMATION	The promoter of the process provides information on a project (or a policy) implemented or which it intends to carry out. **All decisions have already been made.**
CONSULTATION	The promoter of the process asks for feedback from the participants on a project (or a policy) that it intends to carry out. In this way they have the **limited opportunity to influence certain aspects of the decision.**
PARTICIPATED DESIGN	The process promoter analyzes problems, defines strategies and designs solutions together with the participants. Decisions are made on the basis of the skills, resources and responsibilities of both the promoter and participant bodies, or in partnership.
EMPOWERMENT	The participants are able to autonomously manage proposals and projects on which they are looking for a confrontation with the public body: they are an active part of the decision-making process.

Table 4 – main examples of participation levels

The "preliminary document" as defined in page 10, mainly represents a first input to stimulate reactions, ideas and proposals by the participants. This should be clearly communicated at the start, in order to make participants aware that no final decisions are already taken.

8.5 Methodology, techniques and tools overview – The methodology for an appropriate Participatory process is articulated in 6 main steps.

8.5.1. Context Analysis

It is aimed at acquiring detailed information on the elements of strength and criticality present in the territory and in the organizational context in which to operate. It can include:

- **profile of the territory/community:** a description of the socio-demographic, economic and cultural aspects, which highlights the resources present, with the aim of identifying suitable ways to involve citizens and stakeholders.
- **previous similar experience**: description of any participatory processes initiated previously, also by other subjects, on the subject matter of the process.
- **strength and weakness**: description of the strengths and any critical issues present in the community or in the organization in which the process takes place (both in terms of qualified personnel, and in regulatory and legislative terms).

8.5.2. Stakeholder involvement and partnership creation

All people interested or potentially interested in the process, and in its effects, have resources to put in place to contribute positively to the process and represent a set of relevant points of view.

Among the various selection methods there are three major categories:

1. the "**open door**" method, which consists in publicizing the event and letting people decide freely whether to participate or not, presents the typical critical aspects of self-selection;

2. the "**targeted selection**" through mapping of the stakeholders, i.e. all the subjects affected by the possible impacts of the process in order to identify all the interests and points of view at stake.

3. the "**random selection**" of a sample of the reference population. If the sample extracted by the participants is quite numerous, then the criterion of legitimation of this modality is that of the effective statistical-sociological representativeness of the population.

    Sometimes other subjects can be involved as strategic partners, for example associations or bodies / institutions.

Substantially in project CWC case, the stakeholder involvement can follow mainly the "targeted selection" method, while for moments of wider confrontations the "open door" approach should be followed.

8.5.3. Working group

When the management of the process foresees the involvement of numerous subjects, perhaps belonging to different bodies, it may be useful to establish and formalize a working group whose main objective is to share the definition of strategies and organizational / management methods of the participatory process.

8.5.4. Defining goals and activities

To facilitate this task, it may be useful to resume the concept of "SMART objective" developed in the project management area.

Each objective identified for the process must be: Specific; Measurable; Accessible; Relevant; Temporally defined. To carry out this activity we propose a matrix in which for each identified objective it is necessary to establish **expected results and activities to be carried out**. Before starting with the actual operational phase, it may be appropriate to make a "self-analysis" with respect to the correct process setup.

	Description	Indicators	Verification sources
Aims	……………………..	……………………..	……………………..
Expected results	……………………..	……………………..	……………………..
Activities to achieve	……………………..	……………………..	……………………..

Table 5 – matrix to organize, identify/describe, expected results and activities to reach specific aims/objectives

8.5.5. Choice of techniques and tools

In general, it should be noted that any participatory process, to ensure the widest possible involvement, should provide for the integration of forms of participation "**in presence**" and forms of "**online**" participation.

When the processes are carried out in a structured manner, through targeted techniques and tools,

chosen in relation to the needs of the subjects and the specifics of the territory on which they operate, the presence of expert staff able to manage and facilitate them becomes indispensable.

The **use of professional mediators / facilitators** is functional, on the one hand, to the promotion of active listening and interaction between the various subjects; and, on the other hand, it is useful to contain, if not to avoid, negative phenomena that frequently characterize group dynamics. Among the tasks of the facilitator must also include the ability to stimulate the parties involved in the development and sharing of new ideas and perspectives.

Different techniques and tools are available. The main ones can be considered the following, briefly organized in fiches.

