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T-PVS/Files (2015) 45

# CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE AND NATURAL HABITATS

# **Standing Committee**

35<sup>th</sup> meeting Strasbourg, 1-4 December 2015

Follow-up of Recommendation No. 95 (2002) on the conservation of marine turtles in Kazanli beach (Turkey)

- REPORT BY THE NGO -

Document prepared by MEDASSET - The Mediterranean Association to Save the Sea Turtles

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# MEDASSET - The Mediterranean Association to Save the Sea Turtles INFORMATION NOTE

Follow-up of Recommendation No. 95 (2002) on the conservation of marine turtles in Kazanli beach (Turkey)

#### Submitted to:

the 35<sup>th</sup> Meeting of the Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)

Green turtles *Chelonia mydas* are globally endangered and in the Mediterranean researchers estimate that only 339-360 green adult females nest in the region, laying 1,500 nests per year. The species is listed in the Bern Convention Appendix II strictly protected fauna species for which Contracting Parties are required to take legislative and administrative measures to ensure their special protection. Kazanli in southern Turkey is among the top three most important green turtle nesting beaches in the Mediterranean. The habitat had been subject to gradual degradation since the 1980's. Conservation problems were first reported to the Bern Convention in 1999 and have since been discussed regularly at the annual Standing Committee Meetings. A case file was opened in 2000 followed by Recommendation No. 95 (2002) on the conservation of marine turtles in Kazanli beach (Turkey). A background summary on the case file and the conservation problems is annexed to this note.

Although the conservation of Kazanli has remained on the Convention's agenda, since 2009 no official report has been submitted to the Standing Committee by the Turkish Authorities on the implementation of 14 measures described in (2002). The Turkish delegate's oral statement at the 2013 Standing Committee Meeting reported progress on 5 measures; however, there was no progress or no information on the remaining 9 measures. At the 2014 Standing Committee, the Turkish delegate orally informed about all of the recommended measures: 8 of the measures were either partly addressed or have not been implemented yet.

In summary, progress reporting is required for six Measures of Recommendation No. 95 that have not been implemented to date (No. 1, 6, 9-11, 14) and for seven Measures that should be implemented on an ongoing basis (No. 3-5, 7-8, 12-13). An overview of the progress reported by the Turkish authorities is annexed to this note.

#### **MEDASSET** particularly reiterates its concern about lack of implementation of:

- Measure No. 1 for erosion control which continues at an appalling speed and represents a major threat which can undermine all other conservation efforts. Significant loss of beach calls for urgent and drastic measures that have yet to be taken. reater awareness of conservation issues in the Maltese community as demonstrated in the April Referendum.
- Measure No. 10 for the removal of the 1.5 million tons of highly toxic solid waste located right next to Kazanli's green turtle nesting beach, posing a severe hazard for the habitat, the sea turtle nesting population, human health and the entire Mediterranean. In 2010 the Turkish Delegate orally informed the Standing Committee Meeting, that 200,000 tons of chromium toxic waste was neutralised and the by-product is kept within the Factory's grounds, until a landfill site is established. In 2014 the Turkish delegate made an oral statement informing that the landfill will start to operate in 2015, but provided no news on the amount of waste neutralised since 2010.

Therefore, 13 years since the Recommendation's adoption, progress is considered too slow and there are few tangible results on these priority issues.

The Government of Turkey has made some progress in implementing Recommendation No. 95 (2002), however, significant issues remain. We urge the Turkish delegation to provide the Standing Committee with a full written update on progress made in relation to each of the 14 recommended measures. Should there be no such report, we urge the Standing Committee to organise an on-the-spot assessment, recalling that this was already noted as an option by the Standing Committee at its 2014 meeting.

