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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE  
AND NATURAL HABITATS

**Standing Committee**

43<sup>rd</sup> meeting

Strasbourg, 27 November - 1 December 2023

**Follow-up to Recommendation No. 95 (2002) on the conservation  
of marine turtles in Kazanlı beach (Türkiye)**

**- REPORT BY THE COMPLAINANT -**

*Document prepared by*  
*Mediterranean Association to Save the Sea Turtles (MEDASSET)*

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## UPDATE REPORT BY THE NGO

### Marine Turtle Conservation in the Mediterranean

#### FOLLOW-UP OF RECOMMENDATION NO. 95 (2002) ON THE CONSERVATION OF MARINE TURTLES IN KAZANLI BEACH (TURKEY)

2 August 2023

*Document presented by  
MEDASSET - the Mediterranean Association to Save the Sea Turtles*

*for the 43<sup>rd</sup> Standing Committee Meeting of the Contracting Parties to the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)*

MEDASSET hereby submits an update report to the 2nd Bureau Meeting of the Bern Convention (September 2023) on the conservation status of sea turtle nesting beaches in Kazanlı, Turkey.

#### **Contents:**

- SUMMARY
- ANNEX 1: KAZANLI DETAILED UPDATE, BACKGROUND, MAPS & PHOTOGRAPHS
- ANNEX 2: REFERENCES

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#### **SUMMARY**

Kazanlı beach is located in southern Turkey. It is one of the top three most important green turtle (*Chelonia mydas*) nesting beaches in the Mediterranean. Conservation problems regarding Kazanlı, were first reported to the Bern Convention in 1999 and have since been discussed regularly at its annual Standing Committee Meetings. In 2000 and 2001, MEDASSET alerted about the release of toxic waste into the sea from the beachside Soda Chrome Factory and seawater sample analysis revealed chromium concentration 13.500 times higher than permitted levels. A case file was opened in 2000, followed by Recommendation No. 95 (2002) “on the conservation of marine turtles in Kazanlı beach (Turkey)”.

MEDASSET visited Kazanlı in July 2023 to assess the implementation of Recommendation No. 95 (2002) and we documented the significant and alarming issues which remain:

There is insufficient action in relation to five measures that require continual implementation, resulting in widespread litter (Point 3), lack of nest monitoring (Point 5), lack of information (Point 7), and signs of agrochemical pollution (Point 14).

Seven measures have not been implemented to date: Points 1, 4, 6, 9, 10, 11, and 13.

Of great concern is the illegal discharge detected in front of the soda-chromium factory. We observed and documented shiny and crystallized waste materials in the middle of the beach (Point 5).

Details about our summer 2023 survey findings are provided in Annex 1 “Detailed Report”. The survey was funded by Aktionsgemeinschaft Artenschutz (AGA), [www.aga-artenschutz.de](http://www.aga-artenschutz.de).

**To date, Recommendation No. 95 (2002) has not been fully implemented.** Our Detailed report highlights the urgent need to implement Recommendation No.95. The problems identified in 2002 remain unsolved and no improvement on the status of this most important nesting beach can be reported. It is of high priority for Turkish authorities to take action and resolve the unresolved conservation and management problems with no further delay.

#### **MEDASSET calls upon the authorities to:**

- Urgently implement all outstanding measures under Recommendation No. 95 (2002).

- Safeguard Kazanlı nesting beaches against any coastal build-up
- Provide information, requested in 2021 as well, of maps and details in relation to the “Kazanlı Tourism Development plan”/“Kazanlı Beach Arrangement Project”, and the designation of “Sustainable Development and Controlled Usage” areas and “Nature Conservation” areas

***MEDASSET calls upon the Bern Convention Standing Committee to:***

- Follow-up Recommendation No. 95 (2002) at the 43<sup>rd</sup> Meeting of the Standing Committee.
- Urge Turkish authorities to fully implement Rec. No. 95 (2002) with no further delay and request the abovementioned information.

## **ANNEX 1: DETAILED UPDATE, BACKGROUND, MAPS & PHOTOGRAPHS**

### **FETHIYE SPA, TÜRKİYE**

#### **DETAILED UPDATE**

*See Fig.1-3 in for the location and sections of Kazanlı, and Table-1 for the GPS coordinates of section borders and other important structures in the SPA.*

MEDASSET visited Kazanlı SPA in July 2023 to assess and document the management and conservation status of the nesting beaches. The survey was funded by Aktionsgemeinschaft Artenschutz (AGA), [www.aga-artenschutz.de](http://www.aga-artenschutz.de). The following presents the survey findings in relation to each of the measures under Recommendation No. 95.

