

# LAKE SALDA REPORT

June 2020

Salda

## **TMMOB Lake Salda Report Commission**

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## INTRODUCTION

The Union of Chambers of Turkish Engineers and Architects (TMMOB) continues to work with the awareness of the difficulty, magnitude and responsibilities of a professional organization, a professional democratic mass organization, in today's difficult conditions in which the world, our country, our people and our members dwell.

TMMOB and its Affiliated Chambers is not the organization of distinguished engineers and architects isolated from the society, on the contrary, it has a working understanding that is included in the society and interacts with the society as a part of it. TMMOB expresses the fact that the problems of engineers, architects and city planners are not separated from the problems of the people, and the solution of their problems lies in the solution of the problems of the working classes.

TMMOB and its Affiliated Chambers have taken it upon itself to collect and share information with the public on all subjects related to their profession in each working period. What is needed to be done against the collapse of the world-wide capitalist globalization phenomenon in the form of a nightmare on all laborers and supporters of democracy, both as an ideological attack and as sanctions, is to reveal the country realities related to our profession, to specify the causes of the problems and make determinations for their solutions, to create the conditions for sharing this with the forces of labor and democracy and our people, and to fulfill the requirements of an effort in favor of good, truth, science, technique, law, labor and the people.

TMMOB and its affiliated chambers fulfill the task of making science and technology available to the public at all times. Based on these principles and working understanding, TMMOB is not indifferent to the problems of our country.

In the 45<sup>th</sup> Term Work Program of TMMOB (2018-2020), the following evaluations were made under the heading of "Struggle against Rent Plot of Nature, Cities and Living Spaces": *"Today, the capital accumulation policies prevailing in our country are based on land, property and development unearned income arrangements through intense labor exploitation as well as the exchange of urban-rural and cultural-natural assets. Our nature, cities, production and living spaces are destroyed by exploitation-unearned income interventions. TMMOB will continue to fight on legal and social grounds against deindustrialization, destruction of agricultural production; the pillage of historical-cultural assets, natural resources, forest lands, public and public lands and properties, rent-based urban transformation, privatization of the country's public assets; it will be in solidarity with the people fighting against the pillage and plunder of its nature, city, production and living spaces."*

\*\*\*

When the issue of opening the shore of Lake Salda in Burdur for construction and establishing a "National Garden" on the shore came to the agenda in 2019, the issue was brought to the agenda of the public by organizing a social reaction by the "Don't Touch My Lake Salda Platform" and the local people.

Upon the application of the platform and local people to our Association, 45. in the 22nd meeting of the Board of Directors of TMMOB dated 04.10.2019 the decision no. 418 was made for *Baki Remzi Suiçmez to participate in the workshop to be held on October 26, 2019 by the Don't Touch My Lake Salda Platform to represent our Association.*

Baki Remzi Suiçmez, a member of the Executive Board, shared his opinions by participating in the "Lake Salda Workshop and Forum" event held in Yeşilova Municipality Wedding Hall in Burdur province Yeşilova district on Saturday, October 26, 2019 by the "Don't Touch My Lake Salda Platform". The association of the platform was decided by the participants in this event.

TMMOB Lake Salda Report Commission was established with the resolution No. 428 of the Board of Directors dated 02.11.2019 No. 23 for "establishing TMMOB Lake Salda Report Comissions with the Chamber representatives for the *examination and preparing the report of negative impacts towards Lake Salda*, and including Baki Remzi Suiçmez, Selçuk Uluata, Tores Dinçöz, Ayşegül Oruçkaptan, İsmail Küçük, Deniz Kimyon,

member of Board of Directors, in the Commission.

At the 24<sup>th</sup> meeting of TMMOB on 22.11.2019; the decision No. 441 was taken to add the following to Chamber representatives commission, as follows: “To add to *TMMOB Lake Salda Report Commission; Hakkı Yalçın (EMO), Serkan Öğütü (HKMO), Mehmet Necat Özgür (İMO), Atakan Yüklü (JFMO), Faruk İlgün (JMO), Ahmet Hamdi Sargın (JMO), Hüseyin Tarhan (JMO), Servet Cevni (JMO), Yusuf Kenanoğlu (KMO), Haydar Şahin (MMO), Mehmet Soğanlı (MMO), Mustafa Diren (Meteoroloji MO), Müzeyyen Gülşen Can (MO), Reyhan Erdoğan (Peyzaj MO) and Caner Aksakal (ZMO).*

