

2014 - 2020 Interreg V-A

Italy - Croatia CBC Programme

Call for proposal 2019 Strategic

CoAStal and marine waters integrated monitoring systems for ecosystems proteCtion AnD managemEnt CASCADE

Project ID: 10255941

Priority Axis: Environment and cultural heritage

Specific objective: Improve the environmental quality conditions of the sea and coastal area by use of sustainable and innovative technologies and approaches

D 2.4.2 Final report on training activities, seminars and workshops

PP08 DELTA 2000

Final version

Public document

June, 2023



| Project acronym | CASCADE |
|---------------------|--|
| Project ID number | 10255941 |
| Project title | CoAStal and marine waters integrated monitoring systems for ecosystems protection AnD managemEnt |
| Priority axis | 3 - Environment and cultural heritage |
| Specific objective | 3.2 - Contribute to protect and restore biodiversity |
| Strategic theme | 3.2.1 - Marine environment |
| Work Package number | WP2 |
| Work Package title | Communication activities |
| Activity number | Activity 2.4 |
| Activity title | Events, Training and Workshops |
| Partner in charge | PP08 – DELTA 2000 |
| Partners involved | All PPs |



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1. Introduction

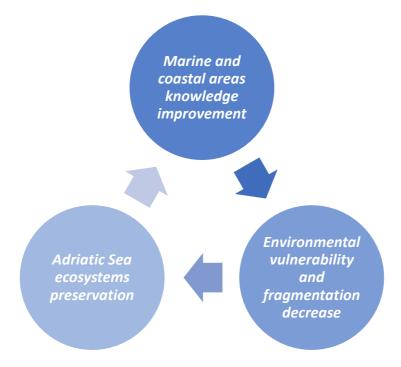
1.1 Project CASCADE

Cascade project is a strategic project realized and financed in the framework of Italia Croatia programme 2014-2020 . It aims to develop a set of concerted and coordinated actions including monitoring (observing and modelling) and management (Maritime Spatial Planning - MSP, Integrated Coastal Zone Management - ICZM, Land-Sea Interaction - LSI) to enhance the knowledge and to evaluate the quality and assess the vulnerability of inland, coastal and marine ecosystems in Italy and Croatia with the final objective to restore endangered species and to support integrated management. The integrated modelling and observing systems will be developed to design and implement MSP/LSI/ICZM, management and restoration actions in 11 pilot areas.

Pilot actions will assess and protect coastal and marine biodiversity in degraded areas, set up restoration actions, assess the impacts of extreme events on ecosystems and understand how to avoid conflicts and boost synergies in the areas.

The project will consolidate long-lasting research capabilities in the field through a concrete dialogue with stakeholders and the participation of Agencies, research centres and universities in order to enhance inland, coastal and marine knowledge. Such shared information and monitoring protocols are essential for supporting concrete actions dealing with environmental vulnerability, fragmentation and safeguarding of ecosystem services at cross-border level.





In support of the specific project activities, CASCADE involves organizations, institutions, schools, trade associations, research centres, experts, and citizens, engaged various in the subject of biodiversity protection and enhancement, guaranteeing their involvement and active participation in the various Project initiatives.

1.2 The project's partnership

Project's partnership is constituted by 10 Italian and 6 Croatian partners and 4 associated partners, in a balanced mix of administration bodies, agencies, research centers and universities. The project, capitalising on previous experiences of the partners both in research and policy activities, will go beyond existing practices in the programme area, providing a useful blueprint for the setup of strategies and actions in the field of environmental protection.