#### Annex

#### SUMMARY ON THE CONSERVATION OF MARINE TURTLES IN KAZANLI

**Green sea turtles**, *Chelonia mydas*, are regarded as gobally endangered.<sup>1</sup> In the Mediterranean, researchers estimate that there are only 339-360 green adult female turtles nesting in the region, laying about 1,500 nests per year.<sup>2</sup>

The beach of **Kazanli** 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 Kazanli 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 Kazanli 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, is a Soda Chrome Factory that has deposited 1.5 million tons of hazardous toxic waste, covered with plastic sheeting, directly next to the Kazanli 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. 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 natural 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 KAZANLI CASE

The situation at Kazanli 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 Kazanli beach (Turkey), with 14 conservation measures:

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;

<sup>&</sup>lt;sup>1</sup> IUCN Red List of Threatened Species, Version 2011.2. www.iucnredlist.org

<sup>&</sup>lt;sup>2</sup> Broderick *et al.* 2002, Casale & Margaritoulis 2010

<sup>&</sup>lt;sup>3</sup> Baran & Kasparek 1989, Yerli & Demirayak 1996

<sup>&</sup>lt;sup>4</sup> Kasparek et al. 2001, Casale & Margaritoulis 2010, Turkozan et al. 2015

- 2. move the taxi parking area away from the beach as a matter of urgency;
- 3. periodically remove the plastic debris from the beach;
- 4. screen the lights of the municipality of Kazanli and the Soda-Chrome factory so as to avoid photopollution on the beach;
- 5. maintain monitoring of the chemical waste discharge into the sea by the chrome 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 Kazanli, with substances released by the soda-chrome factory; assess the potential risk of effluents of the soda-chromium factory to wildlife;
- 6. set in place a monitoring of beach erosion, so as to take remedial measures as needed;
- 7. promote public awareness on the presence and interest of marine turtle nesting in Kazanli, addressed in particular to local population;
- 8. *fully implement the existing environment plan and assure the necessary financial and human resources to this end;*
- 9. remove illegal building in beach section K1;
- 10. remove as appropriate the hazardous waste accumulated over the years close to the beach as a result of industrial activities;
- 11. consider the removal of the wedding hall of Kazanli from the beach, to be relocated elsewhere;
- 12. apply appropriate treatment to sewage waters from Kazanli, so as to free the back of the beach from pollution;
- 13. look for an appropriate solution to remove houses on the beach that were constructed legally;
- 14. reduce the impact of agrochemical products in the area around Kazanli.

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 Kazanli 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 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 Kazanli 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 neutralisation

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 Kazanli was not on the Meeting's agenda, and following MEDASSET's intervention during the Meeting, the Turkish delegate briefly informed that nest monitoring continued in 2010 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 they are 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 Kazanli, 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 report has been submitted since 2009.

At the **2013** Standing Committee, the Turkish delegate informed the meeting about measures, including: awareness raising programmes 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).

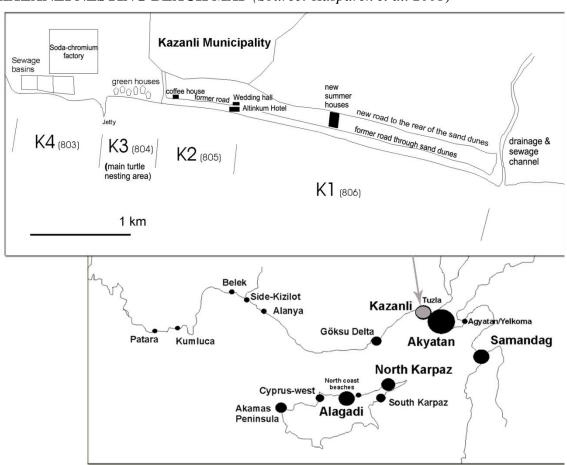
In 2014, the Turkish delegate's oral statement at the Standing Committee addressed all measures under Recommendation No. 95. MEDASSET welcomed the continuation of awareness raising, nest monitoring, efforts to reduce agrochemical pollution, municipal sewage and industrial wastewater discharge monitoring. A single beach cleanup before the nesting season was reported; periodical cleanups in the summer are preferable and important in order to remove seaborne and visitors' litter. 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 has not progressed but is pending an ongoing shoreline delimitation court process. Lastly, the complete lack of measures to monitor or manage erosion is of concern. 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 Kazanli using satellite imagery, identified the river dams in the surrounding area as the possible key (as has been suggested in MEDASSET's reports) and provided some general guidance on potential measures.