***1. Remove as a matter of urgency, the row of greenhouses closest to the sea in beach section K3; remove, as soon as feasible, other greenhouses in beach section K3 through the appropriate legal and administrative procedures and restore that space to favour turtle nesting:***

There seems to be no attempt at restoring the nesting zone. Greenhouses in beach section K3 still remain. Artificial slopes made of boulders and rubble lay in front of the reeds lining the sea-facing sides of greenhouses, heavily littered with plastic wastes. There is a high sea turtle activity in the restricted dune area in front of the rocky wall. We believe that this intense activity occurred due to the shielding effect of the bend against artificial lights and preventing artificial noise (Fig.1).

The earth graded secondary road used in the K3 region is combined with the beach. This part of the road is a socializing area, especially at night. Vehicles park and illuminate the beach and sea with their lights. In addition, the lights of vehicles passing through the road at night directly affect the beach. Low sea turtle activity occurs here, especially in the area affected by vehicle lights (Fig. 2).

There is intense macropollution throughout the area (Figure 3). Rubble and various construction wastes are dumped in this area. There are also stray dogs (Fig. 4).

***2. Moving the taxi parking area away from the beach as a matter of urgency:***

It is a fact that the taxi parking area has been removed a long time ago, which results in Government Reports simply stating “it’s no longer there”, even though there are parking areas and vehicles that cause light and noise pollution. Vehicle activity has been detected in almost the entire area (K1, K2 and K3), in all flat areas where the road can reach the beach (Fig.5). In the area where K1-K2 sub-regions intersect, a dense car parking exists. Here vehicles are parked just behind the beach, both to the west (in front of the grove area) and to the east (from Cemre Kır Bahçesi to Onur Sitesi). Vehicles are parked in these areas especially at night for the purpose of socializing. At the K1-K2 intersection, the vehicle lights do not hit the beach directly due to the elevation difference of the place where the vehicles are parked with the beach. However, the decrease in sea turtle activities in this area shows that it disturbs the female individuals.

Facilities also cause light and noise pollution. There are two restaurants located on K2. Both customer parking is active. Both car parks are illuminated from a high point and very strong (Fig. 6). In the beach area, which is not affected by the light between the two restaurants, there are sea turtle emergences, which are not very dense. However, there is very limited nesting in front of and around the restaurants.

Onur Sitesi car park in K1 is actively used. There is lighting in amber tones here (Fig. 7). Since the point of these lights is behind the beach, it does not affect the nesting zone. However, it is recommended to reduce and screen these lightings.

Unfortunately as drafted, Recommendation No. 95 does not have any articles that address these issues, as Article 4 only mainly focuses on the Factory and Municipality Light. Thus we strongly suggest that Article 2 is amended to state “Prohibiting vehicle parking in general, near/facing the nesting beach” and extending Article 4 as to cover “all light pollution reflecting on the nesting beach”.

### ***3. Periodically removing the plastic debris from the beach:***

There is intense macro-pollution throughout the beach. The pollution, which is much more intense in some areas, is basically plastic pollution (Fig. 8). There is an NGO (Akdeniz Üçüncü Göz Eğitim ve Gençlik Derneği - Third Eye Mediterranean Society) that performs cleaning activities at regular intervals on the beach. Turkey has experienced one of the world's largest land earthquakes that occurred on February 6, 2023. Although Kazanlı (Mersin) was not directly affected by this earthquake, it was directly affected by the panic and internal migration from the earthquake region. The NGO manager, informed us that they could not carry out cleaning activities in 2023 due to this devastating earthquake.

No cleaning activity has been identified by the municipality, local people, or industrial establishments. Since the cleaning activity carried out by the local NGO in previous years did not take place this year, the pollution on the beach is very serious.

### ***4. Screening the lights of the municipality of Kazanlı and the Soda-Chromium factory so as to avoid photo-pollution on the beach:***

As we mentioned in Article 2, this Article should be extended to also address light pollution from the facilities and visitors on the beach.

The lights of the Soda-Chromium factory affect almost the entire area. However, it shows the most serious effect in K3 (Fig. 9). Almost all of the public lighting is amber toned. In particular, the lighting on the newly built road behind K1 is placed to face the opposite direction of the beach and again in amber tones (Fig. 10).

Although the lights at the location of the school at K2-K3 are suitable in terms of color, some should be screened (Figure 11).

The sources of light pollution (which can be called light disaster instead of light pollution) that affect the beach the most are Denizkizi Restaurant, Sahil Balık Restaurantı and Cemre Kır Bahçesi (Fig. 12). These light sources cause the most serious pollution. The Soda-Chromium factory, the car park at Onur Sitesi and the vehicles parked behind the beach are also sources of serious light pollution.

The light of one of the commercial ships anchored at sea during our survey was also intense (Fig. 13). Precautions should be taken for ship lighting anchored at sea as well as on land.

### ***5. Maintain monitoring of the chemical waste discharge into the sea by the chromium factory; establish a reliable and permanent monitoring of nesting activities in the beach and make an independent assessment of potential burden of the natural environment of Kazanlı, with substances released by the Soda-Chromium factory; assess the potential risk of effluents of the Soda-Chromium Factory to wildlife;***

#### ***(i) Chemical waste discharge***

According to the Government Reports, chemical wastes of the soda-chromium factory are treated in two different industrial waste treatment facilities belonging to the factory, and analysed by an accredited laboratory. The factory's website also includes some information on chemical and physical analyses of glass and chemical products, raw materials, metal and industrial waste samples. However, it does not provide analysis results regarding the chemical waste discharge.