- Lp Puglia Region
- Pp1 CMCC
- Pp2 Institute Ruder Boskovic
- Pp3 Dubrovnik Neretva County
- Pp4 Arpa Fvg



- Pp5 University Iuav Di Venezia
- Pp6 Unibo
- Pp7 Arpa Emilia Romagna
- Pp8 Delta 2000 Societa' Consortile A R.L.
- Pp9 Universita' Del Salento Salento University
- Pp10 Institute Of Ocenography And Fisheries / Iof
- Pp11 Atrac
- Pp12 City Of Nin Grad Nin
- Pp13 Universita' Degli Studi Del Molise Unimol
- Pp14 Marche Region
- Pp15 Public Institutions For Management Protected Area in Split Dalmatia County Sea And Karst

1.3 Project budget and duration

Total budget: € 5 817 547,00

Duration: 1.1.2020 - 30.06.2023 | 42 months

1.4 Project objective

Programme specific objective 3.2

project overall objective

The CASCADE project overall objective is to increase marine knowledge through the consolidation of inland and marine waters monitoring (observing and modelling) tools to address environmental vulnerability, fragmentation, safeguarding of ecosystem services, to support the protection of marine ecosystems and to develop science-based restoration methodologies and actions to assess the impacts of extreme events on marine ecosystems. In particular, CASCADE will concretely contribute to biodiversity protection in several Natura 2000 sites also providing monitoring tools, best practices of restoration of endangered species and integrated management plans.



Project specific objective 1

Consolidated dialogue for the monitoring, management and restoration of endangered marine ecosystems

Project specific objective 2

Further development and validation of observing and modelling tools for coastal and marine waters

Project specific objective 3

Enhanced management of the coastal environment and restoration action practices

1.5 Project results

Programme result indicator

3.2R - Excellent conservation status of habitat types and species of Natura 2000 sites in the programme area.

CASCADE main results will be to improve marine and coastal knowledge of Adriatic Sea, decrease environmental vulnerability and fragmentation, and safeguard ecosystem services. Additional results of CASCADE will consist on the development of capacity to support the protection of marine ecosystems. Final main result of CASCADE will be to assess the impacts of extreme events on marine ecosystems and develop science-based restoration methodologies and actions. These above mentioned results are strictly connected to CASCADE outputs, which aim to improve and develop of monitoring systems, to facilitate the access to monitoring data through an information system, to implement pilot actions focusing on restoration actions and improvement of integrated management systems, to engage stakeholders and improve capacity building through dissemination/communication/training activities/guided tours and scuba diving.

1.6 Project structure

From a technical point of view, project activities, organized in 3 technical WPs, clearly address to the identified challenges to reach the aims. Through subsequent and well connected tasks, characterization, monitoring and restoration/management actions are studied, implemented and tested. Including different pilot areas, the project will address biodiversity of habitats and



ecosystems, allowing to refine the developed tools according to site specific characteristics and data needs

Project main WPs

- WP 0 Project preparation
- WP 1 Project management and coordination of activities
- WP 2 Project communication
- WP 3 Coastal Marine Environment characterization of (species and) ecosystems
- WP 4 Monitoring (observations and modelling) and information system
- WP 5 Pilots for endangered species restoration and Integrated coastal/marine management system



2. Events realized with CASCADE project with a focus on trainings, seminars and workshops

The deliverable is foreseen in the framework of ACT. 2.4. but considering the strictly connection between events in the WP 2 – Act. 2.4. and the WP 5, this report evidences the outcome and results of all public events realized in the frameworks of Cascade project.

- Act. 2.4 Events, training and workshops
- Act. 5.2 Restoration actions supporting endangered species
- Act. 5.3 Integrated coastal/marine management systems
- Act. 5.4 Ocean literacy toolkit and local events

2.1 Aim of events realized

As general aim and in line with communication plan of project, in the involved areas, partners organize events addressed to reach target groups as: general publics, visitors, citizens and tourist with the aim to valorise and increase the awareness in the citizens about the marine environmental, disseminate information and knowledge about the scientifical activities and results of the project and activities realized in the pilot area and also increase the tourist sustainable attractiveness of Adriatic area.

Furthermore, more important target also the schools and young people to involved also the younger generation, the future of our areas, in the awareness and knowledge about the marine environmental, cultural resources, heritage, traditions, and increase knowledge about the importance of a sustainable development.

The events are also addressed to stakeholders, scientists/technical, local, regional and national public authorities, associations, NGOs, universities and researches institutes with the aim to disseminate information about tool and data resources developed in the project, project and researches results, disseminate results of activities and pilot projects etc.