Open Space Technology

Characteristics and method of execution
Open Space Technology (OST) is an event format used in meetings of 5 to 2,000 people, invented by Harrison Owen in 1985. Participants create the agenda for themselves and facilitators lead and record the resulting discussions. It is a methodology that facilitates the circulation of ideas, experiences and knowledge through the spontaneous discussion of the participants. A facilitator introduces the topic, defines the times and spaces and opens and concludes the discussion, while the participants, arranged in a wide circle, freely propose the work program by choosing the topics to be discussed in the subgroups that are formed based on the interest of each one.

When would you use it
When you want to stimulate innovation and creativity.
When you plan to involve multiple points of view.
When there is a clear, specific theme felt as important by the participants on which to work but whose starting conditions and future developments still need to be defined.

More info: https://workshopbank.com/open-space-technology

The World Cafe

Characteristics and method of execution
Developed in 1995 by J. Brown and D. Isaacs together with some colleagues, the World Cafe is based on models of community organization and the spread of social movements. Other contributions were given by research on the subject of dialogue and collective awareness.

It is a tool that promotes mutual learning and the sharing of knowledge with the aim of exploring new strategies and opportunities. In general, the participants are gathered in groups of 4-5 people around small tables, in a room set up in the most informal way possible, just like in a coffee shop. Who participates is encouraged to listen and intervene, pinning the key ideas on sheets of paper-

At regular intervals (about every 30 minutes) all the participants, except those who have assumed the role of referent of the table - who will, instead, have the task of welcoming the newcomers and continuing the discussion, as well as recording the various interventions - they are invited to move to other tables. In the end, everyone will share their thoughts in a plenary session.

When would you use it
To gather insights, share knowledge, stimulate innovative thoughts and explore possibilities for action on problems and concrete questions.
To analyze in depth the main strategic challenges and opportunities.
To foster a sense of belonging among the participants.
When there are more than 12 (up to 1000) participants and you want to give everyone the opportunity to make an effective contribution.
When you have at least 90 minutes to work

EASW – European Awareness Scenario Workshop

Characteristics and method of execution

Conceived and promoted by the European Commission in the mid-1990s, it was created to promote social participation and stakeholder discussion in identifying possible actions to be implemented to implement sustainable forms of urban development. t is a participatory planning tool that aims, through dialogue and the participation of different stakeholders, to jointly define possible scenarios and action plans for the solution of a specific problem.

It brings out among the participants a common vision or strategy, furthermore, pushing the different subjects involved to confront themselves about the future of something that concerns them directly, makes them even more aware of the role they have in promoting change. It is structured in two phases: the "development of visions" and the "proposal of ideas". In the first phase the participants work divided into the four groups they belong to (citizens, technicians, public administrators, representatives of the private sector) confronting each other on possible futures, referring to four scenarios proposed to them.

The visions elaborated by each group are then presented in plenary and voted: the vision that collects the greatest number of preferences, perfected by the facilitators, will be the basis on which to set the second phase. During the "proposal of ideas", in fact, the participants, mixed and divided into thematic groups, are invited to propose ideas on how to realize the common vision. Each group can formulate a limited number of proposals (usually five) which, once discussed and voted in plenary, will become the basis of the plan drawn up to solve the problem under discussion.

When would you use it

To promote the launch of participatory planning paths.

When you want to bring out different visions and ideas from different stakeholders.

When looking for solutions through a multisector approach.

When you want to set up in a short time a series of work paths to be elaborated at a later time.

More info: http://www.monitorappalti.it/sites/default/files/pamiers_en.doc.pdf

Innovation Camp

Characteristics and method of execution

Innovation Camp is an intensive 3-day workshop where citizen and stakeholders are involved in a common innovation challenge for solving specific issues. The concept of an Innovation Camp follows the basic principles of the IDEA camp methods and offers an opportunity for facilitators to work along the methods of problem-based learning event.

Innovation Camp is an intensive 3-day workshop where people

1.   are presented with a common general innovation challenge
2.   define the specific problem they want to solve
3.   generate, develop and evaluate ideas and concepts
4.   develop a business model for their idea
5.   present their idea and business model
6.   vote for the best presentations

The workshop format is group work, in groups of up to 6 people. The Innovation Camp doesn't require specific business skills it can be organized for any line of issue or matter that has innovation as a priority to be worked out. Each group is guided through the process by a facilitator. Innovation Camps work best with large groups of people and has been organized for groups of more than 200, in about 35 groups. vote for the best presentations

When would you use it

When there is a common general innovation challenge

When there is a specific problem people want to solve

When is necessary generate, develop and evaluate ideas and concepts
To present and discuss innovative ideas or models to solve specific problems
To develop concrete actions or projects on specific ideas

