

Rapport de révision périodique d'ASPIM

Nom d'ASPIM : Réserve naturelle des côtes de Tyre

Type de révision : Extraordinary Review

Année de révision : 2024

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Section I: CRITERES QUI SONT OBLIGATOIRES POUR L'INSCRIPTION D'UNE AIRE SUR LA LISTE DES ASPIM
(L'Annexe I, et d'autres obligatoires pour une ASPIM, et les Art . 6 et 7 du Protocole)

1. VALEUR MÉDITERRANÉENNE DE L'ASPIM

	<u>Note</u>
<p>1.1. L'ASPIM remplit toujours au moins un des critères relatifs à la valeur régionale méditerranéenne tels que présentés dans l'Annexe I au Protocole ASP/DB.</p> <p><u>Échelle d'évaluation</u></p> <p>Non : 0 Oui : 1</p>	1
<p><u>Justification de la note</u></p> <p>Tyre Coast Nature Reserve (TCNR) fully satisfies the criteria for Mediterranean regional value outlined in Annex I of the SPA/BD Protocol and stands out as a Mediterranean Marine Protected Area hotspot. Its diverse marine zones host critical habitats such as rocky habitats, sandy habitats, coarse sands and gravels, vermetid reefs, photophilic algae habitats, <i>Cystoseira</i> forests, coralligenous assemblages, seagrass meadows of <i>Cymodocea nodosa</i>, and rhodolith/maërl beds. These habitats support 163 marine species across 15 zoological groups, including 33 species of high conservation interest, with 23 listed under Annex II and Annex III of the SPA/BD Protocol. <i>Caretta caretta</i> and <i>Chelonia mydas</i>, both breeding and nesting within TCNR, recorded 17 nests in 2024, highlighting its ecological importance. Key species include <i>Pinna nobilis</i> and <i>Tonna galea</i>, underlining the reserve's significance. The presence of <i>Dendropoma anguliferum</i> (under regional extinction), the primary builder of vermetid reefs, highlights the area's resilience, while iconic species like <i>Epinephelus marginatus</i> (grouper), the tufted ghost crab (<i>Ocypode cursor</i>), and <i>Cystoseira</i> and <i>Sargassum</i> forests remain well-established. Notably, the endangered seagrass <i>Cymodocea nodosa</i>, considered nearly extinct in Lebanese waters, thrives in TCNR.</p> <p>The reserve also supports unique habitats and species of significant interest, such as the vermetid reefs, rhodolith beds formed by the rare <i>Phymatolithon calcareum</i>, coralligenous assemblages, and brown macroalgae (<i>Cystoseira</i> spp.). Shark species like the common guitarfish (<i>Rhinobatos rhinobatos</i>) and sharpnose seven-gill shark (<i>Heptranchias perlo</i>) highlight the reserve's importance for conservation. Other notable species include the endangered giant tun (<i>Tonna galea</i>), classified as threatened under the Barcelona and Bern Conventions, and the endangered tree coral (<i>Dendrophyllia ramea</i>), observed in the area. Furthermore, the neighboring rocky habitats, such as Al-Jamal, Al-Fanar, and Nakoura, enhance TCNR's biodiversity significance by hosting unique ecosystems and fauna. Additionally, new species for Lebanon have been discovered within TCNR waters, notably 24 species of <i>Annelida</i>, further emphasizing the reserve's ecological richness and scientific importance. Remarkably, sightings of monk seals and dolphins have also been reported around TCNR area by local fishers and by divers underscoring the reserve's role as a vital marine sanctuary.</p>	

	<u>Note</u>
<p>1.2. Niveau des changements indésirables survenus pendant la période d'évaluation pour les habitats et les espèces considérées comme caractéristiques naturelles dans le rapport de présentation de l'ASPIM soumis lors de l'inscription de l'aire sur la Liste des ASPIM.</p> <p><u>Échelle d'évaluation</u></p>	3

Changements importants : 0 Changements modérés : 1 Changements légers : 2 Pas de changements indésirables : 3	
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Justification de la note

The status of the majority of marine habitats and associated biodiversity within TCNR waters has improved and is very good. This improvement is due to the regular monitoring program conducted by the TCNR team in cooperation with local divers, fishers, and national and international experts to track any undesirable changes. Additionally, a robust patrolling system has been implemented to prevent any illegal activities within the reserve, especially in the area from 0 to 500 meters offshore. The conservation zone of TCNR, which serves as the main nesting site for sea turtles, has been completely fenced off to ensure the protection and conservation of marine biodiversity and associated species, particularly sea turtles. Furthermore, beach kiosks in the touristic area of TCNR have been equipped with red lights to minimize disturbance to sea turtles during the nesting season in summer. All studies and reports related to marine habitats and associated biodiversity, as provided in the attachments, confirm this favorable situation.

However, there is a clearly high abundance of Non-Indigenous Species (NIS) in TCNR, as well as throughout Lebanese waters, with some NIS species first reported in Lebanon from TCNR waters. The status of some NIS species, such as lionfish, pufferfish, and long-spined sea urchins, is being actively monitored. TCNR is playing a significant role in increasing the use of citizen science as an important tool for monitoring the status of marine habitats and associated biodiversity and anticipating any introduction of new NIS species. Additionally, the impact of climate change is starting to become significant, as we can see bleaching on some macroalgae and species such as *Oculina patagonica*.

	Note
<p>1.3. Est-ce que les objectifs, énoncés dans la demande initiale pour la désignation de l'ASPIM, sont poursuivis activement ?</p> <p><u>Échelle d'évaluation</u></p> <p>Non : 0</p> <p>Seulement quelques uns : 1</p> <p>Oui pour la plupart d'entre eux : 2</p> <p>Oui pour l'ensemble des objectifs : 3</p>	3

Justification de la note

Yes, the objectives stated in the initial request for the ASPIM designation are being fully pursued and are integrated into the program of TCNR. This has been clearly outlined in the updated Management Plan of TCNR. The TCNR APAC and team are actively considering all the requirements for SPAMI designation in all submitted projects. With the support of SPA/RAC and the Ministry of Environment, the designation of TCNR as a SPAMI remains a high priority and is consistently emphasized.

TCNR, in collaboration with the Municipality of Tyre, is implementing various regulations and measures to enhance the protection and conservation of marine habitats and associated biodiversity, particularly sea turtles. These measures include banning jet skis within the reserve, prohibiting horseback riding, installing a comprehensive signage system (in process), requiring beach kiosk owners to use red lights, and combating plastic pollution through actions aimed at reducing the use of single-use plastics (in process with the kiosk owners). In addition, the reserve has got from project equipment to clean the beach from plastic and other waste, and sorting bins were distributed to kiosks.

More efforts are still needed for full enforcement of the regulations particularly related to horse-back riding, jet-skis and illegal fishing, and marine litter due to touristic activities in summer on the beach of the touristic area.

Additionally, the water quality of TCNR is consistently monitored and remains excellent, as confirmed by the annual reports conducted by CNRS to assess water quality across Lebanese waters. TCNR consistently ranks as having some of the cleanest waters, further underscoring its commitment to marine conservation.

2. DISPOSITIONS JURIDIQUES ET INSTITUTIONNELLES

	<u>Note</u>
<p>2.1. Le statut juridique de l'ASPIM (en référence à son statut juridique à la date du rapport d'évaluation précédent).</p> <p><u>Échelle d'évaluation</u></p> <p>Changement négatif important dans le statut juridique de l'ASPIM : 0</p> <p>Changement négatif léger dans le statut juridique de l'ASPIM : 1</p> <p>L'ASPIM a maintenu ou amélioré son statut juridique : 2</p>	2
<p><u>Justification de la note</u></p> <p>The juridical status of the SPAMI remains unchanged. TCNR was declared a Marine Protected Area (MPA) on the 5th of November 1998, under Law 708 issued by the Parliament based on the proposal of the Ministry of Environment. This designation officially established it as a Lebanese nature reserve. The marine reserve spans a total area of 126.82 km², comprising a terrestrial surface area of 1.763 km², 0.0612 km² of sandy beach, and 125 km² of territorial waters. The plots that are included on the land in TCNR are explicitly stated in Article 1 of TCNR's law, in addition article 1 explicitly stated that TCNR marine part extends till the territorial waters.</p>	

	<u>Note</u>
<p>2.2. Les compétences et les responsabilités sont-elles clairement définies dans les textes régissant l'aire ?</p> <p><u>Échelle d'évaluation</u></p>	2

<p>Les compétences et les responsabilités ne sont pas clairement définies : 0</p> <p>La définition des compétences et des responsabilités a besoin d'une légère amélioration : 1</p> <p>L'ASPIM a clairement défini les compétences et les responsabilités : 2</p>	
<p><u>Justification de la note</u></p> <p>The SPAMI has clearly defined its competencies and responsibilities through the Appointed Protected Areas Committee (APAC), which is appointed through a decision from the Minister of Environment each 5 years, and includes representatives from the Municipality of Tyre, the governor of Tyre Caza, local NGOs, and scientists. The current committee members are as follows:</p> <ul style="list-style-type: none"> • Eng. Hassan Dbouk, President of the Committee • Eng. Mohamad Daher, Treasurer and representative of the Association for Preserving the Environment • Ms. Salam Jabbour, Representative of the Ministry of Agriculture • Ms. Mariam Mroueh, Executive Secretary and representative of the Association AMWAJ for the Environment (NGO) • Mr. Ali Srour, Representative of the Governor of Tyre Caza <p>The operational team of TCNR is represented by:</p> <ul style="list-style-type: none"> • Dr. Ali Badreddine, Manager • Ms. Nabigha Dakik, Financial and Administrative Officer • Rangers: Mr. Mounir Karanbash, Mr. Wassim Nwayri, and Mr. Mohammad Saklawi - year long • Cleaner: Mr. Ryad Hammoud <p>This structure ensures the effective management and conservation of TCNR, with clear roles and responsibilities allocated among its stakeholders and operational team.</p>	