The beach in front of the Soda-Chromium factory was surveyed. Here, too, a protective barrier made of stones has been created in order to provide protection from the effects of waves and sea level rise. Intense sea turtle activity has been detected on the sandy parts of the beach. Towards the middle of the beach, shiny and crystallized waste materials were seen on the sandy area (Fig. 14). In this part, a discharge area, believed illegal, has been documented within the factory. Photo and video recordings of this place were taken. Plastic pollution has been detected in this area. Of serious concern are several pipes extending into the sea beyond the northern border of K4, which might be discharging chemical wastes from the factory, especially the six pipes very close to the factory's northern end. A small pipeline construction was observed on the west part of the Soda-Chromium factory (Fig 15). However, information about the purpose of this pipeline could not be obtained.

***(ii) Nest monitoring***

In 2022, nest monitoring in the SPA was assigned back to Mersin University. However, during our 2022 survey, no sticks, signs, cages or any other forms of nest markings were seen on any sections, except for single long sticks placed on possible nest locations in part of K1. Although a news-piece was published on June 30th, 2022, announcing that public order police placed warning signs on the nesting beach and distributed hand brochures to the public about the sea turtles, those signs were not seen anywhere in the SPA either. In addition, no monitoring team members were seen or mentioned in conversations with locals.

The Nature Conservancy carries out an irregular monitoring study during the 2023 nesting seasons (as in 2022). In the monitoring study, some nests were marked (date, nest number, etc.), while wooden sticks were planted in the body pit of others (Fig. 16). It has been determined that there are no nests at many points marked as such and many actual nests are unmarked. In summary, based on our information, a monitoring and protection activity that received professional (or academic) support was last carried out in 2021.

***6. Setting in place a monitoring of beach erosion, so as to take remedial measures as needed:***

There is no information regarding any means of monitoring the coastal erosion of nesting beaches in Kazanlı. Several projects have been mentioned in the Government Reports over the years, but there has been no solid outcome. The only remedial measure taken against the beach erosion problem in the SPA continues to be the arbitrary use of boulders and concrete/cement structures.

In K4, the entire coastline is bordered with large boulders, and there is virtually no available sandy zone suitable for nesting. We consider this section of the beach lost for nesting. It is not possible to reach this section from either ends. In K3, large boulders line the front of the greenhouses at the northern end, near the drainage channel. There seems to be enough sandy zone for nesting although it is heavily littered, and the presence of deep body pits suggest that the beach is not very suitable for nesting and most emergences do not result with a nest. At the southern border of K2, boulders supporting the school wall adjacent to the drainage channel still seem to be helping in preventing further loss of sand. No coastal erosion was observed in K1, but the artificially made sand hills at both sides of the large drainage channel mid-section remain.

***7. Promote public awareness on the presence and interest of marine turtle nesting in Kazanlı, addressed in particular to local population:***

The lack of signage in Kazanlı SPA becomes more worrying every year. The only information sign left in the entire SPA in K1 has now lost its writing plates (Fig. 17). As of July 2023, not a single proper “sea turtle nesting beach” sign was seen in the entire SPA.

The local NGO, Akdeniz Üçüncü Göz Eğitim ve Gençlik Derneği - Third Eye Mediterranean Society, has been working in the region with local and international volunteers for a long time. The NGO’s website provides some information about the sea turtles to raise public awareness, and occasionally publishes posts on social media to announce its activities in Kazanlı, including beach cleanings and briefings.

The public seems largely uninformed or neglectful about the presence of sea turtles in the region. There is careless beach usage at nights, severe littering, fishing activities and even goat herding on the nesting beaches.

***8. Fully implementing the existing environment plan and assure the necessary financial and human resources to this end***

The Environment Status report published by the Ministry of Environment, Urbanization and Climate Change, Mersin Provincial Directorate was last published in 2021. There is no information about implementing environmental plans within the scope of this report. There is no new development within the scope of the Tarsus Kazanlı Tourism project.

The wastewater treatment facility is actively working. Behind the beach, the new access road has become operational.

***9. Removing the illegal building in beach section K1***

The illegal structure still remains in K1. In previous years, temporary use was seen especially on the lower floors. However, use has not been observed this season. The building is completely abandoned (Fig. 19).

***10. Removing as appropriate the hazardous waste accumulated over the years close to the beach as a result of industrial activities:***

The Government Reports state that the wastes from the Soda-Chromium Factory are “neutralized, pressed, and then deposited in a temporary landfill which is surrounded by an impenetrable geomembrane covering”. The “temporary” landfill area continues to be too close to the beach, inside the factory’s building complex. During our survey, it was observed that the landfill areas maintained their current location and condition (Fig. 20). In addition, direct discharge into the sea has been detected, raising serious environmental concerns.