The CASCADE events had been linked with the pilot interventions with the aim to give information and disseminate activities realized in the pilot sites with a realisation of events in the pilot sites and/or with the theme and content related to pilot sites.



Pilot interventions/areas and partners involved:

P1: Grado and Marano Lagoon and Gulf of Trieste (IT); PP: ArpaFVG; UNIBO

P2: Transitional (e.g. Goro area and Bevano Mouth) and coastal areas in Emilia Romagna (IT); PP: ARPAe; UNIBO; CMCC; Delta2000

P3: Torre Guaceto - Canale Reale, Punta della Contessa, Melendugno in Puglia (IT); PP: Regione Puglia; CMCC; UNISALENTO

P4: Neretva river mouth (HR); PP: IOF, DNC; CMCC

P5: Coastal area in Veneto (IT); IUAV with the support of CORILA;

P6: Miljašić Jaruga river mouth, Nin bay (HR); City of Nin; IOF

P7: Coastal area in Molise (Biferno river mouth, Campomarino Coast and Bonifica Ramitelli SAC) (IT);

PP: UNIMOLISE

P8: Northern-eastern Adriatic in Croatia (HR); IRB

P9: Cetina river mouth (HR); PP: Sea and Karst

P10: Torre del Cerrano, Pineto Abruzzo (IT); PP: UNIMOLISE

P11: Marche coastal area (IT); Regione Marche.

In the activities foreseen in the WP 2 Communication, the activity number 4 is dedicated to Events, Training and Workshops.

Act 2.4 Events, Training and Workshops

CASCADE PPs organized events targeted to stakeholders, citizens and tourists with the aim to enhance and increase the awareness about the marine environment, disseminate information and knowledge about the scientific activities and results of the project, namely:

- Cross Border Event
- Seminars, lectures and workshops
- Training and educational activities
- Summer Schools
- Final conference



Trainings, workshops and seminars took place during various kind of activities:

CROSS BORDER EVENT – ADRIATIC SEASIDE FESTIVAL

| Deliverable | Partner involved | Name of event | Date | Location |
|-------------|--|--|----------------------------|---|
| D.2.4.3 | LP DELTA 2000 coordinator ; All PPs involved | Cross border events – Adriatic Seaside Festival | 30.04.2022 – 30.09.2022 | 24 different location between Italy and Croatia |





SUMMER SCHOOL organized by University of Salento partner during Summer 2022

| Deliverable | Partner involved | Name of event | Date | Location |
|-------------|------------------------------|--|--------------------------|---|
| 2.4.4 | PP9 UNIVERSITY OF SALENTO | SUMMER SCHOOL The Adriatic coastal and marine system - Monitoring, protecting and managing biodiversity and ecosystem services | 16 - 22 October, 2022 | Brindisi and other location of Puglia Region |



LOCAL EVENTS (about a total of n. 10 laboratories, n. 10 seminaries, n. 10 workshops, n. 5 scientific training)

A total of 61 local events under the activity 2.4.5 were realized, as shown in the following table.

The local events covered a large kind of typologies, but the workshops, trainings and seminaries were the largest part, in terms of type, of these events.