	Note
<p>2.3. Est-ce que l'aire a un organe de gestion, disposant de pouvoirs suffisants ?</p> <p><u>Échelle d'évaluation</u></p> <p>Pas d'organe de gestion, ou l'organe de gestion n'est pas doté de pouvoirs suffisants : 0</p> <p>L'organe de gestion n'est pas entièrement dédié à l'ASPIM : 1</p> <p>L'ASPIM a un organe de gestion entièrement dédié et des pouvoirs suffisants pour mettre en œuvre les mesures de conservation : 2</p>	<p>2</p>

<p><u>Justification de la note</u></p> <p>Yes, TCNR has a management body with sufficient powers for several reasons. The president of the Appointed Protected Areas Committee (APAC) is also the president of the Municipality of Tyre and the president of the Union of Municipalities, giving him the authority to implement regulations, laws, and conservation measures effectively. This authority is evident in the field, as TCNR is highly integrated with the Municipality of Tyre.</p> <p>The collaboration between TCNR and the municipality ensures shared resources when needed. For instance, the patrol system is a joint effort: patrols of the sea waters are conducted by the municipality using the reserve's boat, while ground patrols are carried out by TCNR rangers in cooperation with the municipality's police force. This cooperative system has significantly reduced violations within the reserve, particularly concerning restrictions on vehicles, horses, light pollution, camping, and fires, especially during the sea turtle nesting season.</p> <p>3. LA GESTION ET DISPONIBILITÉ DES RESSOURCES More efforts are still needed for full enforcement of the regulations particularly related to vehicles, horse-back riding, jet-skis and illegal fishing, and marine litter due to touristic activities in summer on the beach of the touristic area.</p> <p>Additionally, an agreement between the Municipality of Tyre and kiosk owners (operating only during the summer in the touristic zone of TCNR) has further reinforced compliance with regulations to ensure protection and conservation efforts. Moreover, TCNR, in collaboration with the Municipality of Tyre, the Ministry of Agriculture, and the coastal guards, actively prevents illegal fishing activities. Fishing of any kind in TCNR waters is strictly prohibited and consistently enforced, highlighting the effectiveness of the management structure.</p> <p>3.1. Est-ce que l'ASPIM a un plan de gestion ?</p> <p>Furthermore, TCNR, in cooperation with the Ministry of Environment, is diligently working to apply all the rules and regulations imposed for the protection and conservation of the reserve, ensuring that its biodiversity and ecosystems are preserved for future generations.</p> <p>Échelle d'évaluation The TCNR and the Nature Reserve (TCNR) control the violations, but they are not yet authorized legally to impose sanctions and issue fines. Pas de plan de gestion : 0 The Protected Areas Framework Law (#130 issued in 2019) granted the reserves' guards the authority and powers to issue fines to address the violations inside the reserve. The law stated that this training should be given by the Internal Security Forces. However, due to the different crisis in the country since 2019, this training is not yet given. Le plan de gestion est officiellement adopté et mis en œuvre de manière adéquate : 3</p>		<p>Note</p>
<p><u>Justification de la note</u></p> <p>TCNR Management Plan has been officially updated for a five-year period, covering 2023 to 2028. This update was carried out in collaboration with the Ministry of Environment, the SPA/RAC, and the IUCN, which acted as the organizer. The plan was developed by a national team with diverse qualifications, including marine biologists, financial experts, management experts, and ecotourism experts. Additionally, numerous stakeholder meetings were conducted to ensure a comprehensive and inclusive approach to the management plan.</p> <p>The Management Plan is well developed and well structured, however it still needs more actions for its full implementation.</p>		<p>Note</p>

<p>3.2. Évaluer la pertinence du plan de gestion en tenant compte des objectifs de l'ASPIM et les exigences énoncées dans l'Article 7 du Protocole ASP/DB et la Section 8.2.3 du Format annoté (FA).</p> <p>Échelle d'évaluation</p> <p>Faible : 0 Moyenne : 1 Bonne : 2 Excellente : 3</p>		<p>Note</p> <p>3</p>
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Justification de la note

The updated Management Plan of TCNR comprehensively addresses all aspects mentioned in Section 8.2.3 of the Annotated Format (FA) and aligns with Article 7 of the ASP/DB Protocol. It includes detailed management objectives (3), zoning (3), and regulations for each zone (3), with a management body (2) actively overseeing implementation. The management programs encompass administration (2), protection (3), natural resource management (2), tourism and visits (2), education and training (3), and research and monitoring (3). These components have been thoughtfully designed and implemented with varying degrees of application to ensure effective management and conservation of TCNR.

The Appointed Protected Areas Committee (APAC) and the TCNR team actively collaborate to uphold protection rules and agreements in coordination with the Ministry of Environment, ensuring compliance with the declaration law of TCNR. TCNR also works closely with the Municipality of Tyre and the Crisis Unit of the Union of the Municipality of Tyre to address environmental damages. For example, during the oil spill incident that impacted TCNR in 2021, all national units concerned collaborated under the National Contingency Plan of the Ministry of Environment to address and mitigate the issue effectively.

The Management Plan of TCNR was developed with extensive stakeholder engagement, ensuring inclusive participation throughout the planning process. TCNR maintains a clear and transparent financial management system with robust policies and regulations to ensure accountability. Additionally, TCNR, in partnership with the Ministry of Environment, actively works to enhance the capacities of its management team with significant support from organizations such as SPA/RAC and MedPAN. This collaborative and systematic approach ensures the effective management and long-term conservation of TCNR's valuable habitats and biodiversity.

The Management Plan is well developed and well structured, however it still needs more actions for its full implementation.

Note

3.3. Évaluer l'adéquation des ressources humaines à la disposition de l'ASPIM.

Échelle d'évaluation

Très faible/Insuffisante : 0

Faible : 1

Adéquate : 2

Excellente : 3

2

Justification de la note

The human resources available to TCNR are adequate for its current operations, with a dedicated and capable team in place. However, as outlined in the updated Management Plan, there is a recognized need to strengthen and enhance the team to meet future challenges and ensure the effective management of the SPAMI. TCNR is actively addressing this need in collaboration with the Appointed Protected Areas Committee (APAC), working towards building additional capacity and expertise within the team.

In addition, there is a need to ensure more seasonal rangers and cleaners during the summer season due to the large number of visitors/swimmers that visit the touristic part of the reserve during the summer season.

Note

3.4. Évaluer l'adéquation des moyens financiers et matériels disponibles à l'ASPIM.

Échelle d'évaluation

2

<p>Très faible : 0</p> <p>Faible : 1</p> <p>Adéquate : 2</p>	
<p><u>Justification de la note</u></p> <p>The financial and material resources available to TCNR have been impacted by the economic crisis, the COVID-19 pandemic, and broader challenges in Lebanon. However, the reserve has managed to adapt and sustain its operations through several funding mechanisms. According to the declaration law, the Municipality of Tyre invests in the touristic zone, through the establishment of 49 private kiosks operating only during the summer in the touristic zone of TCNR (based on an agreement between the municipality and , and by getting rental fees from the kiosks owners and allocating 35% of these fees to TCNR committee, enabling the reserve to pay its team and manage SPAMI-related responsibilities. Additionally, TCNR receives consistent support from organizations such as SPA/RAC and ENICBCMED, which provide funding for projects and human resource development.</p> <p>TCNR is doing its best to stand on its own feet, particularly in addressing financial challenges. While this is not easy, the reserve actively submits project proposals and seeks partnerships to secure additional funding. TCNR also generates income from water-based activities like pedalo and kayak rentals and from ecotourism initiatives.</p> <p>Looking ahead, TCNR is working towards implementing entrance fees and fees for specific eco-tourism activities such as diving, snorkeling, and kayaking. This effort aligns with the new draft decree being prepared by the Ministry of Environment in cooperation with the Ministry of Finance, based on the Protected Areas Law (Law 130/2019). Once issued, this decree will formalize fee structures for reserves, providing TCNR with a sustainable financial model for its long-term management and conservation efforts.</p>	

	<u>Note</u>
<p>3.5. Est-ce que l'aire a un programme de surveillance ?</p> <p><u>Échelle d'évaluation</u></p> <p>Pas de programme de surveillance : 0</p> <p>Le niveau de mise en œuvre du programme de surveillance est évalué comme “insuffisant” : 1</p> <p>Le programme de surveillance a besoin d'être amélioré pour couvrir d'autres paramètres qui sont importants pour l'ASPIM : 2</p> <p>Le programme de surveillance est mis en œuvre de manière adéquate et permet l'évaluation de l'état et de l'évolution de l'aire, ainsi que de l'efficacité des mesures de protection et de gestion : 3</p>	2
<p><u>Justification de la note</u></p> <p>TCNR has developed a “Sustainable monitoring scheme in Tyre to support monitoring and conservation post 2022” for marine turtles and it is being implemented.</p> <p>On the other hand the MOE has developed in cooperation with SPA/RAC a national monitoring program for marine biodiversity in Lebanon, and TNCR follows this plan to monitor marine NIS, marine habitats and associated biodiversity in the reserve through regular diving (results in process). Scientific reports are provided in attachment.</p> <p>TCNR has a comprehensive patrolling program in place. The reserve is equipped with CCTV cameras covering key areas, ensuring effective monitoring and the prevention of violations. Additionally, as mentioned in previous responses, TCNR has an adequate patrolling system both on land and in the waters, carried out in collaboration with the Municipality of Tyre. This integrated system plays a critical role in stopping violations and ensuring compliance with conservation measures, contributing to the effective management and protection of the reserve. However, additional cameras are needed to enhance coverage, and more seasonal rangers and guards are needed in the summer season to be able to control the large number of visitors/swimmers and control the violations during the peak season, and the patrolling system requires further development to ensure even greater effectiveness in monitoring and enforcement.</p>	

	<u>Note</u>
<p>3.6. Y a-t-il un mécanisme de feedback qui établit un lien explicite entre les</p>	2

résultats de la surveillance et les objectifs de gestion, et qui permet une adaptation des mesures de protection et de gestion ?

Échelle d'évaluation

Faible : 0
 Moyenne : 1
 Bonne : 2
 Excellente : 3

Justification de la note

TCNR has a feedback mechanism that establishes a clear link between monitoring results and management objectives, enabling the adaptation of protection and management measures. Regular monitoring data, collected through CCTV surveillance, patrolling, and scientific studies, are analyzed and compared against the management objectives outlined in the TCNR Management Plan (2023-2028).