***11. Considering the removal of the wedding hall of Kazanlı from the beach, to be relocated elsewhere:***

The wedding hall in section K3 rarely operates. Cemre Kır Bahçesi seems to be serving as the new popular place for weddings now. Restaurants in the surrounding area are also used for wedding and engagement-style entertainment.

***12. Applying appropriate treatment to sewage waters from Kazanlı, so as to free the back of the beach from pollution:***

The legislation on wastewater treatment facilities clearly states that any waste containing heavy metal is strictly prohibited from entering the system and that facilities violating this regulation are subjected to a fine called “KÖP”, a cease and desist order, and a lawsuit that may be filed by any local authority.

Sewage water from Kazanlı is pumped to Karaduvar waste water treatment facility, where it is treated before being released to the sea. Monthly analysis reports of wastewater treatment facilities can be found on the website of MESKİ (Mersin Su ve Kanalizasyon İşleri Müdürlüğü - Mersin Water and Sewerage Administration). The latest analysis report available is for January 2023 and only includes results for suspended solid matter, biochemical and chemical oxygen need, total nitrogen and total phosphorus.

***13. Looking for an appropriate solution to remove houses on the beach that were constructed legally:***

The summer house complex called “Onur Sitesi” remains on section K1 and is a source of light pollution at night. Although the Government Report of 2019 stated that the complex was constructed legally and thus cannot be removed, the parcel was included in the “Sustainable Protection and Controlled Usage Area” published in November 2020.

***14. Reducing the impact of agrochemical products in the area around Kazanlı:***

Drainage channels that directly or indirectly flow into the sea are possible sources of agrochemical contamination, and chemical waste analysis reports are required for all of them due to abundant agricultural practices in the region.

Akdeniz Municipality mentions in their strategic plan for 2020-2024 several projects on promoting agricultural practices, including organic agriculture, and environmental recycling. Updates are needed regarding the operation of the composted fertilizer production unit at the back of the beach in K1, details of the bio-farming attempts, as well as the project “Integrated pest management in undercover vegetables and fruits”. Besides the obvious agrochemical wastes affecting the SPA, the entire area of Adanalıoğlu-Kazanlı-Tarsus is filled with industrial facilities, all of which are definitely contributing to the waste problem.

The following information is given within the scope of Mersin province marine litter action plan (DCEP 2020 / 2024) ([https://webdosya.csb.gov.tr/db/mersin/menu/mersin-ili-deniz-copleri-eylem-plani\\_20200309031348.pdf](https://webdosya.csb.gov.tr/db/mersin/menu/mersin-ili-deniz-copleri-eylem-plani_20200309031348.pdf)).

-D7 and D8 drainage in Kazanlı region is a source of agricultural pollution.



- It was stated that waste collection points will be created along the coastline and the garbage on the seaside will be cleaned.

-There are partial sewer line deficiencies in Kazanlı.

- It is planned to establish Mersin-Tarsus Culture-Tourism and Conservation-Development Zone with a capacity of approximately 8000 beds on the Mediterranean coast within the Turan Emeksiz Forest, in the coastal part between the Seyhan river flowing into the sea from the Mersin-Adana provincial border in the east and Kazanlı settlement in the west.

***Other observations:***

- Sea water was exceptionally warm during the time of our survey, almost the same degree as human body, even at night.
- Sea daffodils (*Pancratium maritimum*) growing in a large area in front of the summer house complex in K1 are endemic plants that add to the ecological importance of the SPA, and must also be protected in accordance with the related laws and conventions.
- Both Denizkızı and Sahil Balık restaurants now have artificially planted palm trees in front of them, while Cemre Kır Bahçesi is surrounded with acacia trees.
- The very high amount of “V” shaped body-pits almost on top of each other in K2 indicate either disturbance during nesting or the unsuitability of beach sand.
- Currently, K1 remains as the hot-spot in the section, with a very high number of tracks, body-pits and potential nests. The protection status of this section must be kept, secured and strictly monitored.

## BACKGROUND SUMMARY

**Green sea turtles**, *Chelonia mydas*, are regarded as globally endangered.<sup>1</sup> In the Mediterranean, researchers estimate that there are only 784 green adult female turtles nesting in the region, laying about 1.164-2.674 nests per year.<sup>2</sup>

The beach of **Kazanlı** in southern Turkey is one of the most important green turtle nesting areas in the Mediterranean. In 1988, it boasted the highest density of green turtle nesting in the Mediterranean.<sup>3</sup> More recently, it was listed as among the top three most important green turtle nesting beach in the Mediterranean, together with Akyatan and Samandag beaches. In 1988-2006, 43-403 nests/year were recorded and 176–562 nests/year in 2006-2011.<sup>4</sup> Part of Kazanlı nesting beach is nationally designated as a 1st Degree Natural ‘SIT’ Protected Area. The total length of the beach is 4.5 km (see map at the end of this annex). Surveys in the 1980’s identified a number of serious **threats**, which increased in subsequent years and although confirmed and reported by numerous researchers and conservationists, the responsible authorities failed to take action for several years. As a result, the nesting beach is subject to serious deterioration.

