The Green Light system

version 1

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A system from the Mediterranean Alliance for Wetlands to promote restoration activities in the Mediterranean

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The Green Light system

A system to promote restoration activities in the Mediterranean

Background

Wetlands are one of the most productive ecosystems in the world. They are sources of biological diversity, providing water, food, recreation and protection against climatic events. Nevertheless, they continue to be degraded and destroyed. This affects not only our biodiversity and drinking water supplies but also impacts food security, health, jobs, recreation and tourism.

The destruction and degradation of wetland habitats is progressively reducing their ability to mitigate the effects of climate change and to host biodiversity. Furthermore, the conversion of wetlands into other land-uses transforms them from carbon sinks into carbon sources.

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By conserving and restoring our wetlands, we can recover ecosystem functionality and habitat functions for biodiversity and humans. Thanks to their capacity for improving water quality, recharging aquifers, storing carbon and reducing the impacts of severe flooding events, wetlands constitute a natural, long-term, and cost-effective option to mitigate climate change effects. Wetland restoration has been recommended as an important part of the strategy to help counteract the biodiversity and climate crisis outlined in the COP15 agreements.

What is ecological restoration?

Ecological restoration consists on assisting the recovery and functioning of the degraded ecosystem to a reference ecosystem. A **reference ecosystem** is a native or environmentally similar ecosystem to the project site, but that have not experienced a high degree of degradation. This ecosystem is used in setting goals and planning a restoration project, and later in its evaluation.

Ecological restoration can encompass a wide range of practices, depending on local conditions and societal choice (UNEP, 2021). Restoration can happen in many ways -for example through actively planting or by removing pressures so that nature can recover on its own. Effective wetland ecosystem restoration ensures maintaining critical habitats and species, securing natural buffers that soak up and store water, ensuring carbon sinks by capturing and storing atmospheric carbon dioxide and contributing to socio-economic well-being by providing water, food and natural recreational areas (Mediterranean Ecosystems restoration sites, 2023).

Ecological restoration and restorative management can be seen to be aligned along a 'restorative continuum' where a broad range of activities undertaken by society to repair damage to the broader environment, complement ecological restoration and provide improved conditions for broad scale recovery (Gann *et al*., 2019) (Figure 1).

