

## National Recovery and Resilience Plan (NRRP)

Mission 4, Component C2, Investment 1.1: "Fund for the National Research Program and for Projects of National Interest (NRP)"

**Call PRIN 2022 PNRR – Directorial Decree no.1409, 14/09/2022**

RESTORE: REconstruct subsurface heterogeneities  
and quantify Sediment needs TO improve the  
REsilience of Venice saltmarshes

CUP: B53D23033630001

### Deliverable DL 0.1: Project Management Plan

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## Revision history

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1.0	Tosi, Cosma, Da Lio, Donnici, Ferronato, Mazzia, Teatini,	29/03/2024	
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## Executive summary

The report details the RESTORE project management plan. The deliverable reports the Milestones of the project, the tasks and the related deliverables, highlighting their time schedule.



## Summary

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## 1 PROJECT MANAGEMENT PLAN AT A GLANCE

WP & M	Deliverables (DL)	Year 1						Year 2						Responsible
		Q1		Q2		Q3		Q4		Q5		Q6		
		gen-24	mar-24	mag-24	lug-24	set-24	nov-24	gen-25	mar-25	mag-25	lug-25	set-25	nov-25	
WP0: Project management	DL 0.1: Project management plan	DL 0.1												CNR
	DL 0.2: Research activity reports		DL 0.2		DL 0.2		DL 0.2		DL 0.2		DL 0.2		DL 0.2	CNR; UNIPD
	DL 0.3: Expense reports		DL 0.3		DL 0.3		DL 0.3		DL 0.3		DL 0.3		DL 0.3	CNR; UNIPD
M1	Geological evolution, historical and present land subsidence and geomechanical characterization										lug-25			CNR
WP1: Geo-characterization	DL 1.1: Maps of the transitional environment evolution over the Holocene										DL 1.1			CNR
	DL 1.2: Geo-mechanical characterization of the Holocene units					DL 1.2								UNIPD
	DL 1.3: Maps of the historical and present land subsidence evolution					DL 1.3								CNR; UNIPD
M2	Assessment of the Holocene land subsidence										lug-25			UNIPD
WP2: Modelling land subsidence	DL 2.1: 3D geological, morphological, and age models										DL 2.1			CNR
	DL 2.2: NATSUB3D output of the Holocene reconstruction										DL 2.2			UNIPD
M3	Assessment of sediment volume needed under climate change										lug-25			UNIPD
WP3: Quantification of sediment needs	DL 3.1: Maps of relative sea-level rise numerical simulations								DL 3.1					UNIPD (CNR)
	DL 3.2: Maps of sedimentation rates needed to counterbalance RSLR										DL 3.2			UNIPD (CNR)
M4	Vulnerability of tidal morphologies to RSLR												nov-25	CNR
WP4: Vulnerability assessment	DL 4.1: Vulnerability approach, and classification of the relevant indicators										DL 4.1			CNR; UNIPD
	DL 4.2: Vulnerability maps												DL 4.2	CNR
M5	CTE public awareness, dissemination, communication and training												nov-25	CNR
WP5: Dissemination, communication, and training	DL 5.1: Project website	DL 5.1												UNIPD; CNR
	DL 5.2: Social media communication and participation at public events						DL 5.2							CNR; UNIPD
	DL 5.3: Conference presentations					DL 5.3							DL 5.3	CNR; UNIPD
	DL 5.4: Stakeholders and scientific workshops							DL 5.4					DL 5.4	CNR; UNIPD
	DL 5.5: Scientific papers												DL 5.5	CNR; UNIPD

Figure 1 - GANTT CHART, showing the time schedule of the research activities. Duration of each task is indicated by the grey colour whereas blue colour indicates the delivery of a deliverable. The last column shows the PP responsible for the task.



The project management plan is shown at a glance in the GANTT CHART (Figure 1), which is then detailed in the following paragraphs. The Project Management Plan was firstly drafted by CNR-IGG and then discussed and approved by all PP participants during the Kick off meeting. In the following, the project plan is detailed for both the project management and the scientific milestones, specifying the time schedule of the different tasks and deliverables.

## 2 PROJECT MANAGEMENT

Project management include the following tasks:

- TS 0.1: Work planning;
- TS 0.2: Communication, quality control, and reporting project activities;
- TS 0.3: Reporting expenses.

The corresponding deliverables are:

- DL 0.1: Project management plan;
- DL 0.2: Research activity reports;
- DL 0.3: Expense reports.

## 3 SCIENTIFIC MILESTONES

### 3.1 MILESTONE 1: Geological evolution, historical and present land subsidence and geomechanical characterization

M1 will be submitted in July 2025 by CNR-IGG. This milestone includes the following tasks:

- TS 1.1: Holocene subsurface architecture and lagoon morphological evolution (stratigraphy, sedimentology, geophysics, radiocarbon dating);
- TS 1.2: Geomechanical and geotechnical parameters (compressibility, porosity, grain size);
- TS 1.3: Land subsidence (ground- and satellite-based datasets).

The corresponding deliverables are:

- DL 1.1: Maps of the transitional environment evolution over the Holocene;
- DL 1.2: Geo-mechanical characterization of the Holocene units;
- DL 1.3: Maps of the historical and present land subsidence evolution.

### 3.2 MILESTONE 2: Assessment of the Holocene land subsidence

M2 will be submitted in July 2025 by UNIPD-ICEA. This milestone includes the following tasks:

- TS 2.1: 3D geological and age models of the Holocene stratigraphic surfaces and thickness of depositional units, morphological model of emerged and submerged ground elevation;
- TS 2.2: Modelling Holocene evolution of the lagoon basin in terms of land subsidence, autocompaction, and sediment supply.

The corresponding deliverables are:

- DL 2.1: 3D geological, morphological, and age models;
- DL 2.2: NATSUB3D output of the Holocene reconstruction;

### 3.3 MILESTONE 3: Assessment of sediment volume needed under climate change

M3 will be submitted in July 2025 by UNIPD-ICEA.

This milestone includes the following tasks:

- TS 3.1: NATSUB3D simulations under different scenarios of SLR and sediment availability;
- TS 3.2: Quantification of sediment volume required to preserve lagoon morphologies from RSLR.

The corresponding deliverables are:

- DL 3.1: Maps of relative sea-level rise numerical simulations;
- DL 3.2: Maps of sedimentation rates needed to counterbalance RSLR.

### 3.4 MILESTONE 4: Vulnerability of tidal morphologies to RSLR

M4 will be submitted in November 2025 by CNR-IGG. This milestone includes the following tasks:

- TS 4.1: Conceptualization of the vulnerability approach, and selection, classification and weighting of relevant indicators;
- TS 4.2: Vulnerability assessment for past, present and future scenarios of RSLR.

The corresponding deliverables are:

- DL 4.1: Vulnerability approach, and classification of the relevant indicators;
- DL 4.2: Vulnerability maps.



### 3.5 MILESTONE 5: Coastal Transitional Environments (CTE) public awareness, dissemination, communication and training

M5 will be submitted in November 2025 by CNR-IGG. This milestone includes the following tasks:

- TS 5.1: Project website;
- TS 5.2: Communication to the general public;
- TS 5.3: Presentations at scientific conferences;
- TS 5.4: Organization of stakeholder and scientific workshops;
- TS 5.5: Peer-reviewed publications in international journals.

The corresponding deliverables are:

- DL 5.1: Project website;
- DL 5.2: Social media communication and participation at public events;
- DL 5.3: Conference presentations;
- DL 5.4: Stakeholders and scientific workshops;
- DL 5.5: Scientific papers.

*Delegate of the*

*Legal Representative*

*(digital signature)*