MEDASSET has been monitoring Kazanlı nesting beach and reporting on conservation problems since 1999. Main threats identified are: erosion, wastewater and toxic waste pollution, litter, sand extraction, light pollution, agriculture (greenhouses) on the rim of the nesting beach, coastal fishing during the nesting season, disturbance to the species during nesting and lack of public awareness. To the rear of the beach, sits the Kromsan Soda Chrome Factory that has deposited 1.5 million tons of hazardous toxic waste, directly next to the Kazanlı nesting beach. The waste has a high concentration of toxic chromium (Cr 3+/6+) compounds, and is a by-product of the factory’s activities in the 1990s. This mountain of waste is covered with a plastic sheet (in reaction to Recommendation No 95), directly next to the Kazanlı nesting beach. The removal of this hazardous waste from the beach is of high priority for environmental and human health. In 2000 and 2001, MEDASSET alerted about the release of toxic waste into the sea off the nesting beach from the beachside factory. Seawater samples, which MEDASSET analysed, were found to contain chromium concentration 13,500 times higher than permitted levels. More than 23 green turtles were found dead. Discharges into the sea resulted in turtles emerging to nest with their body encrusted with white CaCO<sub>3</sub>.

### Bern Convention & the Kazanlı Case

The situation at Kazanlı has been reported several times in the Recommendations of the Bern Convention Standing Committee. In **1998** the Standing Committee adopted **Recommendation No. 66 on the conservation status of some nesting beaches for marine turtles in Turkey**, and urged the Government of Turkey to “*take urgent measures to restore the beach, remove the adjacent greenhouses and the solid waste, particularly plastics; and resolve the pollution problem from the soda chrome factory*”. To encourage conservation action, the Standing Committee opened a case file (No. 2000/1) at its 20<sup>th</sup> Meeting in **2000**. Further concerns about inadequate protection of the sea turtle population and discharge of toxic waste into the sea, finally led to an **on-the-spot appraisal mission in 2002**, following which the Standing Committee issued a specific **Recommendation No. 95 (2002) on the conservation of marine turtles in Kazanlı beach (Turkey)**, with 14 conservation measures. As some of the measures were implemented by the Turkish authorities, and considering that a better overall protection of the area had been achieved, despite MEDASSET’s call to maintain the case file open, the Standing Committee at its 24<sup>th</sup> Meeting in **2004** provisionally closed the file, requesting that the Turkish Government continues to report on progress on the implementation of the 14 recommended conservation measures. However, the Turkish Government did not report on the conservation status of Kazanlı in 2005, and no delegation attended the **2005** Standing Committee Meeting. In **2006**, the Turkish Government submitted a brief report, but again did not send a delegate

<sup>1</sup> IUCN Red List of Threatened Species, [www.iucnredlist.org](http://www.iucnredlist.org)

<sup>2</sup> Hochscheid et al. (2018). Sea Turtles in the Mediterranean Region: MTSG Annual Regional Report.

<sup>3</sup> Baran & Kasperek 1989, Yerli & Demirayak 1996

<sup>4</sup> Kasperek et al. 2001, Casale & Margaritoulis 2010, Turkozan *et al.* 2015

to the Standing Committee meeting. In **2007**, the issue was discussed at the Standing Committee, which decided not to re-open a file, but to request that the Turkish Authorities submit a report in 2008. At the **2008** Standing Committee Meeting, the Turkish Government reported on progress to implement measures listed under Recommendation No. 95 and further informed that the Soda Chrome Factory's plan to set up a landfill site had been delayed, and that the solid waste treatment would commence in July 2009, while the operation of the landfill was set to begin in November 2009. MEDASSET called on the Government of Turkey, to start implementing without delay plans to put the hazardous waste in a safe location, far from the green turtle nesting beach and the sea.

According to the March **2009** Bureau Meeting Report, the Turkish authorities reaffirmed their intention to remove the hazardous waste from Kazanlı Beach, but notified that "it would take some time". They confirmed that the construction of the waste neutralisation facility was underway and was expected to be completed as planned. EIA studies were being carried out for the waste storage site. According to the report submitted by the Government to the 2009 Standing Committee Meeting, the waste disposal facility was to be finished by October 2009. At the 2009 Meeting, the delegate of Turkey reported on progress on the implementation of Recommendation No. 95, and informed that the removal of the toxic waste was to start soon, an investment had been made to establish a neutralization plant, and that waste removal will take eight or ten years. MEDASSET welcomed progress made, and highlighted that together with the toxic waste management several points remain unsolved, such as the severe coastal erosion which requires more drastic measures by the authorities.