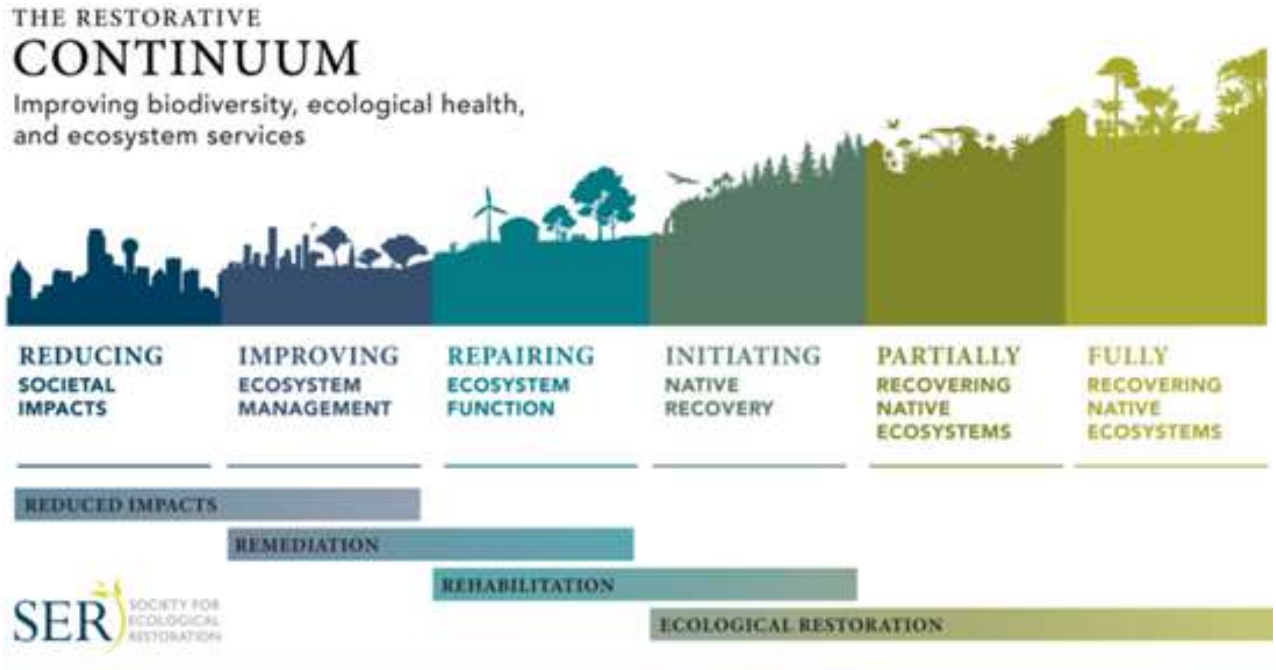

Figure 1. Restorative continuum

Restoration activities should follow the six key concepts underpinning best restoration practices (see box 1 from SER for inspiration) and can include the reduction of negative environmental and societal impacts, removal of contaminants, pollutants and other threats, often known as remediation; and rehabilitation of ecosystem functions and services.

Six Key Concepts Underpinning Best Practice

- Ecological restoration practice is based on an appropriate reference ecosystem, taking environmental change into account;
- Identifying the target ecosystem's key attributes is required prior to developing longer-term goals and shorter-term objectives;
- The most reliable way to achieve recovery is to assist natural recovery processes, supplementing them to the extent that natural recovery potential is impaired;
- Restoration seeks 'highest and best effort' progression towards full recovery;
- Successful restoration draws on all relevant knowledge;
- Early, genuine and active engagement with all stakeholders underpins long-term restoration success.

Box 1. Six Key Concepts Underpinning best practices in ecological restoration.

What is the role of civil society in wetlands restoration?

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The Mediterranean Alliance for Wetlands (MWA/ the Alliance) is a coalition of 32 civil society organizations (CSOs) and research organizations, which began its activities in 2017 with the aim of increasing the capacity of Mediterranean civil society to ensure the protection, restoration and sustainable use of wetlands and rivers.

Now, the Alliance seeks to start a wetland restoration movement in the Mediterranean region by applying a method to promote restoration projects at the international level. This is the Green Light protocol.

The protocol attempts to create dialogue between stakeholders, scientists and architects to co-create the first concept for a restoration project. Involving different stakeholder perspectives through participatory visioning (Robinson, 2003) can help to create a common vision (i.e., a common set of key variables, functions and performance criteria set in time) and empower the partners, providing the groundwork for effective restoration projects. In order to ensure a good integration of user needs, we will rely on participatory design methods and work as a community of support to accelerate the restoration movement in a concerted way.

The protocol

Supporting restoration of Wetlands: Green Light

The Green Light protocol is a positive approach that seeks to support partners to conceptualize, advocate and communicate on a wetland restoration opportunity. Inspired by the 5 step approach of the Conservation Standards, (see Figure 2), the Green Light will help to contribute to the first phase of conceptualization of a project.

The Alliance will support the co-construction with the partners of a concept note for the project. This will illustrate the partners' common vision and design key messages to support the project among stakeholders, decision makers and donors.

Our assumption is that if we, as a network of experts, support the conceptualization and communication of an ecological restoration project, NGOs would be empowered to build the concept and find support among decision makers and donors to start their restoration activities.

Figure 2. 5 steps of the Conservation Standards cycle

If governments and funders see the support of the international community to the NGO project, they can feel more motivated/convinced to support the project. Also, providing an image of the common vision will be a powerful tool to convene stakeholders, decision makers and donors on a common vision. The "Green Light" works similarly to the Red Alert system of the Mediterranean Alliance for Wetlands.

Steps of the Green light protocol

Here are the steps of the project, illustrated in figure 4.

1) REQUEST: An organization can contact the Alliance to ask for assistance to communicate on a "Green Light" meaning a wetland restoration opportunity to its government.

2) APPLICATION: The organization first completes the Annex 1.

3) EVALUATION AND ENGAGEMENT PROCESS: The steering committee analyzes the request and if this is accepted, the SC will constitute a task force for the case including members of the Alliance, a restoration expert (associated to an ecologist when possible) and a landscape architect.

4) CONCEPT AND VISUALS: Once the Green Light is accepted, the applicant fills in the Annex 2, which will be analyzed by a task force of experts to support building a simple concept note. A common vision will be built by the stakeholders and illustrated by a landscape architect with help of a local photographer to design a graphic of the restored site (Figure 3).

5) ADVOCACY AND COMMUNICATION: The task force will support the applicant to develop an advocacy strategy and reach out to decision makers to convince them to begin restoring the site by demonstrating why, how, and who can be responsible.