More info: http://idea-camp.eu/wp-content/uploads/2013/09/innovation-camp-modules-1-5.pdf

Walk, site visits, field visits

Characteristics and methods of execution
Neighborhood walks, site visits and participated field visits are active listening tools in the area, mostly used in urban planning or the environment. They allow technicians and experts to know and value the points of view and tacit knowledge of the inhabitants of a particular territory, which they do not know and would be difficult to grasp otherwise, and the inhabitants to come into contact with the skills and data in their possession of technicians and experts. This involves one or more walks or visits, during which small groups of residents (10-30) guide the technicians and experts in the area of interest, accompanying the walk with stories, questions, and sharing observations and perceptions regarding the topic in discussion. People eventually met along the way are in turn invited to provide information and contributions, or to join the group. At the end of the walk, usually the group of participants is gathered in a room to elaborate together the final considerations related to the carried out experience.

When to use them
- When you want to involve the inhabitants of a specific territory to get their point of view.
- When you want to reach, more than rigorous scientific analyzes, a deep level of understanding of certain problems.
- At the beginning of a participatory process, to inform and involve the people of the path at the start, to gather opinions, problems and precise observations, or to verify in advance the actual interest and willingness to participate.
- At the conclusion of a participatory process to illustrate the results of the process and how to intervene in the territory.

CODESIGN

Characteristics and methods of execution
It is a practice that is based on the meeting of different subjects such as researchers, designers and users (actual or potential) aimed at producing ideas and project proposals generated, evaluated and validated through the experience of the participants, who at the same time possess the knowledge related to the domain, the skills to be able to formulate new solutions and the role to be able to make useful decisions for the continuation of the design activities. In the meetings, also called workshops, participants can explore and articulate their latent needs and explore and design solutions jointly, tangibly and iteratively.
The main benefit of the co-design activities is the ability to quickly generate design proposals, while providing tangible and therefore available representations to constructive criticisms of new participants and to evaluation with end users. For the success of the co-design activities, the people involved must first identify and share the objectives of the project, and then choose together the different techniques to be used for generating the proposals.

When to use it
- When you want to get stakeholder engagement.
- When it is necessary to satisfy the needs of the different actors involved in the project.
- When you want to get to preliminary solutions quickly.

Participated SWOT analysis

Characteristics and methods of execution
The SWOT analysis is an analysis tool that takes into account strengths (Strengths), weaknesses (Weaknesses), opportunities (Opportunities) and threats (Threats) of a project / intervention, or any other situation in where an organization or an individual must make a decision to reach a goal. It highlights the main factors, internal and external to the context of analysis, capable of influencing its success, allowing the analysis of alternative development scenarios.

When to use it
- When the administration and the participants are willing to evaluate different alternatives without any preference for the possible outcome.
- When there are several opposing positions and / or conflicts in the debate.
- During the conception phase of a participatory process to analyze the general context, in terms of strengths and critical points within the organization.

Focus group

Characteristics and methods of performance
A qualitative research tool, it allows obtaining in-depth information on a specific topic by a small number of people under the guidance of a moderator who promotes mutual interaction and ensures that the discussion remains centered on the chosen topic. In this way opinions are revealed by reconstructing the relational dimension within which these are formed. The focus group offers the group of participants (generally selected in a targeted manner by the researchers based on the objectives of the survey) the opportunity to express themselves and share their opinions with others, stimulating the exchange of ideas, experiences and points of view based on of a track (job applications) more or less structured.

When to use it
- When you want to explore the point of view of specific groups.
- To generate research hypotheses.
- To test preliminary questionnaires and other quantitative research tools, or the effects of communication campaigns.
- Interpret quantitative data obtained previously, deepening it with a qualitative analysis.
- Get information, motivations, attitudes, habits, experiences, expectations of the target.
- To evaluate some aspects of the participatory process, such as communication, inclusion, transparency, structure and method, etc.

Blog

Characteristics and methods of performance
The blog is a tool that allows you to periodically publish content, such as articles and insights regarding the subject of the participatory process, displaying them from the most recent to the most dated and allowing users to comment on them.

When to use it

- When the theme lends itself to in-depth analysis and reflection, and users want to be able to interact through the space dedicated to comments.
- When you want to create a reference point to make information on a given topic.

Tools for online participation

The use of online tools, if at the base there is a clear, understandable and well identified objective, undoubtedly represents a strategic element, capable of supporting participatory processes in various aspects, intervening, in particular, on three critical elements: scale, legitimacy and learning.