During the 30<sup>th</sup> Standing Committee Meeting in **2010**, though Kazanlı was not on the Meeting's agenda, and following MEDASSET's intervention, the Turkish delegate briefly informed that nest monitoring continued and that the toxic waste neutralisation facility was established within the chromium factory's grounds and that the process has started (see 2010 MEDASSET Announcement). Two hundred thousand tons of chromium had been neutralised and were kept within the Factory's grounds, until transferred to a landfill site, which had not yet been defined. MEDASSET called upon the Turkish Government to continue reporting regularly to the Convention on all issues concerning Kazanlı, especially on the toxic waste management and erosion problems. The request was reiterated via email to the Secretariat in **2011** and through an intervention during the **2012** Standing Committee. To our knowledge, no government report had been submitted since 2009.

At the **2013** Standing Committee Meeting, the Turkish delegate informed about measures, including: awareness raising targeted at visitors; local volunteer beach cleaning activities; light screening by the municipality; seasonal vehicular traffic bans; chemical analysis showing waste compounds from the chromium factory to be well below standard values. Illegal buildings and greenhouses remain on the beach. No information was provided on the remaining measures, such as the severe beach erosion problem. Information reported on the removal of the toxic waste was the same as reported in 2010, therefore, there seemed to be no tangible progress (for details see T-PVS/Files (2014) 58).

In **2014**, the Turkish delegate's oral statement at the Standing Committee Meeting addressed all measures under Recommendation No. 95. MEDASSET welcomed the continuation of awareness raising, nest monitoring, efforts to reduce agrochemical pollution, municipal sewage and industrial wastewater discharge monitoring. A single beach cleanup before the nesting season was reported. The report was unclear regarding whether light pollution reduction measures were indeed taken or if there were only discussions with the municipality and factory about this issue. The 1.5 million tons of solid toxic waste remain next to the nesting beach, there was no update on the amount of waste neutralised during 2011-2014 and the only positive news was that the permanent landfill for the neutralised waste should start to operate in 2015, as the EIA was completed in 2014. Regrettably, removal of greenhouses and illegal buildings had not progressed, pending an ongoing shoreline delimitation court process. Lastly, there was a complete lack of measures to monitor or manage erosion. As announced in the delegate's oral intervention, in Dec. 2014 the Ministry made a study visit to ARCHELON (Athens, Greece) regarding the management of nesting sites. During the visit, MEDASSET participated in a discussion session on beach erosion and invited an expert geologist who, after noting the severe erosion in Kazanlı using satellite imagery, identified the river dams in the surrounding area as the

possible key source (as has been suggested in MEDASSET's reports) and provided some general guidance on potential measures.

At the **2015** Standing Committee meeting, the Turkish delegate presented a report on the 14 points of Recommendation No. 95 (2002): preliminary work was underway regarding a beach erosion project and 46.593 tons of the neutralised chemical waste stored in a temporary landfill facility in the factory, had been transferred to a permanent landfill (for details see T- PVS/Files (2015) 49).

At the **2017** Standing Committee meeting, the Turkish delegate informed that the beach erosion project was not launched and no action has been taken to deal with the erosion problem, and that 183 thousand tons out of the 1.5 million tons (only 12.2%) of the neutralised chemical waste stored in the temporary facilities had been transferred to a permanent landfill. MEDASSET's survey and report confirmed that the huge amount of toxic waste remains next to the nesting beach and erosion is accelerating at an alarming speed. Despite government reports, light pollution is still a major problem, abandoned buildings and greenhouses are still present on the beach, summerhouses and a wedding hall continue to operate in the nesting area, and information signs are severely lacking.

At the **2019** Standing Committee meeting, MEDASSET reported the lack of implementation of Recommendation No 95 to tackle conservation problems such as coastal erosion, litter, sand extraction, light pollution, coastal fishing during the nesting season and lack of public awareness. According to the Government report "the amount of chromium neutralized in this facility is around 800.000 tons." MEDASSET noted the slow progress in removing the toxic waste, despite government commitments that the process would be completed by 2019. The Standing Committee urged the Turkish authorities to implement all points of Recommendation No. 95 (2002) and requested an updated report in 2021.

At the **2021** Standing Committee meeting, MEDASSET reported the lack of implementation of Recommendation No 95 to tackle conservation problems such as coastal erosion, litter, sand extraction, light pollution, coastal fishing during the nesting season and lack of public awareness. The Standing Committee took note of the updated information provided by both parties and thanked the Turkish authorities and MEDASSET for their presentations. The Committee took note of the complainant's concerns that progress in the implementation of Recommendation No. 95 (2002) was lacking, especially concerning the erosion of the nesting beach and T-PVS(2021)MISC - 22 - building removal. The Committee expressed its regret that the project in cooperation with the METU Marine Sciences Institute on the factors causing coastal erosion, due to lack of funds, could not be implemented. The Standing Committee urged the Turkish authorities to implement all conditions of Recommendation No. 95 (2002) and to accelerate the neutralisation process of the remaining hazardous wastes, hoping that in 2023 all waste would be neutralised. Both parties were invited to submit updated reports in two years.