| Deliverable | Partner involved | Name of event | Date | Location |
|-------------|---|---|--|--|
| 2.4.5 | LP Puglia Region | 5 Events such as trainings, laboratories, workshops, seminars | 28 October 2022 – 10 February 2023 | Online and in presence (Torre Guaceto Reserve) |
| 2.4.5 | PP1 Euro-Mediterranean Center on Climate Change Foundation (CMCC) | 1 - Predict on time | 11-13 may 2023 | Online and in presence |
| 2.4.5 | PP2 RBi Rudjer Boskovic Institute | 5 Events such as trainings, laboratories, workshops, seminars | 4 October 2021 – 22 March 2023 2022 - | Online and in presence |
| 2.4.5 | PP3 Dubrovnik Neretva County & PP10 IOF Institute of Oceanography and fisheries | 6 Events such as trainings, laboratories, workshops, seminars, guided tours | 22 September 2021 – 10 May 2022 | Online and in presence |
| 2.4.5 | PP4 – ARPA FVG | 6 Events such as trainings, laboratories, workshops, seminars, guided tours | 28 September 2021 – 22 November 2022 | Online and in presence |
| 2.4.5 | PP5 – IUAV University | 3 Events such as laboratories, workshops, guided tours | 6 November 2021 – 17 May 2023 | In presence (Chioggia, IUAV seat) |
| 2.4.5 | PP6 University of Bologna – PP7 Arpae | 6 Events such as trainings, laboratories, workshops, seminars, guided tours | 8 June 2021 – 3 November 2022 | Online and in presence (Sacca di Goro, Ravenna Campus) |
| 2.4.5 | PP8 – Delta 2000 | 3 Events (2 workshops and 1 Guided tour) | 30 September 2021 – 24 September 2022 | Goro, Lido di Dante, Foce Bevano |
| 2.4.5 | PP11 – ATRAC | 2 workshops | 4 September 2021 – 13 April 2023 | Rijeka |
| 2.4.5 | PP12 – Grad Nin | 4 Events such as workshops, guided tours | 8 June 2022 – 25 June 2022 | Nin |
| 2.4.5 | PP13 – University of Molise | 17 Events such as trainings, laboratories, workshops, seminars, guided tours | 4 December 2020 – 22 April 2022 | Various location in Molise Region (Torre Cerrano Reserve, Campomarino) and online |



| 2.4.5 | PP14 Marche Region | 1 Piano di adattamento climatico della Regione Marche | 21 February 2023 | Online |
|-------|--|---|-------------------------------|--------------|
| 2.4.5 | PP15 Public Institution Sea and Karst | 2 workshops | 20 May 2021 – 5 April 2022 | City of Omis |

FINAL CONFERENCE organized in two locations, one for Croatia and one for Italy

During the last part of the CASCADE Project, 2 high level Final Conferences, with technic / scientific contents were organized by partners, in hybrid way, with the availability of the speeches through the social networks.

The final event in Italy took place in Puglia Region on 13 April 2023.

The final event in Croatia took place in Rovinj on 5 May 2023.









FINAL EVENT OFFICINE CANTELMO (LE) 13 APRIL 2023 ORE 9.30

REGISTER TO PARTECIPATE: https://bit.ly/3ZVytlF

REGISTRATION UNTIL 31
MARCH WITHIN THE LIMITS
OF AVAILABLE SEATS

LIVE STREAM: https://bit.ly/3Z0aiBW

9:30 REGISTRATION

10:00 WELCOME SPEECH

Chairperson: Antonio Nicoletti – National Responsible for Protected Areas and Biodiversity - Legambiente

Carlo Salvemini - Mayor of Lecce

Anna Grazia Maraschio - Councillor for Environment, Waste Cycle and Remediation, Environmental Supervision, Industrial Risk, Parks and Housing Policy of Apulia Region

Anna Flavia Zuccon - Managing Authority Director.

Paolo Francesco Garofoli - Head of Department of Environment, Landscape and Urban quality of Apulia Region

Marin Miletic - Project Manager of Interreg V A Italy-Croatia 2014-2020 Joint Secretariat

OPENING SESSION

10:40 Valentina De Pinto – CASCADE Project Manager - Introduction and welcome speech from CASCADE project

11:00 Alberto Basset - Department of Biological and Environmental Science and Technology, University of Salento / National Biodiversity Future Centre: Climate change and ecological responses: challenges for conservation and recovery.

11:30 COFFEE BREAK

SESSION 1: COASTAL AND MARINE ECOSYSTEMS IN ITALY AND CROATIA: MONITORING (OBSERVING AND MODELLING) SYSTEMS AND RESULTS

12:00 Daniela Marić Pfannkuchen - Ruđer Bošković Institute: Systematic observation of a model coastal ecosystem towards 21 century – The northern Adriatic:

12:25 Nicola Bettoso e Federico Pittaluga – ARPA FVG: Monitoring of coastal ecosystems and lagoon waters in Friuli Venezia Giulia as part of the CASCADE Project;

12:50 Romana Roje Busatto – Institute of Oceanography and Fisheries: Monitoring of biota, water and sediment in marine environment
13:15 Rita Lecci – Euro-Mediterranean Center on Climate Change (CMCC): Integrated monitoring and modelling system for costal and marine waters protection in the Adriatic Sea.