In the first place, in fact, the multimedia tools allow to connect participative processes circumscribed with the widest public space, with the institutions and the political and social system, representing a sort of "bridge" able to ensure greater visibility and participation in processes that they take place on a limited scale. Secondly, they can become legitimizing factors of participatory processes, to the extent that they make them accessible to a wider public, facilitating the interaction and sharing of solutions / results recognized as legitimate by the entire system, and also guaranteeing greater transparency, openness and traceability. Thirdly, they can promote widespread learning processes, functioning as a sort of "gym" in which, through practice, individual and collective participatory skills are developed, exercised and refined.

The complementary and integrated use of different tools, both in presence and online, so that the more consolidated and traditional forms of participation can make use of all the potential of new technologies, is the goal to which the regional platform ioPartecipo +, activated in 2013, meets. in support of the processes implemented by the Entity in the context of its own policies.

Inside it is possible to activate a square, that is an online space dedicated to a specific participatory process, in which the person in charge of the process and the editor activate and manage a series of communication tools and online involvement of stakeholders according to the specifics of the project . In this way, the square also represents the virtual place where to bring back and relaunch the topics discussed in public meetings or workshops, or any other form foreseen by the presence participation process.

Poll/Survey

Characteristics and methods of execution
The online survey is a survey tool consisting of a question and a series of possible answers, which allows to quickly gather participants' opinions on a precise and defined question. In ioPartecipo + the survey results are automatically processed and displayed in real time in the square in the form of histograms.
When creating a survey, it is necessary to define the question, the selectable response options and the number of answers that the user can give; it is also appropriate to define and explain the duration and the objectives of the survey.

When to use it
- When you have a very precise and definite question to propose.
- When the objective of the survey is clear and fits within a path in which it responds to a precise cognitive and / or operational objective.
- To detect in a rapid way, and at no cost, personal opinions coming also from many subjects.

Forum

Characteristics and methods of performance

The forum is a useful tool to encourage comparison and exchange of ideas. In ioPartecipo + the functioning of the forum foresees that both the editor of the square and the registered user can propose a new discussion or participate in one already started by others.

The main advantages offered by the forums are:

- to be asynchronous: that is, users are not obliged to be in the same place in order to communicate
- represent a specific place that creates a sense of belonging
- convey an idea of autonomy: everyone is free to enter and leave whenever they want
- break down barriers due to geographical, temporal, logistic, etc. factors
- reduce status differences
- promote reflexivity
- make discussions immediately visible in order to facilitate the insertion of new arrivals
- keep track of the discussion

The forum must be periodically updated with new interventions and it is important to respond quickly to user comments, eliminating inappropriate comments, since all content is published in real time without any filter.

When to use it

- When you want to discuss a given topic with the participants or create a space to exchange opinions between them.
- When you already have an active network of people working remotely who lack this type of tool.
- When you want to strengthen and / or follow up on links initiated during previous events or build them in anticipation of subsequent events.
- When we want to include a wider audience of subjects, involving those who are reluctant, or have impediments of various nature in attending events in presence.
- When you want to create a reference point for the debate on a given topic that does not exist elsewhere.

Interview

Characteristics and methods of execution

It is a survey tool that consists of detecting information through a conversation provoked by an interviewer to access the interviewer's perspective and understanding his conceptual categories and his interpretations of reality. The interviews can be divided into:

- structured: all the interviewees are asked the same questions posed in the same sequence, but the answers are open. It represents a sort of mediation between the qualitative and quantitative approach as it has less ability to standardize than the questionnaire but does not go down in depth as the unstructured interview.
- semi-structured: the interviewer has to trace to, however, the order and the formulation of the questions to the decision-free.
- unstructured: in this case not even the content of the questions is predetermined, which can vary from subject to subject; the interviewer presents the purpose of the research and the themes to touch, maintaining stimulus / control and control functions to avoid digressions. Since sub-themes may emerge that they were not initially foreseen, each interview is unique in terms of content, duration and relationship established between the interview and the interviewer.

When to use it

In general:
- We are looking for new hypotheses.
- To evaluate some aspects of the participatory process, such as communication, inclusion, transparency, structure and method.