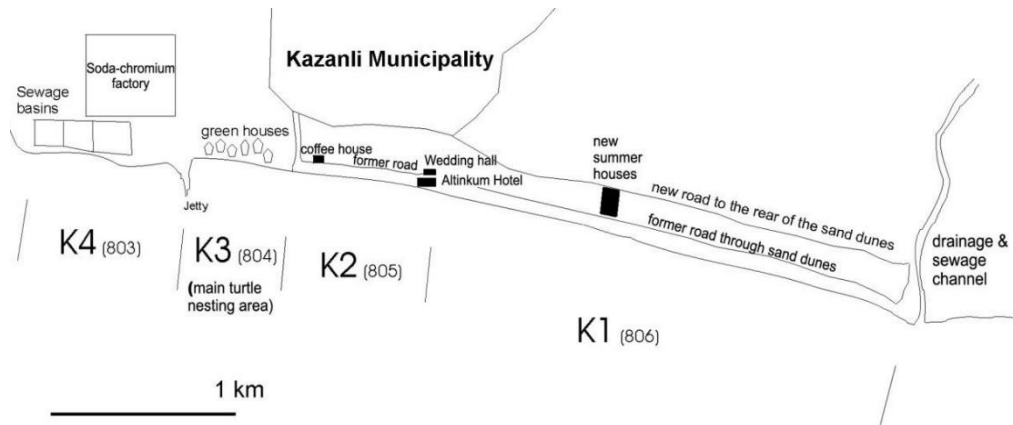
## TABLE, MAPS & PHOTOGRAPHS

**Table 1.** Locations of some points of interest in Kazanlı. Records taken by “GPS Coordinates, developed by Fundroid 3000”, with an accuracy of 8-14 m, and cross-referenced with Google Earth.

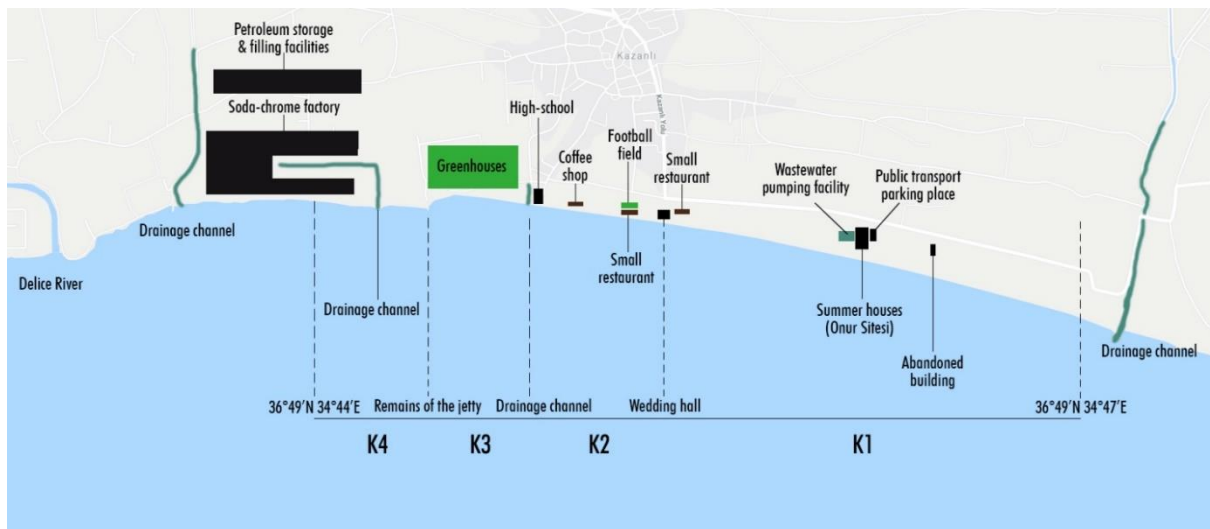
	COORDINATES	DEFINITION
<b>K1</b>	36°48'14"N - 34°47'14"E	Southern end of K1 and the SPA
	36°48'22"N - 34°46'17"E	Sea turtle nesting beach sign in K1
	36°48'30"N - 34°46'32"E	Abandoned building
	36°48'29"N - 34°46'16"E	Semi dried-up drainage outlet, near abandoned building
	36°48'33"N - 34°45'54"E	Dried drainage outlet
	36°48'40"N - 34°45'27"E	Cemre Café
<b>K2</b>	36°48'41"N - 34°45'24"E	Wedding Hall (K1-K2 border)
	36°48'39"N - 34°45'13"E	Sahil Restaurant & Football court
	36°48'40"N - 34°45'09"E	Recreation area (Sea Turtle Shaped Park)
	36°48'40"N - 34°45'04"E	Denizkızı Restaurant
<b>K3</b>	36°48'41"N - 34°44'52"E	Drainage outlet (K2-K3 border)
	36°48'43"N - 34°44'33"E	End of nesting beach. boulders by the very close-by road
	36°48'40"N - 34°44'27"E	Remains of the jetty (K3-K4 border)
<b>K4</b>	36°48'41"N - 34°43'43"E	Northern end of K4 and the SPA
	36°48'40"N - 34°43'25"E	The 6+1 pipes to the west of Soda Chromium Factory
	36°48'35"N - 34°43'09"E	The very large concrete pipe