6) INDICATORS: The TdV team will monitor the results of the Green Light for 3 months. This includes the responses from the government and donors.

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Figure 3. Example of a landscape visualization of the common vision for a site to be restored

Green Light protocol

1. REQUEST OF SUPPORT to design a plan for a wetland Restoration opportunity

A CSO exchange meeting to understand the green light

2. APPLICATION

Fill a form to provide all details

1 week

3. EVALUATION AND ENGAGEMENT PROCESS

Steering committee evaluation and task force constitution

2 weeks

4. CONCEPT AND VISUALS DEVELOPMENT

Task force of experts design a strategy and plan

Meeting 1) Conceptualization of the restoration project

2 weeks

Stakeholder meetings to produce the visualizations

Meeting 2) Exchanges with a landscape architect
Meeting 3) Construction of an action plan

2 months

5.ADVOCACY AND COMMUNICATION

Advocacy and communication campaign

Meeting 4) Participatory session with all Alliance members

3 months

6. PROGRESS CHECKING

Monitoring project acceptance and funding opportunities

3 months

Figure 4. The steps of the Green Light protocol

BOX 2: Meetings and Engagement in Step 4

The taskforce will meet at least four times with a group of stakeholders and a restoration expert to build the concept note, image and communication campaign. A restoration expert (preferably local) will be mobilized to support the co-construction of the note.

The different meetings needed for Step 4 are described as follows:

Meeting 1) Conceptualization of the restoration project

Following the responses of the questionnaire, the key partners, together with the restoration expert and the selected stakeholders will define the following aspects of the project.

- Purpose
- Scope
- Vision (desirable ecosystem)
- Restoration targets
- National and International engagements to meet

Meeting 2) Landscape architect intervention

With images provided, the landscape architect will create a graphic representation of the common vision of the site together with the stakeholders and the restoration expert.

Meeting 3) Actors map and action plan

- Stakeholder mapping to identify key actors for communication
- Brainstorming of the actions to promote the project
- Preparation of an action plan

Meeting 4) Action plan validation

- Sharing the action plan with other Alliance members
- Incorporate their feedback if pertinent

The advocacy strategy and communication campaign are supported by the Alliance Green Light team to reach out decision makers and to inform them on the opportunity/need of restoring the sites.

Annex 1. Eligibility criteria

If interest to apply. Request an electronic form Annex 1 by email to medallianceforwetlands@gmail.com

Eligibility criteria has been inspired by the work done by the ecological restoration team from the MAVA OAP 3 FPP7 project and adapted by the Alliance members. The Alliance will not support any ecological restoration project as a justification for destroying or damaging existing native ecosystems or for unsustainable use.

About your organization

1. Organization name

2. Name and email of the contact person

3. What is your experience on wetland restoration?

About the wetland

4. Country (wetland)

5. Wetland name

6. Wetland type

☐ Coastal wetland

☐ Inner wetland

☐ River

7. Coordinates (Geographic)

Lat

Long

8. Total area of the existing wetland (in hectares)

9. Former extent of the wetland

10. Area in need of restoration (in hectares) . Please attach some photos.

11. Has the wetland any national or international designation (Ramsar, Natura 2000, etc)?

12. What is the feasibility of restoration according to the Pan-Mediterranean assessment** You can contact the coordinator of the Mediterranean Wetlands Observatory (guelmami@tourduvalat.org) and check together the Pan-Mediterranean assessment below

https://tourduvalat.org/en/newsletter-articles/la-cartographie-au-service-de-la-restauration-des-zones-humides-mediterraneennes/ to assess the potential of restoration of the wetland following land use change criteria.

Environmental values

13. Why is it important to restore this site?

14. Describe how the wetland was before it was degraded or how you think it was, based on the evidence available to you.

15. Mention your knowledge and experience on the site (current environmental characteristics)
Biodiversity inventories hydrological conditions, etc.

16. Describe the threats and degradation state of the wetland
In terms of hydrology, pollution, vegetation, land use (urbanization, agriculture, etc.

17. Do you plan to restore to the previous state of the wetland? If no, explain your objective and why it is different from the "previous natural" state

18. Main type of restoration needed
☐Recreating wetlands from land converted to other land-uses
☐Addressing pollution issues
☐ Restoring key biodiversity elements (please list)
☐ Restoring other values/ functions (please specify)
☐Mixed
Other:

19. What are your first ideas of restoration activities needed in the site (technical activities for example stop a pollution source, rewetting, pond creation, etc)

**The Pan Mediterranean Assessment uses hydro-ecological data (e.g., topography, surface runoff, geology), combined with climatic variables, on surface water dynamics to indicate the probability of the presence of wetland habitats .