This feedback mechanism allows the TCNR team, in collaboration with the APAC and the Ministry of Environment, to assess the effectiveness of current measures and identify areas requiring improvement. For example, monitoring reports on biodiversity, human activities, and violations inform adjustments to patrolling strategies, habitat restoration efforts, and visitor regulations. Additionally, stakeholder engagement and periodic reviews of the management plan ensure that the reserve's strategies remain dynamic and responsive to new challenges, such as climate change impacts or the introduction of non-indigenous species. This adaptive approach ensures that TCNR's conservation and management measures align with its long-term goals and the criteria outlined for ASPIM.

However, this mechanism is not implemented systemically (the link between monitoring results and management objectives, and taking directly and regularly the responsive actions and measures)

Note

2

3.7. Est-ce que le plan de gestion est mis en œuvre de façon efficace ?

Échelle d'évaluation

Faible : 0
 Moyenne : 1
 Bonne : 2
 Excellente : 3

Justification de la note

The Management Plan of TCNR is being implemented as per the structured guidelines and objectives detailed in the updated document. The plan includes operational programs targeting marine and coastal conservation, terrestrial habitat management, ecotourism, and community engagement. Collaborative efforts among TCNR's team, the Appointed Protected Areas Committee (APAC), the Ministry of Environment, and local stakeholders, including the Municipality of Tyre, ensure its alignment with conservation objectives.

However, challenges persist due to limited financial and material resources, compounded by Lebanon's ongoing economic crisis and the aftermath of COVID-19 and the political conflicts and instability of the situation in South Lebanon since more than one year, including the two months extended war from end of September till end of November 2024. Despite these obstacles, TCNR is actively addressing these challenges by engaging in partnerships, applying for grants, and seeking funding opportunities from international organizations and donor bodies. Moreover, efforts are ongoing to secure additional resources, improve infrastructure, and enhance patrolling and monitoring systems.

These measures demonstrate a strong commitment to effectively implementing the management plan and adapting to evolving challenges, ensuring the long-term protection and sustainability of TCNR.

The Management Plan is well developed and well structured but needs further actions for its full implementation.

	<u>Note</u>
<p>3.8. Des mesures, des activités et des actions de conservation concrètes ont-elles été mises en œuvre ?</p> <p><u>Échelle d'évaluation</u></p> <p>Faible : 0</p> <p>Moyenne : 1</p> <p>Bonne : 2</p> <p>Excellente : 3</p>	2
<p><u>Justification de la note</u></p> <p>Based on the updated Management Plan for TCNR (2023-2028), numerous activities have been implemented in the past two years (2022-2024) to strengthen the conservation and management of Tyre Coast Nature Reserve (TCNR). These initiatives have received significant support from international and national donors, focusing on valorizing the reserve's natural and cultural resources, infrastructure development, biodiversity monitoring and protection, stakeholder involvement, and capacity building. The main activities achieved or ongoing during this period include:</p> <p>Infrastructure Development and Rehabilitation</p> <ul style="list-style-type: none"> • Fencing and Demarcation: The conservation zone has been fenced and demarcated to enhance habitat protection, especially for nesting sea turtles. • Solar Energy Infrastructure: Installment at the visitor center to promote sustainable energy use. • Visitor Facilities: Rehabilitation of the visitor center, including its main entrance, bungalows in the touristic zone, and educational trails, and bird tower. • Signage System (ongoing): Installation of a comprehensive signage system across the reserve, including directional, educational, and regulatory signs tailored to meet the needs of different zones (conservation, touristic, and agricultural). This system improves visitor guidance, awareness, and compliance with conservation rules. • Scientific and Monitoring Equipment (ongoing): Establishment of a scientific laboratory with essential tools like high-quality microscopes, drones (aquatic and aerial), data loggers for sea turtle nest monitoring, water quality kits, and cleaning tools for marine litter, projector, birds equipment. • Accessibility Enhancements: Installation of toilets and chairs for people with special needs, making the reserve more inclusive. • Kiosk Support: Equipping kiosks in the touristic zone with red lights to reduce light pollution, bins for waste management, and cleaning tools. • Patrolling Equipment: Acquisition of a patrol boat and surveillance drones to monitor and protect marine habitats. <p>Environmental Monitoring, Protection, and Conservation</p> <ul style="list-style-type: none"> • Marine Biodiversity Monitoring: Regular monitoring of non-indigenous species (NIS) through field campaigns and citizen science initiatives. • Sea Turtle Conservation: Annual monitoring of nesting and hatching, with temperature data loggers placed in nests to assess climate change impacts. A first aid sea turtle rescue center was also rehabilitated. • Plastic Pollution Mitigation: TCNR has implemented mitigation actions to reduce the use of single-use plastics, coupled with awareness campaigns and educational programs to engage the public and stakeholders in sustainable practices. • Marine Litter Studies: Comprehensive studies have been conducted to assess the impact of macro- and micro-litter on TCNR's beaches and marine waters, including its effects on marine biodiversity and habitats. • Marine Biodiversity Research: Extensive studies have been carried out to document and assess marine biodiversity within TCNR. These include surveys of marine habitats, species population dynamics, and the ecological role of key habitats such as vermetid reefs, seagrass meadows, and coralligenous assemblages. • Habitat Restoration: Planting <i>Gemayz</i> trees in the conservation zone and monitoring sand dunes for ecological health. • Water Quality Studies: Analysis of water and sand quality in Ras-Al Ain springs and agricultural zones. <p>Collaboration and Stakeholder Engagement</p> <ul style="list-style-type: none"> • National and Regional Cooperation: Establishing stronger links with other MPAs in Lebanon, particularly Palm Island Nature Reserve, to share expertise and collaborate on monitoring NIS, sea turtles, and monk seals, and management. • Twinning Programs: Partnerships with Kas-Gökova MPA (Turkey), Parc des Medes (Spain), and Grande-Motte Sea Turtle Rescue Center (France) to promote pescatourism, ecotourism, and sea turtle conservation strategies. • Stakeholder Trust and Engagement: TCNR has become a trusted partner for local communities, gaining the confidence of key stakeholders, especially fishers and divers. This trust is critical for ongoing biodiversity monitoring programs and fosters active community participation in conservation initiatives. • Volunteer Opportunities: TCNR has increased the number of volunteers, particularly students, by offering opportunities to engage directly in the reserve's activities. This has strengthened the connection between the reserve and the younger generation while contributing to biodiversity monitoring and management efforts. <p>Capacity Building and Visibility</p> <ul style="list-style-type: none"> • Training and Workshops: Organizing regional and national training sessions, including a first-of-its-kind regional training in Lebanon on "Governance of Marine Protected Areas in the Mediterranean Sea" in September 2023. • Community Engagement: Organizing many school and scout visits, national workshops, and many cleanup events to raise awareness about TCNR. • Communication Efforts: Producing educational videos, publishing press articles, and conducting interviews on national TV to increase 	

the visibility of TCNR.

Research and Reporting

- **Scientific Contributions:** Publication of research studies in international journals and 28 comprehensive reports on various environmental topics.
- **Data Compilation:** Integration of biodiversity and monitoring data into specialized software for better management and accessibility.

Ecotourism Development

- **Tourism Strategy:** Development of ecotourism plans focusing on sea turtles and sustainable tourism activities like kayaking and snorkeling.
- **Collaboration with Hotels and Restaurants:** Encouraging eco-friendly practices and integrating them into TCNR's broader conservation goals.

Policy and Regulation Enforcement

- **Light Pollution Control:** Agreements with kiosk owners to reduce light pollution during the sea turtle nesting season.

These comprehensive actions reflect TCNR's dedication to marine biodiversity research, addressing environmental challenges, fostering community trust, expanding volunteer involvement, and strengthening biodiversity conservation. Through enhanced collaboration, stakeholder engagement, and targeted actions, TCNR continues to serve as a model for effective marine protected area management.

Section II: CARACTÉRISTIQUES FOURNISSANT UNE VALEUR AJOUTEE POUR L'AIRE

4. MENACES ET CONTEXTE ENVIRONNANT

4.1. Évaluer le niveau des menaces dans le site aux valeurs écologiques, biologiques, esthétiques et culturelles de l'aire (B4.a de l'Annexe I).

Sous la section 4.1, les questions sont posées en deux parties : la partie a) concernant l'existence de menaces dans le site, et la partie b) concernant les mesures prises pour atténuer ces menaces. Si la réponse à la partie a) est "aucune menace", la partie b) n'est pas applicable. En revanche, lorsque des menaces sont signalées dans la partie a), il convient de répondre à la partie b). La note totalisée en réponse aux parties b) est considérée comme un bonus et n'a aucune incidence sur l'évaluation de la note et, par conséquent, sur le résultat de la révision.