**Map 1.** Location of Kazanlı, Turkey, among major nesting sites.



**Map 2.** Sections of Kazanlı nesting beach and coastal infrastructure. *Source: Kasparek et al., 2001*



**Map 3.** Updated map of Kazanlı nesting beach sections and coastal infrastructure.



Fig 1. The rocky wall covered by plastic wastes. There are many nest and non nesting emergences in front of this wall (Black arrows).



Fig 2. The lights of cars and their illumination over the beach at K3





Figure 3. Plastic pollution is a serious problem



Fig 4. Stray dog and construction wastes





Fig 5. Vehicles are parked in areas close to the beach both during the day and at night.



Fig 6. Highly lit car parks of the restaurants



Fig 7. Onur Sitesi car park and the lights in K1



Fig 8. The amount of plastic is quite dense throughout the entire beach.



Fig 9. Soda-Chromium factory lights



Fig 10. Road lights are amber and they are not visible from the beach.



Fig 11. The tone and the direction of the road lights next to the school area.





Fig 12. The sources of light pollution ( Denizkızı Restaurant, Sahil Balık Restaurantı and Cemre Kır Bahçesi)





Fig 13. The light of one of the commercial ship

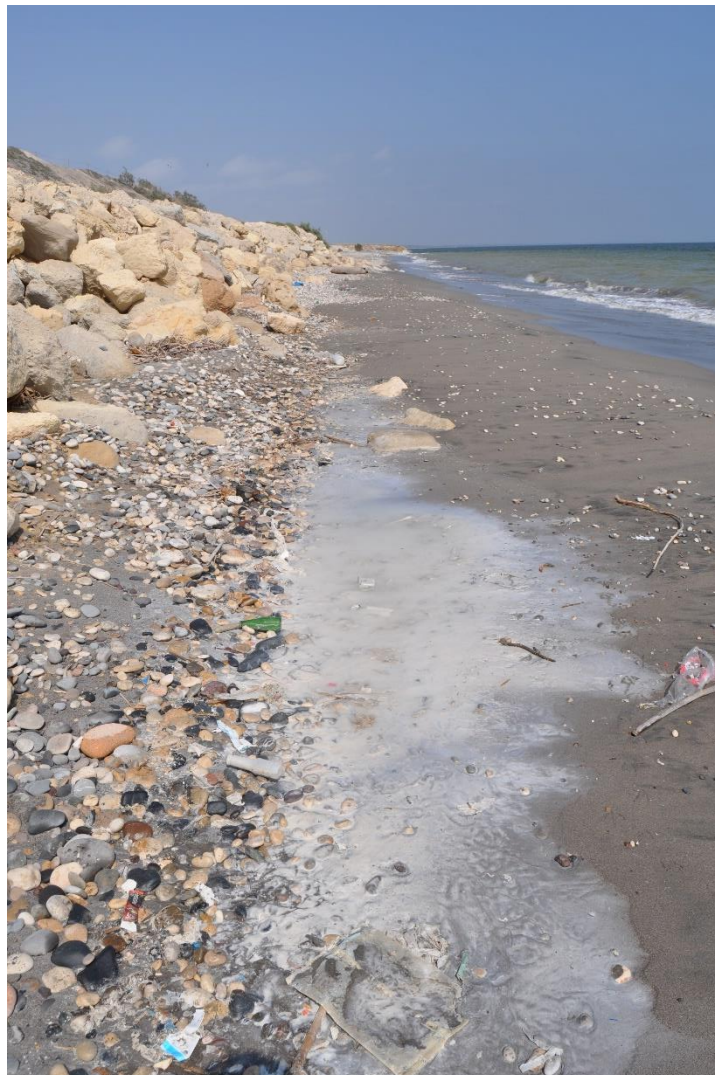


Fig 14. Shiny and crystallized waste materials were seen on the sandy area in front of the Soda-Chromium factory



Fig 15. A small pipeline construction on the west part of the Soda-Chromium factory





Fig 16. Wooden sticks were planted in the body pit and some nests were marked with date



Fig 17. The information sign at the eastern entrance of the beach and Cemre Kır Bahçesi



Fig 19. The illegal building is completely abandoned



Fig 20. The chemical waste storage areas maintained their current location and condition

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- No. 13 (1988) Concerning measures for the protection of critical biotopes of endangered amphibians and reptiles;
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