Self-compiled questionnaire

Characteristics and methods of execution

The questionnaire is an information-gathering tool in which some questions are asked in written form to the individuals who constitute the object of the research through a standardized procedure, both as regards the questions and the answers. Standardization is essential to ensure the comparability of the answers and the possibility of analyzing them through statistical tools, in order to study the relationships between the variables. The self-completed questionnaire, in particular, is distributed to the identified subjects (for example sent by post or delivered by hand) and filled out by them independently without the presence of an interviewer; generally, the restitution is not bound. The self-completed questionnaire must be short and not take more than 10-15 minutes to complete. Some tips:
- clearly establish the objective of the questionnaire;
- use a simple language that is in any case appropriate to the level of information of the subject to whom it is addressed;
- avoid resorting to vague and undefined terms, which may lend themselves to different interpretations;
- avoid asking too many questions / answer options or making them too long.

When to use it
- When we want to deepen a given social topic / phenomenon starting from clear research hypotheses.
- When you want to collect data for the evaluation of an event / service that also includes, for example, the level of satisfaction / satisfaction of users.
- When you intend to involve a large group of subjects in the survey.
- When you do not have adequate resources in terms of time and budget to collect data through other methods (interviews, focus groups).
- When you have staff available to set up the questionnaire (which must be as short, concise and simple as possible) and, above all, to statistically analyze the data collected.
- To evaluate some aspects of the participatory process, such as communication, inclusion, transparency, structure and method.

8.5.6. MONITORING

Specifically, using the indicators and sources of verification identified in previous point 8.5.4 (defining goals and objectives), the following can be analyzed:

- the **achievement of expected results**, in which, for example, the qualitative and quantitative level of participation, the techniques and tools used, and the administrative response capacity, including in terms of organizational adjustment, are taken into consideration;

- **critical issues** and unexpected elements;

- **opportunities**, external or internal to the process, not known during the design phase and which could improve it.

All the information collected during this analysis phase must be re-elaborated by the Working Group and translated into appropriate corrective actions to be implemented.

8.5.7. EVALUATION

In general, the evaluation (also, note, must be considered a participatory phase) can concern two different dimensions: the dimension of <u>the process</u>, the dimension of <u>the outcomes</u>.

<u>A. For the Process</u>, the verification parameters are listed below:

- **Inclusion** of all the points of view on the object under discussion.
- **Transparent communication** and maximum circulation towards the entire information community, in every phase of the process.
- **Use of methodological techniques and tools tailored** to the specificities of the case and to the resources (human, financial and territorial) available.

Finally, with regard to the resources to draw on for the process, it is necessary to take into account the total cost / number of participants; and of the total cost of the process / n ° ideas or proposals emerged.

<u>B. For the Outcomes,</u> the verification should focus on:

- **Output**: formalization in a document of ideas and heterogeneous contributions collected during the comparison with the participants.
- **Effects on participants**: satisfaction with personal experience; satisfaction with the process and the outcome; improvement of the perception of personal ability to bring useful contributions to the process (use of a dedicated questionnaire).
- **Impact**: what impact the participatory path has had on the decision / policy.

9. *Monitoring of WP5 activities and results indicators*

Monitoring of ongoing activities will be performed on a regular basis, every 5 months, as indicated in Table 6 (with reference to WP5 timetable in Figure 2).

Monitoring will be conducted by the Coordination & Monitoring Board (composed by the WP5 Task leaders/Area Coordinators and by all Technical Partners) via Teleconference meetings (**Tcm**) and during the project Steering Committee meetings (**SCm**).

The aim of the monitoring is to check the ongoing WP5 activities and to solve possible problems, through an early identification, and to possibly support the eventual reinforce or re-direction of activities to meet the specific objective.

Date	Type of meeting	Object of the Monitoring
September 2019 M9	Tcm	- stakeholder mapping updating - Deliverables advancements/completion - Participatory processes start-up (local seminars, reports)
November 2019 M11	Scm	- Participatory processes design, project work in progress - Deliverables advancements/completion
May 2020 M17	Tcm	- Participatory processes design completion, implement program - Deliverables advancements/completion
October 2020 M22	Tcm	- Participatory processes progress, 1st wshop (held in 09/2020) - Deliverables advancements/completion
December 2020 M24	Tcm	- Participatory processes progress, 2nd wshop (held in 11/2020) - Deliverables advancements/completion
March 2021 M25	Scm	- Participatory processes progress, 3rd wshop (held in 02/2021) - Adaptation plans in progress
May 2021 M29	Scm	- Adaptation plan completion - Deliverables completion