13:40 LIGHT LUNCH

SESSION 2: PRESERVATION AND PROTECTION OF COASTAL AND MARINE AREAS: THE WAY FOR THE CORRECT MANAGEMENT

14:40 Luana Mia Pirelli – Municipality of Brindisi: Correct management of protected areas for the preservation and protection of biodiversity
15:05 Martina Vukašina - Zadar County Development Agency Zadra Nova: Interreg projects as a way of sustainable management and restoration of natural ecosystems for biological diversity (case presentation of AdriaClim and Stream projects)

15:30 Daniele Brigolin – University of Venice (IUAV): Integrating monitoring data and food web modelling for supporting the management of marine conservation areas: the case study of Tegnùe di Chioggia

15:55 Francesco De Franco - Management Consortium of the Torre Guaceto Nature Reserve: Preservation of marine space: the case study of Torre Guaceto

16:20 CLOSING REMARKS

European Regional Development Fund

https://www.italy-croatia.eu/web/cascade





FINAL EVENT

04th MAY 2023 MMC - CCM TRG BRODOGRADILIŠTA 5 ROVINJ - ROVIGNO

REGISTER TO PARTECIPATE:



REGISTRATION UNTIL 28th APRIL WITHIN THE LIMITS OF AVAILABLE SEATS

PARTECIPATION IS FREE OF CHARGE

9:30 REGISTRATION

10:00 WELCOME SPEECH

Marco Paliaga – Mayor of Rovinj-Rovigno

Martin Pfannkuchen - Head of Center for Marine Research, Rudjer Bošković Institute Silvia Buttignoni- Head of Natura Histrica

Marin Miletić - Project Manager of Interreg V A Italy-Croatia 2014-2020 Joint Secretariat

OPENING SESSION

10:40 Valentina De Pinto – CASCADE Project Manager - Introduction and welcome speech from CASCADE project

11:00 Alberto Basset - Department of Biological and Environmental Science and Technology, University of Salento / National Biodiversity Future Centre: Climate change and ecological responses: challenges for conservation and recovery.

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12:50 Romana Roje Busatto – Institute of Oceanography and Fisheries: Monitoring of biota, water and sediment in marine environment

13:15 Rita Lecci – Euro-Mediterranean Center on Climate Change (CMCC): Integrated monitoring and modelling system for costal and marine waters protection in the Adriatic Sea.

13:40 Tjaša Kogovšek - Ruđer Bošković Institute – Citzen science as a tool in jellyfish research

14.00 LIGHT LUNCH

SESSION 2: PRESERVATION AND PROTECTION OF COASTAL AND MARINE AREAS: THE WAY FOR THE CORRECT MANAGEMENT

15:00 Svjetlana Lupret-Obradović-Natura Histrica Presentation of Interreg project CREW for Palud Ornithological Reserve

15:30 Daniele Brigolin – University of Venice (IUAV): Integrating monitoring data and food web modelling for supporting the management of marine conservation areas: the case study of Tegnùe di Chioggia

15:55 Riccardo Bentivogli and **Riccardo Arcamone** - University Bologna:The Goro Lagoon: observations and modelling within the CASCADE project

16:20 Andrea Torresan- Presentation of the Interreg project Marless –

on line connection

16:45 CLOSING REMARKS

European Regional Development Fund

https://www.italy-croatia.eu/web/cascade



WORKSHOPS addressed to general public or focused to stakeholders

| Deliverable | Partner involved | Name of event or type of events | Date | Location |
|---------------------|------------------|---------------------------------|----------------------------|--|
| D.5.2.2. D.5.3.2 | ALL PPs | Workshops , 62 events | During project realization | Pilot sites or other sites between Italy and Croatia |

Workshops organized under WP5 were in total 62.