	Note
4.1.1.a. L'exploitation anarchique des ressources naturelles (p. ex. : l'extraction de sable, l'eau, le bois, les ressources vivantes). Voir 5.1.1. dans le FA.	2

<p><u>Échelle d'évaluation</u></p> <p>Aucune menace : 3</p> <p>Faibles menaces : 2</p> <p>Menaces sérieuses : 1</p> <p>Menaces très graves : 0</p> <p>(Si la réponse est “aucune menace”, passez directement à la question 4.1.2. a).</p>	
<p><u>Justification de la note</u></p> <p>In the past, Tyre Coast Nature Reserve (TCNR) faced significant pressures from activities such as horsing and vehicle driving, which disturbed sea turtle nests, as well as illegal fishing methods.</p> <p>However, since the implementation of a patrolling system in 2022, supported by the addition of a new patrol boat, CCTV cameras, and enhanced collaboration between TCNR, the Municipality of Tyre, the Ministry of Agriculture, and coastal guards, these violations have significantly decreased.</p> <p>Better enforcement of regulations, including punitive measures, has further reduced these activities, and decreased the violations which were better addressed.</p> <p>TCNR also prevents unauthorized exploitation of natural resources, including livestock activities in the agricultural zone, ensuring sustainable ecosystem management.</p> <p>As a touristic hotspot, particularly during summer, TCNR was historically impacted by marine litter. Over the past two years, awareness campaigns, clean-up initiatives, and collaborations with local stakeholders have noticeably decreased this pollution, with new marine litter policies and mitigation actions driving a behavioural shift among visitors and stakeholders.</p> <p>Additionally, the use of jet skis is strictly prohibited within TCNR waters to protect marine biodiversity. Extensive awareness campaigns, educational signage, and direct engagement efforts have been implemented to sensitize the public, particularly visitors, about permissible and restricted activities within the reserve. These comprehensive efforts have strengthened compliance, supported conservation objectives, and enhanced the ecological health of TCNR.</p>	

	<u>Note</u>
<p>4.1.1.b. Efforts (actions) entrepris au cours de la période d'évaluation pour traiter/atténuer l'exploitation non réglementée des ressources naturelles (p. ex. : extraction de sable, l'eau, le bois, les ressources vivantes) Voir 5.1.1. dans le FA.</p> <p><u>Échelle d'évaluation</u></p> <p>Aucun effort : 0</p> <p>Peu d'efforts : 1</p> <p>Quelques efforts : 2</p> <p>Efforts importants : 3</p> <p>(Si applicable : N'est pas applicable si la réponse à la question 4.1.1. a) est “aucune menace“.)</p>	<p style="text-align: center;">2</p>

Justification de la note

As mentioned in 4.1.1.a.. Mainly, a strict patrolling system in collaboration with the Municipality of Tyre, enforcement of sanctions and laws through CCTV cameras, as well as awareness and sensitization efforts.

Laws are good and impose sanctions to the violators inside the reserve, but it needs more efforts for proper enforcement.

Note

2

4.1.2.a. Menaces pour les habitats et les espèces (p. ex. : perturbation, dessiccation, pollution, braconnage, introduction d'espèces non-indigènes ...). Voir 5.1.2. dans le FA.

Échelle d'évaluation

Aucune menace : 3

Faibles menaces : 2

Menaces sérieuses : 1

Menaces très graves : 0

(Si la réponse est "aucune menace", passez directement à la question 4.1.3. a).

Justification de la note

Today, the primary serious threat to habitats and species in Tyre Coast Nature Reserve (TCNR), as well as in all Lebanese waters and the Levantine Sea, is the increasing abundance of Non-Indigenous Species (NIS). These species, often introduced through ballast waters from the Red Sea via the Suez Canal, are becoming more prevalent, with newly introduced species increasing significantly.

On the other hand, illegal fishing methods have decreased in the area of the reserve from 0 to 500m from coast due to enforcement measures and effective patrolling.

TCNR also closely monitors any disturbances or pollution events within or around the reserve to ensure swift action for better protection and conservation.

Additionally, natural challenges such as climate change and ocean acidification are starting to show minor impacts on certain habitats and species. Although these impacts are not yet significant, TCNR continues to monitor and study these effects to mitigate potential future risks.

The patrolling system was enhanced, but still there is need for more enforcement to reduce further the violations, like stopping all illegal fishing activities, further controlling visitors/swimmers' activities on the beach in the touristic zone during the peak season in summer, especially marine littering, preventing totally the entry of horses and vehicles to the beach, sand compaction in the parking area of the reserve, use of pesticides in the agriculture area, and agriculture runoff.

Note

2

4.1.2.b. Efforts (actions) entrepris au cours de la période d'évaluation pour traiter/atténuer les menaces pour les habitats et les espèces (p. ex. : perturbation, dessiccation, pollution, braconnage, introduction d'espèces non-indigènes). Voir 5.1.2. dans le FA.

Échelle d'évaluation

<p>Aucun effort : 0</p> <p>Peu d'efforts : 1</p> <p>Quelques efforts : 2</p> <p>Efforts importants : 3</p> <p>(Si applicable : N'est pas applicable si la réponse à la question 4.1.2. a) est "aucune menace".)</p>	
<p><u>Justification de la note</u></p> <p>During the evaluation period, Tyre Coast Nature Reserve (TCNR) has undertaken significant efforts to address and mitigate threats to habitats and species, particularly focusing on Non-Indigenous Species (NIS). TCNR actively promotes and utilizes citizen science as a valuable monitoring tool to anticipate newly introduced species and evaluate the status of existing NIS. Additionally, TCNR has developed protocols to monitor the impacts of climate change, including the use of data loggers in sea turtle nests to study the effects of temperature changes on hatching success.</p> <p>TCNR has also launched a network in collaboration with the Tyre fishers' cooperative and maintains strong connections with fishers across Lebanon. This partnership is further strengthened by close collaboration with Palm Island Nature Reserve to enhance NIS monitoring and mitigation efforts. Workshops are regularly organized to raise awareness about the impact of NIS on Indigenous Species (IS), encouraging fishers to actively target and remove NIS, particularly those with harmful ecological impacts.</p> <p>Moreover, TCNR aligns its efforts with the National Action Plan for Non-Indigenous Species in Lebanon, working diligently to implement its strategies. Social media campaigns are also conducted periodically to raise public awareness about the impacts of NIS and to encourage fishers to catch these species. These integrated actions demonstrate TCNR's commitment to protecting habitats and species while addressing the growing challenge of NIS and climate change impacts.</p> <p>NB: The patrolling system was enhanced, but still there is need for more enforcement to reduce further illegal and unregulated human activities, like stopping all illegal fishing activities, further controlling visitors/swimmers' activities on the beach in the touristic zone during the peak season in summer, especially marine littering, preventing totally the entry of horses and vehicles to the beach, sand compaction in the parking area of the reserve, use of pesticides in the agriculture area, and agriculture runoff.</p>	

	<u>Note</u>
<p>4.1.3.a. Augmentation de la présence humaine (p. ex. : tourisme, bateaux, construction, immigration ...). Voir 5.1.3. dans le FA.</p> <p><u>Échelle d'évaluation</u></p> <p>Aucune menace : 3</p> <p>Faibles menaces : 2</p> <p>Menaces sérieuses : 1</p> <p>Menaces très graves : 0</p> <p>(Si la réponse est "aucune menace", passez directement à la question 4.1.4. a).</p>	<p>2</p>
<p><u>Justification de la note</u></p> <p>Tyre Coast Nature Reserve (TCNR) is a Marine Protected Area hotspot attracting a significant number of visitors, ranging from 500,000 to 1,000,000 annually, including local, national, and international tourists.</p> <p>While this high visitation highlights the reserve's importance as a natural and cultural destination, it also presents challenges. A notable issue is the increased plastic pollution during the summer months, primarily generated by tourists using the sandy beach within the touristic zone. This underscores the need for ongoing efforts to manage and mitigate the environmental impact of tourism on the reserve.</p>	

	<u>Note</u>
<p>4.1.3.b. Efforts (actions) entrepris au cours de la période d'évaluation pour traiter/atténuer l'augmentation de la présence humaine (p. ex. : tourisme, bateaux, construction, immigration). Voir 5.1.3. dans le FA.</p> <p><u>Échelle d'évaluation</u></p> <p>Aucun effort : 0</p> <p>Peu d'efforts : 1</p> <p>Quelques efforts : 2</p> <p>Efforts importants : 3</p> <p>(Si applicable : N'est pas applicable si la réponse à la question 4.1.3. a) est "aucune menace".)</p>	<p>3</p>
<p><u>Justification de la note</u></p> <p>Tyre Coast Nature Reserve (TCNR) has implemented several actions to address and mitigate the impact of increased human presence, particularly from tourism. Regular awareness and sensitization campaigns are conducted to educate tourists and visitors about the rules and regulations of the reserve, supported by a comprehensive signage system that clearly communicates what is allowed and prohibited.</p> <p>According to the reserve's declaration law, the Municipality of Tyre has the right to invest in the touristic zone of TCNR by renting kiosks to 49 owners. To ensure compliance with conservation objectives, the municipality has signed agreements with kiosk owners, obliging them to adhere to TCNR's rules. Additionally, TCNR, in collaboration with the municipality, has implemented strict measures and regulations, including bans on vehicles, camping, light pollution, and jet skis within the reserve.</p> <p>To further address tourism pressures, TCNR has focused heavily on managing and controlling these impacts through specific projects. These projects aim to regulate the effects of high visitor numbers and promote sustainable tourism practices. One of the key strategies has been the launch of ecotourism activities, especially those centered on sea turtles, in alignment with the report published by SPA/RAC in collaboration with the Ministry of Environment. These ecotourism initiatives serve as a way to channel the large influx of visitors toward positive engagement with conservation efforts, ensuring that tourism supports, rather than threatens, the reserve's ecosystems.</p> <p>Additionally, TCNR continues its work to reduce plastic pollution, particularly single-use plastics, through awareness campaigns and targeted initiatives, creating a comprehensive approach to mitigating human pressures while fostering sustainable use of the reserve's resources.</p> <p>NB: Efforts are being deployed, and initiatives are being taken, however there is need to further address/reduce the human pressure and unregulated human activities on the beach in the touristic zone during the peak season in summer where this zone is open for swimming, especially in relation to marine litter including plastic pollution, knowing that huge number of visitors come to the reserve in summer for swimming.</p>	

	<u>Note</u>
<p>4.1.4.a. Conflits entre les utilisateurs ou groupes d'utilisateurs. Voir 5.1.4., 6.2 dans le FA.</p> <p><u>Échelle d'évaluation</u></p>	<p>2</p>

<p>Aucune menace : 3</p> <p>Faibles menaces : 2</p> <p>Menaces sérieuses : 1</p>	
<p><u>Justification de la note</u></p> <p>Conflicts with stakeholders in Tyre Coast Nature Reserve (TCNR) are rare; however, occasional issues arise, primarily with fishers who do not comply with the reserve's rules. TCNR, within its patrolling capacity and in cooperation with the Municipality of Tyre, works diligently to enforce the law and ensure compliance. Additional conflicts have occurred with horse and vehicle owners, particularly regarding activities that disturb sensitive habitats. TCNR and the municipality are actively addressing these issues.</p> <p>There have also been some conflicts related to the fencing of the conservation zone, as it restricts certain traditional uses of the area. However, since the laws and regulations mandate this step, TCNR and the Municipality of Tyre are working to raise awareness within local communities about the long-term importance of this measure for biodiversity protection. Over time, these efforts aim to foster greater understanding and support among stakeholders.</p> <p>It is important to highlight that TCNR is home to the longest and largest sandy beach in Lebanon, which remains open and accessible to everyone without any fees, ensuring equal access for all while balancing conservation efforts. Despite the economic challenges facing Lebanon, TCNR continues to prioritize collaboration and education to resolve conflicts and maintain its role as a vital ecological and community resource.</p>	