Table 8 – WP5 Monitoring activity timetable

The timetable is subject to flexibility, some changes and tuning up of timing could occur in relation to the specific development of activities in the Pilot Areas and in relation to date arrangement of the project Steering Committee meetings.
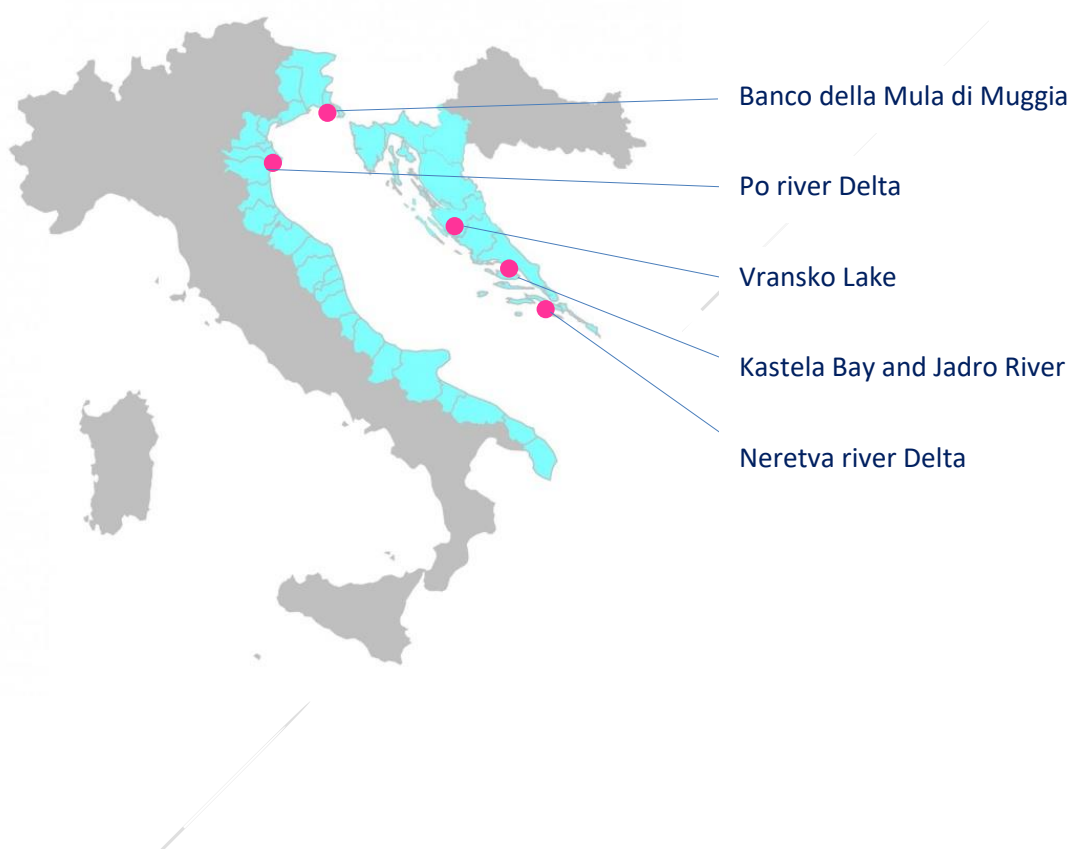
Elements of monitoring, indicators of **advancements /results** for the participatory processes progress of the steps of monitoring are as follows:

- number of participants in the local seminars;
- number/identification of stakeholders/local actors represented;
- inputs/suggestions achieved for the Adaptation plans;
- tools stimulating stakeholder interaction beyond the local seminars;
- progresses in the preparation of the Adaptation plans;
- completion of the Adaptation plans.

Appendix to the WP5 Coordination Plan

Pilot Sites Factsheets

Distribution of the Pilot Areas in the cooperation space

Banco della Mula di Muggia

Po river Delta

Vransko Lake

Kastela Bay and Jadro River

Neretva river Delta

NAME	**BANCO DELLA MULA DI MUGGIA**
Country	Italy
Responsible Partner	Autonomous Region of Friuli Venezia Giulia (RAFVG)
Reference Map	
General description	The area comprises a wide shallow waters coastal area off the mouth of the river Isonzo, presenting a system of sandy bars covered in its inner part by a wide seagrass meadow, an important nursery and feeding site for many marine species.

GEOMORPHOLOGICAL AND ECOLOGICAL FEATURES

Banco della Mula di Muggia comprises a succession of sandy bars (between -2 m and -5 m), arranged in the form of an arc, representing the outer limit of a wide muddy intertidal zone partially covered by seagrass. The back-barrier is dominated by muddy sand, commonly covered by dense seaweed meadows. The fore-barrier present higher-energy conditions and rippled sand. It is commonly assumed to represent the remnants of the former Isonzo river delta having formed during the Middle Ages and it is part of Natura 2000 sites.