The following table provide a brief overview of the information provided by the authorities since 2009 on progress made to implement the 14 recommended measures:

OVERVIEW OF PROGRESS REPORTED BY TURKISH AUTHORITIES SINCE 2009					
<b>2002 Recommendation No. 95</b> (in brief)	2009		2014 Delegate SC		
	Government	2013 Delegate SC	Meeting		
	Report	Meeting Statement	Statement		
1. Remove greenhouses in beach section K3	Mostly	No	No		
2. Move the taxi parking area away from the					
beach	Yes	-	-		
3. Periodically remove the plastic debris from			Partly		
the beach	Yes	Yes	(once)		
		Partly			
4. Screen lights of municipality and the factory	Yes	(no info on factory)	Unclear		
5. Monitoring of chemical waste discharge into	Yes	Yes	Yes		

OVERVIEW OF PROGRESS REPORTE	D BY TURKIS	SH AUTHORITIES	<b>SINCE 2009</b>	
2002 Recommendation No. 95 (in brief)	2009		2014 Delegate SC	
	Government	2013 Delegate SC	Meeting	
	Report	Meeting Statement	Statement	
sea; independent impact assessment; establish permanent nest monitoring				
	Yes ("ban of activities			
6. Monitoring of beach erosion, take remedial	resulting in		No	
measures as needed	erosion")	No information	(planning stage)	
7. Promote public awareness	Yes	Yes	Yes	
8. Fully implement environment plan and assure				
necessary financial and human resources	Yes	No information	Yes	
9. Remove illegal building in beach section K1	Partly	No	No	
10. Remove hazardous waste close to the beach				
as a result of industrial activities	No	No	No	
11. Consider the removal of the wedding hall of				
Kazanli from the beach, to be relocated	No – inactive		No – has been	
elsewhere	in summer.	No information	inactive for years	
12. Treatment of sewage waters	Yes	No information	Yes	
13.Remove houses on the beach that were				
constructed legally	Partly	No information	No	
14. Reduce impact of agrochemical products	Partly	No information	Yes	

# KAZANLI NESTING BEACH MAP (Source: Kasparek et al. 2001)



#### REFERENCES

- Baran, I. & M. Kasparek. 1989. Marine turtles Turkey. Status survey 1988 and recommendations for conservation and management. WWF. Heidelberg. ISBN 3-925064-07-9
- Broderick, A.C., F. Glen, B.J. Godley BJ, G.C. Hays. 2002. Estimating the number of green and loggerhead turtles nesting annually in the Mediterranean. Oryx 36:227-235.
- Casale P. & D. Margaritoulis (Eds.) 2010. Sea Turtles in the Mediterranean: Distribution, Threats and Conservation Priorities. IUCN/SSC Marine Turtle Specialist Group. Gland, Switzerland: IUCN, 294 pp.
- Kasparek, M., B. J. Godley & A. C. Broderick. 2001. Nesting of the Green Turtle, *Chelonia mydas*, in the Mediterranean: a review of status and conservation needs. Zoology in the Middle East 24: 45-74.
- Yılmaz C., Oruç A., Türkozan O. 2015. Marine turtles (*Chelonia mydas and Caretta caretta*) nesting along the eastern Mediterranean coast of Turkey: Results from six years of surveying. Herpetological Journal Wolume 25, Number 4, 197–204.
- Yerli, S. and F. Demirayak. 1996. Marine turtles in Turkey: a survey on nesting site status. DHKD. CMS Report No. 96/4 133pp.

## The following Recommendations of the Standing Committee are relevant to Kazanli:

No. 7 (1987)	On the protection of marine turtles and their habitat;
No. 8 (1987)	On the protection of marine turtles in Dalyan and other important areas in Turkey;
No. 12 (1988)	Concerning the protection of important turtle nesting beaches in Turkey;
No. 13 (1988)	Concerning measures for the protection of critical biotopes of endangered amphibians and reptiles;
No. 24 (1991)	On the protection of some beaches in Turkey of particular importance to marine turtles;
No. 66 (1998)	On the conservation status of some nesting beaches for marine turtles in Turkey;
No. 95 (2002)	On the conservation of marine turtles in Kazanli beach (Turkey).