	<u>Note</u>
<p>4.1.4.b. Efforts (actions) entrepris au cours de la période d'évaluation pour traiter/atténuer les conflits entre les utilisateurs ou groupes d'utilisateurs. Voir 5.1.4., 6.2 dans le FA.</p> <p><u>Échelle d'évaluation</u></p> <p>Aucun effort : 0</p> <p>Peu d'efforts : 1</p> <p>Quelques efforts : 2</p> <p>Efforts importants : 3</p> <p>(Si applicable : N'est pas applicable si la réponse à la question 4.1.4. a) est "aucune menace".)</p>	<p>3</p>
<p><u>Justification de la note</u></p> <p>As mentioned in the answer to 4.1.4.a., the conflicts are mostly minor and have been addressed by TCNR and the Municipality of Tyre through increased engagement of local stakeholders in the management program of TCNR.</p> <p>However, some unregulated activities still need to be further controlled and reduced, like marine litter and plastic pollution on the beach in the touristic zone from visitors/swimmers during the peak season in summer, horses and vehicles on the beach, and some illegal fishing practices.</p>	

Prière d'inclure ici une liste prescriptive des menaces préoccupantes (non évaluées ou mentionnées ci-dessus) et de les évaluer individuellement :

Non-Indigenous Species-Climate Change-Horsing-Illegal Fishing Methods-Tourism

4.2. Évaluer le niveau des menaces extérieures aux valeurs écologiques, biologiques, esthétiques et culturelles de l'aire(B4 . a de l'Annexe I) et les efforts déployés pour les traiter/atténuer. Voir 5.2. dans le FA.

Sous la section 4.2, les questions sont posées en deux parties : la partie a) concernant l'existence de menaces extérieures, et la partie b) concernant les mesures prises pour atténuer ces menaces. Si la réponse à la partie a) est "aucune menace", la partie b) n'est pas applicable. En revanche, lorsque des menaces sont signalées dans la partie a), il convient de répondre à la partie b). La note totalisée en réponse aux parties b) est considérée comme un bonus et n'a aucune incidence sur l'évaluation de la note et, par conséquent, sur le résultat de la révision.

	Note
<p>4.2.1.a. Les problèmes de pollution provenant de sources externes, y compris les déchets solides et ceux affectant les eaux en amont. Voir 5.2.1 dans le FA.</p> <p><u>Échelle d'évaluation</u></p> <p>Aucune menace : 3</p> <p>Faibles menaces : 2</p> <p>Menaces sérieuses : 1</p> <p>Menaces très graves : 0</p> <p>(Si la réponse est "aucune menace", passez directement à la question 4.2.2. a).</p>	1
<p><u>Justification de la note</u></p> <p>During winter, Tyre Coast Nature Reserve (TCNR) faces solid waste pollution originating from the sea. Given that the Mediterranean Sea current flows from south to north, the primary source of this waste, particularly plastic, is often from neighboring countries. This issue is particularly noticeable during the winter months.</p> <p>In 2021, TCNR was significantly affected by a major oil spill originating from Israel, highlighting the vulnerability of the reserve to cross-border environmental incidents. Even today, TCNR continues to receive various types of solid waste, especially during winter, underscoring the ongoing challenges related to marine pollution.</p>	

	Note
<p>4.2.1.b. Efforts (actions) entrepris au cours de la période d'évaluation pour traiter/atténuer les problèmes de pollution provenant de sources externes, y compris les déchets solides ceux affectant les eaux en amont. Voir 5.2.1 dans le FA.</p> <p><u>Échelle d'évaluation</u></p> <p>Aucun effort : 0</p> <p>Peu d'efforts : 1</p> <p>Quelques efforts : 2</p> <p>Efforts importants : 3</p> <p>(Si applicable : N'est pas applicable si la réponse à la question 4.2.1. a) est "aucune menace".)</p>	3

Justification de la note

During the evaluation period, Tyre Coast Nature Reserve (TCNR) has undertaken various efforts to address and mitigate pollution from external sources, including solid waste and those affecting upstream waters. TCNR regularly organizes cleaning events, sometimes independently, and other times in collaboration with the Municipality of Tyre, the Crisis Unit of the Union of Municipalities of Tyre, or as part of the routine activities of the TCNR team. These events are conducted in partnership with local communities, NGOs, TCNR supporters, and other stakeholders.

Additionally, based on the level of pollution, TCNR takes necessary steps to address the issue. At times, actions are coordinated at the national level, including filing complaints against the polluting country when transboundary pollution is involved. Furthermore, TCNR actively follows the Contingency Plan for Environmental Crises proposed by the Ministry of Environment to ensure a structured and effective response to environmental emergencies. These combined efforts not only help mitigate pollution within the reserve but also enhance collaboration, awareness, and accountability on a broader scale.

However, still solid waste brought by the current flows from the neighboring countries or from the Rachidieh camp located in the Southern part of the reserve, still constitute challenges to the reserve, and a problem that is difficult to resolve.

	Note
<p>4.2.2.a. Des impacts importants sur les paysages et les valeurs culturelles. Voir 5.2.2 dans le FA.</p> <p><u>Échelle d'évaluation</u></p> <p>Aucune menace : 3 Faibles menaces : 2 Menaces sérieuses : 1 Menaces très graves : 0</p> <p>(Si la réponse est "aucune menace", passez directement à la question 4.2.3. a).</p>	<p>1</p>
<p><u>Justification de la note</u></p> <p>As mentioned in 4.2.1.a., TCNR generally anticipates any kind of pollution through regular cleaning activities, identifying the source, and taking measures to stop the pollution.</p> <p>However, the problem of solid waste and marine litter still needs to be addressed.</p>	

	Note
<p>4.2.2.b. Les efforts (actions) entrepris au cours de la période d'évaluation pour traiter/atténuer les impacts importants sur les paysages et les valeurs culturelles. Voir 5.2.2 dans le FA.</p> <p><u>Échelle d'évaluation</u></p>	<p>3</p>

<p>Aucun effort : 0</p> <p>Peu d'efforts : 1</p> <p>Quelques efforts : 2</p>	
<p><u>Justification de la note</u></p> <p>As mentioned in 4.2.1.b</p>	

	Note
<p>4.2.3.a. Développement de menaces prévu aux abords de l'aire. Voir 6.1. dans le FA.</p> <p><u>Échelle d'évaluation</u></p> <p>Aucune menace : 3</p> <p>Faibles menaces : 2</p> <p>Menaces sérieuses : 1</p> <p>Menaces très graves : 0</p> <p>(Si la réponse est "aucune menace", passez directement à la question 4.2.4. a).</p>	<p>2</p>
<p><u>Justification de la note</u></p> <p>The following trends and challenges are anticipated around Tyre Coast Nature Reserve (TCNR):</p> <p>Demographic Evolution in and Around the Site The demographic evolution around TCNR may lead to increased pressures on the reserve, including higher demand for natural resources and increased human activity. Urban expansion and population growth in Tyre and neighboring areas could intensify challenges such as solid waste generation and encroachment on protected zones.</p> <p>Evolution of Economic Activities (Excluding Tourism and Recreation) Economic activities in the area, such as agriculture and fishing, may pose risks if not managed sustainably. Increased fishing efforts, particularly illegal fishing practices, could threaten marine biodiversity. Additionally, agricultural runoff and other pollutants from nearby areas may impact the reserve's water quality, although these pressures are currently mitigated by regular monitoring and enforcement efforts.</p> <p>Evolution of Local Recreational Demand As TCNR remains the longest and largest sandy beach in the area that is freely accessible, local recreational demand is expected to increase. This could exacerbate issues such as plastic pollution and disturbances to sensitive habitats, especially during peak seasons. TCNR is actively addressing this through awareness campaigns, signage, and stakeholder engagement to promote sustainable recreational use.</p> <p>Evolution of Tourist Pressure on the Site TCNR attracts between 500,000 and 1,000,000 visitors annually, making it a key tourist destination. While tourism generates economic and cultural benefits, it also presents challenges such as waste management, habitat disturbance, and increased demand for facilities. However, TCNR is addressing these pressures by launching ecotourism activities, enhancing infrastructure, and implementing measures like bans on jet skis, vehicles, and camping in sensitive zones.</p> <p>Despite these pressures, TCNR's proactive management measures, including strong collaboration with stakeholders, patrolling systems, awareness campaigns, and ongoing monitoring of environmental impacts, ensure that the reserve is well-prepared to adapt to and mitigate these challenges effectively. However, more control and law enforcement are needed to prevent and mitigate these pressures and threats.</p>	
	Note
	3

4.2.3.b. Les efforts (actions) entrepris au cours de la période d'évaluation pour traiter/atténuer le développement des menaces attendu aux abords de l'aire. Voir 6.1. dans le FA.

Échelle d'évaluation

Aucun effort : 0

Peu d'efforts : 1

Quelques efforts : 2

Efforts importants : 3

(Si applicable : N'est pas applicable si la réponse à la question 4.2.3. a) est "aucune menace".)

Justification de la note

Tyre Coast Nature Reserve (TCNR) has undertaken several proactive efforts to address and mitigate the anticipated development of threats around the reserve:

Demographic Pressures

TCNR has strengthened its patrolling system and implemented regular monitoring to prevent encroachment and unauthorized activities. Collaborative efforts with the Municipality of Tyre ensure that urban expansion and population growth around the reserve do not negatively impact its ecosystems. Awareness campaigns targeting local communities emphasize the importance of sustainable practices and respecting the reserve's regulations.

Economic Activities

To mitigate the impacts of agriculture and fishing, TCNR has partnered with local stakeholders, including fishers and farmers, to promote sustainable practices. Workshops and training sessions have been organized to raise awareness about the importance of biodiversity conservation and to encourage compliance with laws regulating economic activities around the reserve. Additionally, TCNR works closely with the Ministry of Agriculture and the coastal guards to enforce fishing regulations and combat illegal practices.