MAIN PROBLEMS TO BE TACKLED & OBJECTIVES TO ACHIEVE

External sandy bars tend to migrate toward south-west, following the littoral drift generated by waves. Sediment supply derives from east, from the fluvial source of the Isonzo River. On the western terminus, the bathymetric contours curve abruptly, thus inducing bars to shift landward toward the touristic beaches. Therein, sediment tends to accumulate over time, and the area is currently the final sink for the whole up-drift sector. Therefore, there is the urgent need to balance between tourism development and protection of the natural areas.

ACTIVITIES TO CARRY OUT & STAKEHOLDER TO BE INVOLVED

The project intends to develop an adaptive management plan for solving the conflicts between tourism and protected areas. The"living with nature" approach aimed at enhancing circulation and sediment transport dynamics will be used to reestablishing attractiveness of the landscape. The activities will be carried out in collaboration with tourism operators, local authorities, protected areas management bodies and environmental associations.

NAME	PO RIVER DELTA
Country	Italy
Responsible Partner	Managing Body for Parks and Biodiversity – Po Delta (POPARK)
Reference Map	
General description	The area comprises the largest Italian reserve of wetlands and plays a major role in conservation due to the diversity of environments such as river branches, coastal dune, sandbars, lagoons, fishing ponds, canals and coastal pine forests

GEOMORPHOLOGICAL AND ECOLOGICAL FEATURES

Po River Delta consist of five major distributaries: Goro, Gnocca, Tolle, Pila and Maestra, all characterized by artificial levees which prevent the sedimentation of the delta plain and, consequently, the fine sediments are directly discharged into the Adriatic Sea. Po River Delta has been included within the UNESCO World Heritage Site, Directive "Habitat" and Directive "Birds". In this area, which is characterized by shallow waters and sandy bottom, there are SIC and ZPS zones being part of Natura 2000, such as Sacca di Goro lagoon and Sacca di Canarin lagoon, was chosen as focus pilot site.

MAIN PROBLEMS TO BE TACKLED & OBJECTIVES TO ACHIEVE

The area is suffering a number of issues related to climate change such as loss of biodiversity, erosion of the barrier island systems, marinization of lagoon and sediment deposition. Therefore, there is the urgent need to compensate sedimentation and erosion trough effective plan for engineering intervention and wetland preservation, protect the lagoon ecosystem and balance it with aquaculture practices, and reduce the flood and erosional risk.

ACTIVITIES TO CARRY OUT & STAKEHOLDER TO BE INVOLVED

The project intends to develop an adaptive management plan describing the possible strategies for conservation of the wetlands, lagoons and barrier island systems. Indications to proceed toward a coastal protection plan will be included as well. These activities will be carried out in collaboration with local authorities, protected areas management bodies, environmental associations, fishermen and others socio-economic stakeholders, tourism operators.

NAME	VRANSKO LAKE
Country	Croatia
Responsible Partner	Public Institution Vransko Lake Nature Park (VRANPARK)
Reference Map	
General description	It is the largest Croatian lake, created by flooding the field of karst groundwater and its ground is under the sea level. The lake is an extremely important biodiversity conservation sites as in its brackish water live many marine and freshwater species.

GEOMORPHOLOGICAL AND ECOLOGICAL FEATURES

Vransko lake is a shallow karst lake, separated from the sea by a merely 1 km wide limestone ridge and its area occupy a cryptodepression i.e. its bottom is at 3.5 m b.s.l. Its water levels vary in the range of 0.02 – 2.25 m a.s.l. and the its volumes from 50.3 to 120.3 mil. m³ (average 75 mil m³). The lake constitutes a complex hydrological system in dynamic balance with the sea and it is a wetland area supporting habitat types that are rare in the Mediterranean and recognized as Natura 2000 habitats.

MAIN PROBLEMS TO BE TACKLED & OBJECTIVES TO ACHIEVE

The area is suffering a number of issues related, at least partially, to climate change such as long-term drought periods, intrusion of the sea water with biodiversity loss, eutrophycation processes during drought periods, planned golf courses in the catchment area and plans for further water uptake for irrigation in the catchment. For these reason, there is an urgent need to activate measures for sea level rise adaption, for reducing irrigation in the catchment area and for stopping water uptake and illegal landfills.