### A number of documents describe the Kazanli issue in detail. These include:

T-PVS (1999) 74	Report by the NGO: MEDASSET
T-PVS (2000) 56	Report by the NGO: MEDASSET
T-PVS (2000) 73	Report from the Government
T-PVS (2001) 39	Report by the Secretariat of the Bern Convention
T-PVS (2001) 70	Report by the NGO: MEDASSET
T-PVS/Files (2002) 2	Report of on-the-spot appraisal undertaken for the Council of Europe
T-PVS/Files (2002) 17	Report by Turkish Government
T-PVS/Files (2002) 20	Report by the Secretariat of the Bern Convention
T-PVS/Files (2003) 14	Report by the NGO: MEDASSET
T-PVS/Files (2004) 10	Report of the Meeting of the Bureau
T-PVS/Files (2004) 11	Report by the NGO: MEDASSET
T-PVS/Files (2004) 16	Report by the Secretariat
T-PVS/Files (2005) 10	Report by the NGO: MEDASSET
T-PVS/Files (2006) 3	Report by the Government

T-PVS/Files (2006) 13 Report by the NGO: MEDASSET

T-PVS/Files (2007) 29 Report by the Government

T-PVS/Files (2007) 16 Report by the NGO: MEDASSET

T-PVS/Files (2008) 10 Report from the Government

No T-PVS reference (2008) MEDASSET Update on Green Turtle (Chelonia Mydas) Conservation

Monitoring in Kazanli, Turkey

T-PVS (2009) 7 Report of the 1<sup>st</sup> Meeting of the Bureau

T-PVS/Files (2009) 11 Report from the Government

No T-PVS reference (2009) MEDASSET Update on Green Turtle (Chelonia Mydas) Conservation

Monitoring in Kazanli, Turkey

T-PVS (2010) 25 Standing Committee Meeting Report

No T-PVS reference (2010) MEDASSET Announcement. 14/12/2010, Bern Convention, Council of

Europe: Sea Turtle Conservation Problems in Cyprus & Turkey

T-PVS (2012) 22 Standing Committee Meeting Report
T-PVS/Files (2013) 52 Report by the NGO: MEDASSET
T-PVS (2013) 15 Standing Committee Meeting Report
T-PVS/Files (2014) 58 Report by the NGO: MEDASSET

T-PVS (2014) Misc Standing Committee List of Decisions & Adopted Texts

# ADDENDUM TO T-PVS/Files (2015) 45 - NGO REPORT

TABLE: Overview of progress reported by Turkish authorities since 2009

2002 Recommendation No. 95 (in brief)	2009 Government Report	2013 Delegate SC Meeting Statement	2014 Delegate SC Meeting Statement	2015 Government Report
1. Remove <b>greenhouses</b> in beach section K3	Mostly	No	No (court case)	No (court case)
2. Move the taxi <b>parking</b> area away from the beach	Yes	-	-	-
3. Periodically remove the plastic <b>debris</b> from the beach	Yes	Yes	Partly (once)	Partly (once)
4. Screen <b>lights</b> of municipality and the factory	Yes	Partly (no info on factory light)	Unclear	Unclear
5. Monitoring of <b>chemical waste discharge into sea</b> ; independent impact assessment; establish permanent <b>nest monitoring</b>	Yes	Yes	Yes	Yes
6. Monitoring of beach <b>erosion</b> , take remedial measures as needed	Yes ("ban of activities resulting in erosion")	No information	No (planning stage)	No (planning stage)
7. Promote public <b>awareness</b>	Yes	Yes	Yes	Yes
8. Fully implement <b>environment plan</b> and assure necessary financial and human resources	Yes	No information	Yes	Yes
9. Remove <b>illegal building</b> in beach section K1	Partly	No	No (court case)	No (court case)
10. Remove <b>hazardous waste</b> close to the beach as a result of industrial activities	No	No	No	No - some progress made (46.593 tn neutralised & transferred to new landfill)
11. Consider the removal of the wedding hall of Kazanli from the beach, to be relocated elsewhere	No – inactive in summer.	No information	No – inactive for years	No – inactive for years
12. Treatment of <b>sewage</b> waters	Yes	No information	Yes	Yes
13.Remove <b>houses</b> on the beach that were constructed legally	Partly	No information	No	No
14. Reduce impact of <b>agrochemical</b> products	Partly	No information	Yes	Yes