Recreational Demands

TCNR has implemented measures to manage the growing demand for recreational use of the reserve. These include creating designated zones for tourism, enforcing bans on vehicles, jet skis, and camping in sensitive areas, and providing infrastructure like bins and signage to minimize the environmental impact of visitors. Efforts to reduce single-use plastic waste and clean-up initiatives are ongoing, further addressing the pressures from local recreation.

Tourism Pressure

To manage the high number of tourists, TCNR has launched ecotourism activities, particularly those focused on sea turtle conservation, as a way to channel tourism into sustainable and educational experiences. Collaborations with local hotels, restaurants, and kiosks aim to promote eco-friendly practices, while agreements with kiosk owners ensure compliance with reserve regulations. TCNR also continues to enhance visitor awareness through educational materials, workshops, and social media campaigns.

These actions reflect TCNR's commitment to mitigating current and future threats while maintaining the ecological integrity of the reserve. By fostering collaboration with local stakeholders, strengthening enforcement, and promoting sustainable practices, TCNR is well-prepared to address the challenges of demographic growth, economic activities, recreational demand, and tourism pressure. However there is still a need to reduce visitors impact on the reserve, to apply more the concept of eco-tourism and sustainable tourism during the summer season on the touristic zone, to reduce marine litter and plastic pollution, to reduce further illegal fishing activities, to apply sustainable agriculture and organic farming on the agriculture zone.

Prière d'inclure une liste prescriptive des menaces préoccupantes (non évaluées ou mentionnées ci-dessus) et de les évaluer individuellement :

Prière d'inclure la liste des menaces préoccupantes (non évaluées ou mentionnées ci-dessus) qui ont été éliminées ou résolues :

	Note
<p>4.3. Y a-t-il un plan de gestion côtière intégrée ou des lois d'utilisation du territoire dans la région limitrophe ou entourant l'ASPIM ? (B4.e de l'Annexe I). Voir 5.2.3 dans le FA.</p> <p><u>Échelle d'évaluation</u></p> <p>Non : 0 Oui : 1</p>	<p>1</p>
<p><u>Justification de la note</u></p> <p>Tyre Coast Nature Reserve (TCNR) operates within a framework of coastal and land-use laws (masterplan for the City of Tyre) that governs the surrounding area of the reserve, in alignment with Lebanon's Protected Areas Framework Law (Law No. 130/2019). This law establishes guidelines for the conservation and sustainable use of protected areas, including land-use regulations and management authority structures.</p> <p>Additionally, TCNR is divided into three distinct zones: the Touristic Zone, the Scientific/Conservation Zone, and the Agricultural Zone, each with its own priorities and rules to ensure effective management and protection.</p> <p>TCNR benefits from collaboration with the Municipality of Tyre and the Union of Tyre Caza Municipalities, which implement zoning and land-use policies for the city of Tyre (through the masterplan of the City of Tyre), tailored to the reserve's conservation objectives regarding the TCNR buffer zone. These efforts, combined with the updated Management Plan (2023–2028), ensure that TCNR's zoning structure and management align with broader coastal management goals, meeting the requirements of Annex I, Section B4.e of the SPA/BD Protocol.</p>	

	Note
<p>4.4. Est-ce que le plan de gestion de l'ASPIM influence la gouvernance de la zone environnante ? (D5.d l'Annexe I). Voir 7.4.4. dans le FA.</p> <p><u>Échelle d'évaluation</u></p> <p>Non : 0 Oui : 1</p>	<p>1</p>

Justification de la note

Yes, the Management Plan of Tyre Coast Nature Reserve (TCNR) significantly influences the governance of the surrounding area. Through its zoning structure and clearly defined objectives, the plan promotes coordinated efforts between the reserve's management team, the Municipality of Tyre, the Union of Tyre Caza Municipalities, and various national authorities. This collaboration ensures that activities in the surrounding areas are aligned with the reserve's conservation priorities.

For example, the Management Plan guides local governance in implementing regulations that prevent activities such as illegal fishing, unregulated tourism, and habitat disturbance in areas adjacent to the reserve. Additionally, the collaboration between TCNR and local stakeholders, including fishers, farmers, and kiosk owners, fosters sustainable practices and compliance with conservation goals. Agreements with the Municipality of Tyre, such as those regulating kiosk operations in the touristic zone, demonstrate how the plan shapes governance and promotes harmony between community needs and ecological protection.

The influence of the Management Plan extends to addressing broader environmental challenges, including marine litter, through awareness campaigns, stakeholder engagement, and mitigation actions that involve surrounding communities. This integrated approach ensures that the governance of the area around TCNR supports its long-term conservation and aligns with the objectives outlined in Annex I, Section D5.d of the SPA/BD Protocol.

However, there is a need to enhance sustainable and environmental practices in the adjacent areas of the reserve, regarding solid waste disposal, littering, waste water disposal, fishing practices, environmental standards in the adjacent hotels and resorts

5. APPLICATION DES MESURES DE PROTECTION

5.1. Évaluer le degré d'application des mesures de protection En particulier

	Note
<p>5.1.1. Est-ce que les limites de l'aire sont marquées d'une manière adéquate à terre et, le cas échéant, marquées de manière adéquate en mer ? Voir 8.3.1. dans le FA.</p> <p><u>Échelle d'évaluation</u></p> <p>Non : 0</p> <p>Oui : 1</p>	1

Justification de la note

Yes, the boundaries of Tyre Coast Nature Reserve (TCNR) are clearly marked as specified in its declaration law. The law specifies the plots on the land that are covered by the reserve, and states that the marine part of the reserve extends till the territorial waters, The marine reserve covers a total area of 126.82 km², comprising a terrestrial surface area of 1.763 km², a sandy beach of 0.0612 km², and territorial waters extending over 125 km².

The terrestrial part of TCNR is divided into three zones:

- **Touristic Zone (Open Access):** Spanning 974 meters of coast, this zone is accessible to visitors and includes facilities for recreational and educational purposes.
- **Conservation Zone (closed):** Covering 740 meters and also 200 hectares, this zone focuses on protecting sensitive habitats, including sea turtle nesting sites and sand dunes.
- **Agricultural Zone (Access Controlled by the Lebanese Army):** Extending 2000 meters, including the beachfront of Rachidiyeh camp, and covering 180 hectares, this zone aims to conserve freshwater and wetland ecosystems while supporting sustainable agricultural practices.

These clearly defined boundaries ensure that each zone's objectives and regulations are appropriately enforced, supporting the effective management and conservation of TCNR.

The terrestrial boundaries of the reserve are demarcated by fences on the ground, the marine part is demarcated by buoys during summer for the 0 - 500m zone.

Note

5.1.2. Y a-t-il une collaboration de la part d'autres autorités dans la protection et la surveillance de l'aire et, le cas échéant, y a-t-il un service de garde-côtes contribuant à la protection du milieu marin ? Voir 8.3.2. et 8.3.3. dans le FA.

Échelle d'évaluation

Non : 0

Oui : 1

1

Justification de la note

Yes, there is collaboration from other authorities in the protection and monitoring of Tyre Coast Nature Reserve (TCNR). The **Agricultural Zone**, located near the Rachidiyeh camp, is under the control of the **Lebanese Army** for security reasons, ensuring the protection and regulation of activities in this area. Additionally, **TCNR** collaborate with the **Municipality of Tyre** in addressing and controlling illegal fishing activities, the municipal police carries out regular patrolling in the waters of the reserve using the boat of the reserve, and there is collaboration when necessary with the **Coast Guards** in order to address these violations.

However, there is a need for more enforcement to stop illegal fishing and more involvement from the coastal guards in controlling and preventing these practices.

The Municipality also ensures through the municipal police the control of the visitors/swimmers in the touristic zone during the summer for safety purpose.

Note

5.1.3. Est-ce que des agences tierces sont également habilitées à faire respecter la réglementation relative aux mesures de protection des ASPIM ?

Échelle d'évaluation

1

<p>Non : 0</p> <p>Oui : 1</p>	
<p><u>Justification de la note</u></p> <p>Rangers of the Ministry of Agriculture have also the mandate to enforce regulations regarding illegal fishing.</p>	

	Note
<p>5.1.4. Y a-t-il des pénalités et des pouvoirs adéquats pour une application effective de la réglementation ? Voir 8.3.4. dans le FA.</p> <p><u>Échelle d'évaluation</u></p> <p>Non : 0</p> <p>Oui : 1</p>	1
<p><u>Justification de la note</u></p> <p>There are penalties for the violations within Tyre Coast Nature Reserve (TCNR). The law establishing TCNR has defined penalties for the various violations in the reserve, as well as the Protected Areas Framework Law (#130 issued in 2019), in addition the fishing law has also defined the penalties related to illegal fishing.</p> <p>The Municipality of Tyre, in collaboration with the Coast Guard, the municipality police, and the Internal Security Forces, can impose various penalties for violations, and have the authority to issue fines. For instance, fishers who violate regulations can have their boats stopped from operating for several days, pay fines or face imprisonment. Similarly, horse owners who fail to comply with warnings may have their stables shut down, and ATVs or vehicles involved in breaches can be confiscated or stopped.</p> <p>In addition, TCNR is actively working on implementing the "polluter pays" regulation, which holds individuals or entities accountable for pollution or environmental damage caused within the reserve. This regulation seeks to deter harmful activities by imposing financial penalties or requiring offenders to cover the costs of cleanup and restoration. These measures are not applied yet, but if it will be applied, this will ensure effective enforcement, promote accountability, reduce marine litter in the reserve specifically in the beach on the touristic zone from the visitors/swimmers during the summer season, and will strengthen the reserve's conservation efforts.</p> <p>In addition, the Protected Areas Framework Law (#130 issued in 2019) granted the reserves' guards and rangers the authority and powers to issue fines to address the violations inside the nature reserves, after attending with success a training on protected areas legislation, rules, and regulations, and on the procedure of issuing fines. The law stated that this training should be given by the Internal Security Forces. However, due to the different crisis in the country since end of 2019 till present, this training course was not given yet.</p> <p>In summary, the laws and regulations provide adequate penalties to stop the violations inside the reserve, however the proper enforcement of the law needs still to be enhanced, to address and stop unregulated human activities, specially illegal fishing practices, marine litter during the summer in the touristic zone, the entry of horses and vehicles to the reserve, and some unsustainable farming practices in the agriculture zone.</p>	