ACTIVITIES TO CARRY OUT & STAKEHOLDER TO BE INVOLVED

The Project intends to activate a participatory decision process aimed at developing an adaptation/management Plan, which will be addressed to the preservation of the environmental waterflow and promoting a sustainable agriculture land use. These activities will be carried out in collaboration with Zadar county, Croatian water management company, Ministry of environment and energetics - water department and nature protection department, Agriculture land companies and private landowners and Municipality Pakoštane.

NAME	**KAŠTELA BAY AND JADRO RIVER**
Country	Croatia
Responsible Partner	Public Institution for the Coordination and Development of Split-Dalmatia County (RERA)
Reference Map	
General description	The bay is one of the most productive site of Central Adriatic Sea situated in a closed coastal area strongly influenced by the freshwater runoff coming from Jadro river and affected by pollution and eutrophication problems.

GEOMORPHOLOGICAL AND ECOLOGICAL FEATURES

Kaštela Bay is a semi-enclosed coastal bay, covering an area of 57 Km2 and presenting an average depth of 23 m. The most important fresh water source is the Jadro River, a relatively small river with an average annual discharge of 8 m3 s-1, which discharges into the eastern part of the bay. Geologically, the area forms part of a large Cretaceous-Tertiary sedimentary complex, which belongs to the structural unit of the Adriatic cretaceous carbonate sediments. Based on the primary production, the Kaštela Bay may be considered a moderately productive basin.

MAIN PROBLEMS TO BE TACKLED & OBJECTIVES TO ACHIEVE

The area is suffering a number of issues related to climate change such sea level and air temperature rise, heat wave increase, increase flooding events and appearance of long-lasting dry periods. During the summer months, almost 50% of water flow at the source of Jadro drains for the needs of water supply and the intensity of urbanization represents a threat for environmental quality status of both the river and the bay. For these reasons there is an urgent need to activate measures for reducing the flood risk, for mitigating the saltwater intrusion and for protecting the sensitive ecosystem of Kastela Bay.

ACTIVITIES TO CARRY OUT & STAKEHOLDER TO BE INVOLVED

The Project intends to implement guidelines for Jadro river management for promoting a sustainable development of the whole Kastela Bay coastal system. These activities will be carried out in collaboration with City of Solin, Split-Dalmatia County, Public institution for management of protected nature "Sea and Karst" Croatian Waters, INA – national oil company, Croatian railways, CEMEX Croatia – cement factory and local NGO's and initiatives.

NAME	**NERETVA RIVER DELTA**
Country	Croatia
Responsible Partner	Public Institution for Management of Protected Natural Areas of Dubronik-Neretva County (PIDNC)
Reference Map	
General description	The river delta comprises the largest and the most valuable wetlands of the eastern Adriatic coast. The area is a significant resting and wintering place for migratory species and it provides many valuable ecological services.

GEOMORPHOLOGICAL AND ECOLOGICAL FEATURES

The Neretva River originates in the mountains of Herzegovina and it flows into a delta covering a surface of 20 000 ha, which is surrounded with karst hills rich with underground water supplying numerous springs, streams and lakes. The delta is characterized by wide lagoons, sandflats, saltmarshes and agricultural lands. It is a Natura 2000 site and internationally important areas for birds, where at least 313 registered bird species are present. Moreover, it is an exceptionally important habitat for breeding many fish species

MAIN PROBLEMS TO BE TACKLED & OBJECTIVES TO ACHIEVE

The area is suffering a number of issues related to climate change such sea water intrusion, reduced freshwater inflow, settlement of invasive species and loss of habitat suitable for agriculture and fishery. Moreover, modifications on freshwater and sediment transport regimes and loss of ichthyofauna are taking place due to hydropower systems construction and illegal land reclamation/fishing, respectively. For these reasons there is an urgent need to activate measures for balancing the territorial development request with the necessary protection of natural resources and sensitive ecosystems.

ACTIVITIES TO CARRY OUT & STAKEHOLDER TO BE INVOLVED

The Project intends to develop adaptive measures to effectively oppose saltwater intrusion without obstructing fish migration, to preserve not only the wetland habitats and biodiversity but also important activities such as agriculture and fishery. These activities will be carried out in collaboration with Hrvatske vode, Dubrovnik Neretva County, Municipality of Slivno, Municipality of Zažablje, Municipality of Kula Norinska, City of Ploče, City of Metković, City of Opuzen, University of Split Faculty of Civil Engineering, Architecture and Geodesy.