#### COMPARISON OF GOVERNMENT 2014 ORAL STATEMENT - 2015 REPORT

1. Removing 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:

#### **NO PROGRESS (same)**

2014: In the inspection that was carried out by our Ministry on 09th July 2014, it was spotted that there are still some greenhouses in K3 section of the beach which are very close to the sea. This issue was discussed with the responsible municipality and we learnt that all the greenhouses there have parcel numbers, the shore edge line in the region is in the local court and the court is waiting for renewal of cadastral work, once this work is done, all the lands beyond the shore edge line will be transferred to public property.

2015: In the inspection that was carried out by the Ministry of Forestry and Water Affairs on 07th October 2015, it was spotted that there are still some greenhouses in K3 section of the beach which are very close to the sea. As we have stated last year, all the greenhouses there have parcel numbers, meaning that they are legal considering the existing legislation. However, the shore edge line in the region is in the local court and the court is still waiting for renewal of cadastral work, once this work is done, all the lands beyond the shore edge line will be transferred to public property.

3. Periodically removing the plastic debris from the beach:

# **PARTLY IMPLEMENTED (cleaned once)**

2014: Like every year, the responsible municipality, with the volunteered contributions of students, cleaned the area before the nesting season of 2014.

2015: Like every year, some inspections were done by the Ministry of Forestry and Water Affairs on the nesting beaches of sea turtles and the related institutions were informed about the situation. The responsible municipality, with the volunteered contributions of students, cleaned the area before the nesting season of 2015.

**Comment:** beach cleanups should be periodical instead of once per season, done manually and not with the use of heavy machinery.

4. Screening the lights of the municipality of Kazanlı and the Soda-Chrome factory so as to avoid photopollution on the beach:

### **UNCLEAR**

2014: The responsible municipality was reminded of the precautions about photopollution, and they interviewed with restaurants around and the Soda-chrome factory to take necessary measures. Also Mersin university made screening for the nests during the hatching season.

2015: The responsible municipality was reminded of the precautions about photopollution, and they interviewed with restaurants around and the Soda-chrome factory to take necessary measures. Also Mersin university in cooperation with Ministry of Forestry and Water Affairs and Soda-chrome factory made screening for the nests during the hatching season.

Comment: It is unclear if lights were screened or if the measure was just discussed. We urge the government to make periodical site visits to check that lights are screened. Though screening of nests is a positive measure, it does not deal with the source of the light pollution problem. If lights are screened, there will be a lower need for nest screening.

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

#### NO - IN PROGRESS / PLANNING STAGE

2014: As we don't have enough information on how to prevent beach erosion, we planned a study visit to Greece. We will discuss this beach erosion issue with our colleagues in Archelon, which is one of two NGOs on marine turtles in Greece. After our visit, we will initiate a beach erosion control program and also start preparing a regulation on management of nesting sites of marine turtles.

2015: The Ministry of Forestry and Water Affairs, together with Mersin University started the preliminary work on a beach erosion project. This project is in draft now and the Ministry of Forestry and Water Affairs is working on the budgetary issues.

Comment: This is excellent news, however, as 13 years have passed since the Recommendation was issued and erosion has progressed, we urge the government to carry out the study asap and, most importantly, take action on the ground, with no further delay.

9. Removing the illegal building in beach section K1:

#### **NO PROGRESS**

2014 & 2015: The decision mentioned in the first article will apply to this building as well.