	Note
<p>5.1.5. Est-ce que le personnel de terrain est habilité à imposer des sanctions ? Voir 8.3.4. dans le FA.</p> <p><u>Échelle d'évaluation</u></p>	0

<p>Non : 0</p> <p>Oui : 1</p>	
<p><u>Justification de la note</u></p> <p>The rangers of Tyre Coast Nature Reserve (TCNR) control the violations, but they are not yet authorized legally to impose sanctions and issue fines.</p> <p>The Protected Areas Framework Law (#130 issued in 2019) granted the reserves' guards the authority and powers to issue fines to address the violations inside the nature reserves, after attending with success a training on protected areas legislation, rules, and regulations, and on the procedure of issuing fines. The law stated that this training should be given by the Internal Security Forces. However, due to the different crisis in the country since end of 2019 till present, this training course was not given yet.</p> <p>Meanwhile, the TCNR rangers are trained to document violations but they coordinate currently with the municipal police, in order to issue fines and impose the penalties.</p> <p>The Committee of the reserve and the Ministry of Environment coordinate, if needed, with the Internal Security Forces, for major violations in the reserve (like the establishment of illegal infrastructure etc...) in order to stop the violations and impose the related sanctions.</p>	

		<u>Note</u>
<p>5.1.6. Est-ce que l'aire a mis en place un plan d'urgence pour faire face à la pollution accidentelle ou d'autres situations d'urgence graves ? (Art. 7.3. du Protocole, Recommandation de la 13ème Réunion des Parties contractantes).</p> <p><u>Échelle d'évaluation</u></p> <p>Non : 0</p> <p>Oui : 1</p>	<p>0</p>	
<p><u>Justification de la note</u></p> <p>There is no emergency plan developed for the reserve. However, Tyre Coast Nature Reserve (TCNR) responds to emergencies in collaboration with the Municipality of Tyre and the Crisis Unit of the Union of Tyre Municipalities, adapting its actions based on the degree and level of urgency. While this coordinated approach has been effective so far, there is a recognized need for TCNR to develop an independent emergency response plan specifically tailored to its unique ecological and management needs.</p> <p>Although current measures have ensured that emergencies are handled effectively and remain under control, a dedicated plan would enhance preparedness and provide a structured framework for addressing pollution incidents or other serious emergencies in the future.</p>		

6. COOPÉRATION ET RÉSEAUTAGE

	<u>Note</u>
<p>6.1. Est-ce que d'autres organisations nationales ou internationales collaborent en fournissant des ressources humaines ou financières ? (p. ex. : des chercheurs, des experts, des bénévoles...). Voir 9.1.3. dans le FA.</p> <p><u>Échelle d'évaluation</u></p> <p>Non : 0</p> <p>Insuffisante : 1</p> <p>Moyenne : 2</p> <p>Excellente : 3</p>	3
<p><u>Justification de la note</u></p> <p>Tyre Coast Nature Reserve (TCNR) actively collaborates with various national and international organizations, benefiting from both human and financial resources. Over the past four years, TCNR has been a partner in four EU-funded ENI CBC MED projects and consistently seeks opportunities to submit project proposals and establish strong collaborations and partnerships. The SPA/RAC organization has been a key supporter, funding significant initiatives and providing essential training for the TCNR team.</p> <p>The Ministry of Environment also plays an important role by proposing opportunities and offering support for TCNR's infrastructure, capacity building, and monitoring programs, often through project-based initiatives. TCNR maintains close collaboration with national and international experts for scientific research and, with the help of SPA/RAC, is connected through twinning programs with Medes Island Nature Reserve in Spain and the Grande Motte Sea Turtle Rescue Center in France. Additionally, TCNR has a strong partnership with Palm Island Nature Reserve, working together to submit joint project proposals whenever opportunities arise.</p> <p>As a member of MedPAN, TCNR also participates in regional workshops and trainings, and exchange of experiences with other MPAs in the Mediterranean. Local NGOs also contribute by collaborating with TCNR on specific topics within their own projects.</p> <p>In summary, TCNR is highly active and continuously striving to secure funding, to benefit from regional knowledge-sharing and collaboration networks, and foster strong partnerships with various stakeholders to support its conservation and management goals.</p>	

	<u>Note</u>
<p>6.2. Évaluer le niveau de coopération et d'échange avec d'autres ASPIM (particulièrement dans d'autres nations) (Art. 8, Art. 21.1, Art. 22.1., Art. 22.3 du Protocole, A.d de l'Annexe I).</p> <p><u>Échelle d'évaluation</u></p> <p>Non : 0</p> <p>Insuffisante : 1</p> <p>Moyenne : 2</p> <p>Excellente : 3</p>	3

Justification de la note

The level of cooperation and exchange between Tyre Coast Nature Reserve (TCNR) and other SPAMIs, particularly in other nations, is active but has room for further strengthening. With the help of SPA/RAC, TCNR has established a twinning program with Medes Island Nature Reserve in Spain and the Grande Motte Sea Turtle Rescue Center in France. However, these collaborations require more effective and consistent implementation to reach their full potential, with funding constraints being the primary challenge limiting their activation and progress. Despite these hurdles, TCNR remains dedicated to enhancing these partnerships and actively seeks opportunities to secure the necessary resources for meaningful exchanges and cooperative initiatives with other SPAMIs.

TCNR has also the opportunity to exchange experience with other SPAMIs through the regional workshops and events that SPA/RAC organizes for the SPAMIs

At the national level, the collaboration with the SPAMI-designated Palm Island Nature Reserve has been particularly fruitful, yielding significant socio-economic benefits and enhanced protection and conservation outcomes. This partnership serves as a strong example of effective coordination, where both reserves share experiences, challenges, solutions, and best practices. Together, TCNR and Palm Island Nature Reserves have created common networks with fishers and divers to monitor Non-Indigenous Species (NIS), monk seals, sea turtles, and other endangered or rare species. These efforts also include data collection and collaborative work in publishing reports and articles, demonstrating the value of national-level cooperation for marine biodiversity conservation.

Section III: SUIVI DES RECOMMANDATIONS FORMULÉES PAR LE(S) ÉVALUATION(S) PRÉCÉDENTE(S)

7. MISE EN ŒUVRE DES RECOMMANDATIONS FORMULÉES PAR LES ÉVALUATIONS PRÉCÉDENTES

	Note
<p>7.1. Évaluer dans quelle mesure les recommandations éventuellement formulées par les évaluations précédentes ont été mises en œuvre : Les recommandations formulées par la/les CTC et/ou approuvées par les Points Focaux pour les ASP concernant la Section I.</p> <p><u>Échelle d'évaluation</u></p> <p>'Non' pour toutes : 0</p> <p>'Oui' pour seulement certaines d'entre elles : 1</p> <p>'Oui' pour la plupart d'entre elles : 2</p> <p>'Oui' pour toutes : 3</p>	<p>2</p>
<p><u>Justification de la note</u></p>	

Justification de la note

Tyre Coast Nature Reserve (TCNR) has made remarkable progress in implementing the 2018 recommendations and further advancing its role as a key Marine Protected Area (MPA) and a significant center for scientific research. The reserve has demonstrated notable achievements in biodiversity conservation, community engagement, governance, and infrastructure enhancement, solidifying its position as a model for sustainable conservation in the Mediterranean region.

Key Achievements and Enhancements

Sea Turtle Conservation: TCNR has achieved a significant increase in sea turtle nests through strengthened monitoring, nest protection initiatives, and the enforcement of laws and regulations. Capacity-building programs for the TCNR team have further enhanced conservation techniques and responses to environmental incidents.

Improved Patrols and Enforcement: A robust patrolling system on land and sea, supported by TCNR's new patrol boat and CCTV cameras, has significantly reduced illegal activities, including unauthorized fishing. Collaboration with the Municipality of Tyre, the Ministry of Agriculture, the Lebanese Army, and Coastal Guards has been instrumental in these efforts. However, there is still a need for enhancement of law enforcement in order to control further human activities in the touristic area in the peak season in summer, and stop marine litter and plastic pollution, and reduce unregulated activities, and stop all illegal fishing activities.

Community Engagement and Collaboration: TCNR has successfully increased the involvement of local communities, particularly students and youth, in its programs. It has strengthened partnerships with fishers, farmers, and NGOs, fostering trust and creating opportunities for sustainable livelihoods. The reserve has also organized more cleaning campaigns and educational initiatives, promoting conservation awareness and action.

Youth Development and Gender Equity: TCNR is actively working on youth capacity building through training programs and its innovative *Ecoleader Program*, which encourages young individuals to take leadership roles in conservation efforts. Additionally, TCNR is focusing on gender equity by ensuring inclusive participation in its programs and management activities.

Scientific Contributions: TCNR has become a hub for scientific research, regularly publishing articles and reports on topics such as marine biodiversity, habitat restoration, the impact of climate change, and monitoring Non-Indigenous Species (NIS). These contributions enhance understanding of the Mediterranean's ecosystems and attract researchers and institutions, further emphasizing TCNR's scientific importance.

Infrastructure and Programs

Enhanced Infrastructure: Under the updated Management Plan (2023-2028), TCNR has rehabilitated critical facilities, including the visitor center, bird towers, and educational trails. The conservative zone has been fully fenced, and the signage system has been expanded to improve navigation and awareness for visitors.

Expanded Equipment: The reserve is equipped with a patrol boat, drones, and scientific tools for biodiversity monitoring, including dataloggers for sea turtle nests, water quality kits, and high-quality microscopes.

Marine Biodiversity Monitoring: TCNR has established monitoring systems for key habitats such as *Cymodocea nodosa* meadows and coralligenous assemblages, as well as tracking and eradicating invasive species like *Heterotheca subaxillaris*. Networks with fishers and divers support these efforts.