Socio-ecological context

20. What is the project situation in terms of stakeholder engagement (identify major stakeholders and their attitude towards wetland restoration)

21. Who is the owner of the wetland land?

22. Managing bodies (choose 1 option).
☐No managing body
☐Private/company managing body
☐Local/municipality managing body
☐Environmental authority managing body at regional/national level
☐Cultural heritage or other sectoral body at regional/national level
Other:

23. Social support towards wetland restoration (choose 1 option)
☐There is a social conflict against the restoration of the wetland (e.g. due to other developing interests in the area)
☐There is no specific movement in favor of the wetland restoration nor against
☐There is specific support towards the restoration of the wetland by some population sectors
☐There is an important social support, e.g. awareness campaign from NGOs, local population that can even become involved in restoration activities (if possible).
Other:

24. Authorities support (choose 1 option)
☐The competent authorities are against the restoration project (e.g. there are other development interests)
☐No authorities support nor oppose the restoration
☐Authorities passively support the project facilitating the granting of permits
☐The regional and local authorities actively support the restoration project, its long-term maintenance and are involved in the initiative.

Annex 2. Elements for the conceptualization and strategies

About the applicant

1. Name of the candidate site:

2. Name of the applicant:

3. Organization:

4. Country:

About the project

5. What are the objectives of the restoration project?

6. Have you defined the vision of the restored wetland? If yes, describe it

7. Attach photos of the current state of the degraded wetland
☐ Photos attached
☐ I need to take photos

8. Presence of threatened species (IUCN Red List), native emblematic species whose habitat will be improved or recovered after the restoration activities.
Species Mention if: Threatened, native, invasive, etc Presence before restoration (X) Likely to come back after the restoration activities (X)

9. Presence of priority habitats (national or international categories)

10. Nature protection status (choose 1 option)
☐Not protected
☐Protected, specify the type of protection____

11. Which type of restoration interventions are needed? (Mark with an X all suitable options)

☐Assisted natural regeneration
☐Channel reconstruction
☐Reconnecting water bodies, reshaping water paths in a natural way
☐Restoring the sandy coastlines
☐Control of invasive alien species
☐Control of pollution
☐Rewetting
☐Other

12. Will the restoration actions increase the surface of the wetland? You can contact the Mediterranean Wetlands Observatory for GIS support guelmami@tourduvalat.org to verify this.
If not, what is the impact of the restoration project on the wetland?

Ecosystem services and wetlands contributions

13. Mark the cases of ecosystem services that are appropriate to the situation

13a. Provisioning

Ecosystem services	Present	To recover/improve after restoration
Freshwater		
Fuel		
Fodder/Fiber		
Natural medicines/pharmaceuticals		
Clay, mineral, aggregate, salt harvesting		
Energy harvesting from wind and flows		

13b. Regulating

Ecosystem services	Present	To recover/improve after restoration
Air quality regulation		
Water cycle regulation		
Flood/storm hazard regulation		
Pest regulation		
Erosion regulation		
Water purification		
Pollination		
Salinity regulation		
Fire regulation		
Visual/noise buffer		

16. Cultural

Ecosystem services	Present	To recover/improve after restoration
Cultural heritage		
Recreation and tourism		
Aesthetic value		
Spiritual and religious value		
Inspirational value		
Education and research		

About your team and actions

17. What is the composition of your team for the restoration project?

18. Do you know a restoration/ecology expert that you would like us to contact for the case?

19. Do you know a local photographer (who speaks also English/French) who could support the exchanges with the architect to build the landscape visualizations?
Name:
Email:
With or without drone :

Communication and funding

20. Describe all your past actions to communicate on this restoration opportunity

21. What are your needs in terms of national/ international communication for the restoration project?

22. How much financial support are you looking for and for which kind of activities?

23. Is the site planned to be open to visitors and activities are foreseen in the site?

☐No

☐Yes

If Yes, which activities are foreseen in the site?

Literature

Gann et al. (2019) International principles and standards for the practice of ecological restoration. Second edition. Restoration Ecology S1-S46

Mediterranean ecosystem restoration sites (2023), Interreg Mediterranean Biodiversity Protection Community project

Robinson, J. (2003). Future subjunctive: Backcasting as social learning. Futures, 35, 839–856.