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

#### **NO - IN PROGRESS**

2014: As it was mentioned last year, the company has built a facility to dispose of this waste and it has been actively working since November 2009. The wastes are neutralized, pressed, and then deposited in a temporary landfill which is surrounded by an impenetrable geomembrane covering material. Better news is that the <u>environmental impact assessment of the permanent landfill was completed</u> and the company will start to deposit the waste there in 2015. After finishing the ground preparation, all the waste will be deposited there.

2015: As it was mentioned last year, the company has built a facility to dispose of this waste and it has been actively working since November 2009. The wastes are neutralized, pressed, and then deposited in a temporary landfill which is surrounded by an impenetrable geomembrane covering material. This neutralization process is the one of the first examples of its kind in the world. When neutralized, this waste becomes nonhazardous. Moreover, this nonhazardous chemical waste stored in this ETAN facilities is now being transferred to the permanent landfill site whose environmental impact assessment was completed last year. The company started to deposit the waste here, and as of 14 September 2015, 46593 tons of waste was transferred there. The authorities of the company plan to neutralize all the chemical waste, which is 1.7 million tons, in 8 years. As the waste is neutralized, it will be transferred to the new permanent landfill.

#### **Comment:** This is excellent news, however:

- If, as reported in 2010 & 2013, 200.000 tons have already been neutralized, the neutralised waste should be transferred to the permanent landfill asap.
- <u>Eight years (2022)</u>, is too slow. In 2009 the government reported it would take 9-10 years (2018-2019). Thirteen years have already passed since the recommendation was made.
- In the meantime the rest of the waste will still be sitting next to the beach and sea: what precautions are being taken to prevent a possible accident? Is the geomembrane enough to prevent a spill in the case of a natural disasters (e.g. extreme storm, flooding, etc)?
- 11. Considering the removal of the wedding hall of Kazanlı from the beach, to be relocated elsewhere:

#### NO PROGRESS - HALL INACTIVE

2015: As it was stated last year, the wedding hall is still inactive.

**Comment:** Remove the building to restore dune/beach.

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

#### **NO PROGRESS**

2014: During the on-site investigation, a building complex was spotted.

2015: The building complex called "Onur sitesi" is still on K1 section of the beach.

#### YES / DONE:

- 2. Moving the taxi parking area away from the beach as a matter of urgency: Moved
- 5. Maintaining monitoring of the chemical waste discharge into the sea by the chrome factory...: 2014 & 2015: Chemical wastes of the chrome factory are treated in two different industrial waste treatment facility of the factory, and the wastes were analyzed by an accredited laboratory. Chromium levels and other chemical compounds are well below standard values. Also the company is the financial sponsor of marine turtle monitoring project.
- 7. Promote public awareness on the presence and interest of marine turtle nesting in Kazanlı, addressed in particular to local population:

2014: Every year, awareness raising studies are conducted regularly. This year, a project was started in cooperation with METU IMS, Coast Guard Command and Underwater Research Society, and fisherman were invited to the marine turtle rehabilitation center in Mersin to be informed on marine turtles. Then this has become the daily program of the center.

2015: Every year, awareness raising studies are conducted regularly especially for local fishermen. This year, an educational meeting was held on 07.05.2015, and 18 local fishermen participated in the meeting. Besides local fishermen, also Coast Guard staff, local branch of Ministry of Food, Agriculture and Livestock and Mersin University attended the meeting.

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

2014 & 2015: Environment plan is a higher order plan that binds all the relevant institutions and Kazanli beach appears as marine turtle protection site in that plan.

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

2014 & 2015: Sewage waters of Kazanlı is pumped to Karaduvar waste water treatment facility, fully treated there and released to deep sea. Analysis reports of waste water treatment are published on the website of Mersin municipality. www.meski.gov.tr/Kurumsal9.aspx

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

2014 & 2015: Ministry of Food, Agriculture and Livestock has a project around the region. Increasing the efficiency of solarization against nematods and soil originated diseases. Its aim is to decrease the usage of chemicals for plant diseases. Another project is "Integrated pest management in undercover vegetables and fruits". It involves lowering the economical damage of pests to an acceptable level instead of completely destroying them. This also decreases the use of chemicals in agriculture.