Reforestation and Habitat Restoration: Initiatives include the planting of Gemmayz trees within the conservation zone to restore degraded areas and promote ecosystem resilience.

Institutional Collaboration and Governance

Stronger Collaboration with the Municipality of Tyre: Enhanced cooperation has improved law enforcement and resource management. The Municipality of Tyre contributes 35% of the income from the touristic zone to support TCNR's patrols, operations, and development.

Partnerships with Stakeholders: TCNR has deepened its relationships with local and international stakeholders, including SPA/RAC, IUCN, MedPAN, and ENI CBC MED projects. Twinning programs with Medes Island Nature Reserve (Spain) and Grande Motte Sea Turtle Rescue Center (France) strengthen knowledge sharing and collaboration.

Job Opportunities and Local Impact

TCNR has emerged as a source of employment for local NGOs and national experts, creating job opportunities in various capacities, from research and monitoring to capacity-building initiatives. These opportunities further solidify TCNR's role as a socio-economic asset to the local community.

Climate Change Focus

TCNR is increasingly addressing climate change through monitoring programs and mitigation strategies. Dataloggers placed in sea turtle nests help track temperature changes, while the reserve studies the impacts of climate change on marine habitats and species to inform conservation strategies.

Communication and Awareness

TCNR has a clear signage and educational system, ensuring that visitors understand the reserve's rules and regulations while promoting awareness of its ecological importance. The reserve has gained significant visibility in the media through its robust communication plan. National and international press frequently highlight TCNR's achievements, solidifying its reputation as a model of marine conservation.

Conclusion

Today, TCNR stands out as a significant Marine Protected Area, combining effective biodiversity conservation with scientific research, community engagement, and infrastructure enhancement. With its focus on youth development, job creation, gender equity, climate change mitigation, and strengthened collaborations, TCNR continues to grow as a model for sustainable development and marine conservation in the Mediterranean region. Its recognition by local communities and the broader public ensures ongoing support for its efforts, securing a brighter future for the reserve and its rich biodiversity.

	Note
<p>7.2. Évaluer dans quelle mesure les recommandations éventuellement formulées par les évaluations précédentes ont été mises en œuvre : Les recommandations formulées par la/les CTC et/ou approuvées par les Points Focaux pour les ASP concernant la Section II.</p> <p><u>Échelle d'évaluation</u></p> <p>'Non' pour toutes : 0</p> <p>'Oui' pour seulement certaines d'entre elles : 1</p> <p>'Oui' pour la plupart d'entre elles : 2</p> <p>'Oui' pour toutes : 3</p>	<p>2</p>
<p><u>Justification de la note</u></p> <p>Tyre Coast Nature Reserve (TCNR) has effectively addressed and reduced major threats to the reserve through a combination of proactive measures, collaboration, and strategic initiatives. Illegal fishing methods have decreased due to the implementation of a robust patrolling system in collaboration with the Municipality of Tyre and other authorities. Solid waste pollution, which was a major issue, has been mitigated through extensive efforts, including cleaning campaigns, awareness programs, education, mitigation actions, scientific monitoring, and the implementation of innovative solutions. Bird hunting within the reserve has been completely stopped, and horsing activities have been significantly reduced, especially since the scientific zone has been fully closed off.</p> <p>Non-Indigenous Species (NIS) are being systematically monitored through dedicated programs and citizen-science initiatives. Training on monitoring techniques for NIS is regularly offered to fishers and divers, alongside the provision of specialized tools to support their efforts. TCNR also organizes numerous cleaning events, particularly targeting the seabed, utilizing cleaning tools and innovative methods to address marine litter. Climate change impacts are also being tracked using various techniques, including monitoring sea turtle nests with data loggers to evaluate temperature effects. The longstanding conflict with the Rashidiyeh camp has seen significant progress, with a new project underway to benefit the area and its surroundings. However, there is still a need to address the marine litter, solid waste and wastewater pollution that are being generated from this camp and reaching the reserve.</p> <p>Today, TCNR's delineation is clearly established both on land and in the marine zone, ensuring proper governance and protection, the surface area, and the terrestrial and marine borders are clear, however demarcation by buoys is not done for the marine part of the reserve.</p> <p>The reserve has expanded its cooperation and collaboration with Mediterranean organizations, gaining the trust and recognition of many international bodies. TCNR is now actively represented in numerous international and national symposiums and workshops, reflecting its growing prominence in the conservation community.</p> <p>Additionally, TCNR has established several networks, particularly with fishers and divers, who play a vital role in enforcing laws and regulations as well as contributing to monitoring efforts. These collaborations have strengthened community engagement and improved compliance with conservation measures. There has also been a significant increase in capacity-building efforts for the TCNR team, further enhancing their skills and expertise.</p> <p>TCNR has also established effective collaboration with Palm Island Nature Reserve, another national SPAMI, fostering joint initiatives, particularly in monitoring and conservation. The reserve has built stronger cooperation and trust with the Municipality of Tyre, resulting in enhanced capacities for infrastructure maintenance and development.</p> <p>To further support environmental conservation and community engagement, TCNR provides kiosk owners with free tools to help reduce the use of plastics and promote sustainable practices. However, there is still a need to regulate human activities in the touristic zone of the reserve during the peak season in summer and to be more sustainable and environmental.</p> <p>Additionally, TCNR actively trains local communities, including students, women, and other stakeholders, through its expert team. Training sessions focus on techniques for monitoring marine biodiversity, bird identification and monitoring, diving, handmade crafts, marine biodiversity identification, and monitoring macro/micro plastics.</p> <p>Furthermore, TCNR has successfully engaged a large number of volunteers from diverse backgrounds to support its conservation initiatives. The reserve has also implemented a new software system (ISP software) to automatically bank and manage all data related to TCNR's operations and research, significantly enhancing data management and analysis capabilities. These efforts, coupled with ongoing initiatives to monitor NIS, clean marine environments, and foster community involvement, further solidify TCNR's position as a model Marine Protected Area dedicated to sustainable management and long-term ecological preservation.</p>	

CONCLUSION* (sur la base de la note*) :

Sur la base des résultats obtenus, l'ASPIM est maintenue dans le processus de révision ordinaire.

* Évaluation de la note :

La CTC proposera d'inclure l'ASPIM dans une période de nature provisoire (conformément au paragraphe 6 de la Procédure pour la révision des aires inscrites sur la Liste des ASPIM) si l'ASPIM a :

- une note < 1 pour l'un des éléments suivants 1.1, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 3.5 ou 3.6;
- une note < 2 pour l'un des éléments suivants : 1.2, 1.3, 7.1 or 7.2.

En outre, étant donné que les sites inscrits sur la Liste des ASPIM sont destinés à avoir une valeur d'exemple et de modèle pour la protection du patrimoine naturel de la région (Paragraphe A.e de l'Annexe 1 du Protocole ASP/DB), la CTC doit également proposer d'inclure l'ASPIM dans une période de nature provisoire si :

- la note totale de l'évaluation est inférieure à 54 pour une ASPIM côtière nationale (= 70% de la note totale maximale sans le bonus : 78) ;
- la note totale de l'évaluation est inférieure à 50 pour une ASPIM côtière nationale soumise à sa première révision périodique ordinaire (= 70% de la note totale maximale sans le bonus : 72) ;
- la note totale de l'évaluation est inférieure à 58 pour une ASPIM multilatérale (transfrontalière et de haute mer) (= 70% de la note totale maximale sans le bonus : 83) ;
- la note totale de l'évaluation est inférieure à 53 pour une ASPIM multilatérale (transfrontalière et de haute mer) soumise à sa première révision périodique ordinaire (= 70% de la note totale maximale sans le bonus : 77).

Le bonus n'est pris en compte que dans le cas où l'ASPIM n'a pas atteint le score minimum sans le bonus. Dans ce cas, le bonus est ajouté au score total obtenu par l'ASPIM.

**Section I: CRITERES QUI SONT OBLIGATOIRES POUR L'INSCRIPTION D'UNE AIRE SUR LA LISTE DES ASPIM
(L'Annexe I, et d'autres obligatoires pour une ASPIM, et les Art . 6 et 7 du Protocole)**

1. VALEUR MÉDITERRANÉENNE DE L'ASPIM

Note totale 7 (Max : 7)

2. DISPOSITIONS JURIDIQUES ET INSTITUTIONNELLES

Note totale 6 (Max : 6)

3. LA GESTION ET DISPONIBILITÉ DES RESSOURCES

Note totale 18 (Max : 24)

Section II: CARACTÉRISTIQUES FOURNISSANT UNE VALEUR AJOUTEE POUR L'AIRE

4. MENACES ET CONTEXTE ENVIRONNANT

Note totale 14 (Max : 23)

5. APPLICATION DES MESURES DE PROTECTION

Note totale 4 (Max : 6)

6. COOPÉRATION ET RÉSEAUTAGE

Note totale 6 (Max : 6)

Section III: SUIVI DES RECOMMANDATIONS FORMULÉES PAR LE(S) ÉVALUATION(S) PRÉCÉDENTE(S)

7. MISE EN ŒUVRE DES RECOMMANDATIONS FORMULÉES PAR LES ÉVALUATIONS**PRÉCÉDENTES**

Note totale

4 (Max : 6)

NOTE TOTALE GENERALE**59 (Max : 78)****Recommendations pour l'évaluation future**

- 1 - Implement more actions to fully enforce the regulations particularly related to vehicles, horse-back riding, jet-skis and illegal fishing.
- 2 - Empower rangers with enhanced authority and training to enforce local environmental regulations effectively and to be able to issue fines.
- 3 - Implement further actions to reduce and manage marine litter, increase the number of guards and cleaners on the beach, specially in summer season, in collaboration with the Municipality. Strengthen the involvement of kiosk owners and other stakeholders in beach cleaning and waste prevention.
- 4 - Define a zoning for the marine part of the reserve according to the management plan.
- 5 - Officialise the recruitment process of the reserve director
- 6 - Ensure regular and continued maintenance of the infrastructure.
- 7 - Continue efforts to transition to sustainable and integrated agriculture, in the agriculture zone.
- 8 - Develop an independent emergency response plan specifically tailored to the management needs of the reserve.

Signatures

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