They were organized under the umbrella event "Adriatic Seaside Festival" and in other dates and locations, mostly in locations situated or near to Pilot Sites, with the aim of involve citizens with direct experience of coastal management, problems and opportunities gained by the activities of the project.



3. Overview of Events realized and stakeholders involvement

A total of 227 events have been realized in the framework of Cascade Project.

Here following there is a table showing the overview of events (note that some event is "multi-type" so the sum is larger than the list of single events).

| PARTNER PROJECT | EVENTS |
|---|--|
| LP Puglia Region | 16 events - Workshops, trainings, laboratories, guided tours |
| PP1 CMCC | 3 events – Workshops and online webinars |
| PP2 INSTITUTE RUDER BOSKOVIC | 12 events - Workshops, trainings, laboratories |
| PP3 IOF & PP10 Dubrovnik Neretva County | 13 events - Workshops, trainings, laboratories, guided tours |
| PP4 ARPA Friuli Venezia Giulia | 10 events - Workshops, trainings, laboratories |
| PP5 IUAV UNIVERSITY OF VENICE | 8 events - Workshops, trainings, laboratories, guided tours |
| PP6 + PP7 UNIBO – ARPAE | 10 events - Workshops, trainings, laboratories, guided tours |
| PP8 DELTA2000 | 88 events - Workshops, trainings, laboratories, guided tours |
| PP9 University of Salento | 2 events – Laboratory and summer school |
| PP11 ATRAC | 2 events – Workshops |
| PP12 GRAD NIN | 10 events - Workshops, trainings, laboratories, guided tours |
| PP13 UNIVERSITY OF MOLISE | 28 Events - Workshops, trainings, laboratories, guided tours |
| PP14 Marche Region | 3 events – Workshops, seminars |
| PP15 Sea and Karst | 6 events - Workshops, laboratories |

| Type of events | No. |
|----------------|-----|
|----------------|-----|



| workshops | 62 |
|---|----|
| laboratory | 51 |
| scientific training | 7 |
| seminary - conference | 14 |
| lectures | 15 |
| summer camps | 1 |
| guided tour | 68 |
| on line competition | 1 |
| participation at the exhibitions - fair | 3 |
| other citizen science events | 5 |

The largest part of the realized events are workshops, trainings and seminars.

Considering the Summer school, training activities, seminar and workshops a total of no. 135 events are been realized.

| Type of events | No. |
|-----------------------|-----|
| Summer camp | 1 |
| workshops | 62 |
| laboratory | 51 |
| scientific training | 7 |
| seminary - conference | 14 |
| Total | 135 |

This approach was of technical-scientific content, to try to transmit to the participants information and training of high level.

| Target groups - participants | No. |
|--|------|
| Local, regional and other public bodies | 211 |
| Associations | 74 |
| NGOs | 22 |
| Education and training org., universities, researches institutes | 610 |
| General public | 8271 |
| of which students of schools | 1533 |
| Total | 1219 |



The target groups predominant has been the general public, composed for a relevant sections by students and young people, participating in summer activities or participating in school visits in pilot areas or events organized by the project with the aim of involving youngsters.



4. Conclusions

Considering the total number of events (211), the largest part of them is composed by workshops (62), laboratories (51) scientific trainings (7) seminary/conference (14), lectures (15, citizen science events (5).

This kind of events, connected to the participation of target groups such as Students of schools (1533 from a total of 8271 counted general public) and Associations (74), NGOs (22), Education and training organizations (610) remark the aim of the project, related to the preservation of coastal eco-systems using scientific approach and didactical/training models of mid-high level of content, obviously adapted to the proper target group.

The general approach of the involving of target groups during project implementation, especially through participation in activities of high level of technical-scientific content, such as workshops, laboratories, lectures, summer school, permitted to reach organizations, institutions, schools, trade associations, research centres, experts, and citizens, engaged various in the subject of biodiversity protection and enhancement, guaranteeing their involvement and active participation both in Project initiatives than, after project completion, in the active involvement of the citizenship in preservation of coastal and marine environment.