A technical delegation was established in the region with the participation of Baki Remzi Suiçmez, Dersim Gül, Eren Şahiner, Atakan Yüklü, Servet Cevni, Mehmet Soğanlı, Haydar Şahin, Müzeyyen Gülşen Can, Reyhan Erdoğan and Caner Aksakal from the TMMOB Lake Salda Report Commission. The technical delegation completed the technical examinations of Lake Salda and its surroundings on 4-5 December 2019. Technical delegation met with the representatives of Lake Salda Conservation Association, residents of Yeşilova and surrounding villages, Yeşilova Mayor Mümtaz Şenel, met with Yeşilova District Governor Abdulhamit Karaca and exchanged views on the project and its scope.<sup>1</sup>

TMMOB Chairman of the Board Emin Koramaz shared the support of TMMOB with the public in the message he sent to the action held by the "Lake Salda Conservation Association" on 15 December 2019 by the lake against current developments and impositions.<sup>2</sup>

In the process of lawsuits, appeals and new administrative decisions, the contractor firm, which won the tender within the scope of the National Garden project, started excavation and transportation activities on the white beach on April 14, 2020, within the permission of the government trying to turn the curfew in the Covid-19 epidemic into an opportunity. The activity was suspended due to the public reaction of this illegal, destroying nature work, and then the irreversible beach arrangement works were carried out. The destruction at this stage, when the apology messages of the Minister of Environment and Urbanization and the President of the Housing Development Administration (TOKİ) came to the agenda, should be considered as the massacre of the natural heritage. TMMOB immediately informed the public about this issue with its press release.<sup>3</sup>

<sup>1</sup> TMMOB LAKE SALDA REPORT COMMISSION COMPLETED ITS TECHNICAL EXAMINATIONS. (nd). Access Date, 16 June 2020, <https://www.tmmob.org.tr/icerik/tmmob-salda-golu-raporu-komisyonu-tekNIK-incelemelerini-tamamladi>

<sup>2</sup> TMMOB SENDED SUPPORT MESSAGE TO THE ACTION ON LAKE SALDA (nd). Accessed on June 16, 2020, <https://www.tmmob.org.tr/icerik/tmmob-salda-golunde-yapilan-eyleme-destek-mesaji-goderdi>

<sup>3</sup> WORK STARTED ON LAKE SALDA MUST BE STOPPED IMMEDIATELY (nd). Accessed on June 16, 2020, <http://www.tmmob.org.tr/icerik/salda-golunde-baslatilan-calisma-acilen-durdurulmalidir>

While continuing the social and legal struggle on the one hand, our chambers took the necessary social and legal initiatives, on the other hand, a technical delegation formed by our expert colleagues within the body of TMMOB, which was involved in the process by filing a lawsuit, started reporting. This report in your hand deals with all aspects of the subject from geological dimension to meteorological dimension, from agricultural dimension to environmental dimension, from planning dimension to legal dimension.

\*\*\*

In summary; Lake Salda is faced with three main threats. These threats are drought risk and drying out, pollution by mining activities and quarries, tourism pressure and construction with the National Garden Project. The 1st and 2nd degree site areas are intended to be opened for use, without considering the balance of protection and use, the right of voice and planning authority of the elected local administrations in the region is removed and all authority is left to the Ministry of Environment and Urbanization. The obstacles in front of "Urban Design Area 1-2", "Special Project Area" and "National Garden" are intended to be overcome quickly from Ankara. This report has been prepared for the purpose of protecting Lake Salda in its natural state and raising public awareness about Lake Salda and its surroundings.

We thank our friends who prepared this report for their efforts.

We hope this report guides decision-makers with its multi-disciplinary and comprehensive content. With this report, we believe that we have contributed to the struggle of the local people to carry Lake Salda to the future as a world heritage.

The promise of TMMOB is about human, nature, life and the happy future of humanity.

Regards,

**Emin KORAMAZ**  
**Chairman of the Board of Directors**

## 1. INTRODUCTION TO LAKE SALDA AND ITS SURROUNDINGS

Lake Salda is located within the borders of Yeşilova District of Burdur Province. The coordinates of the lake are between  $37^{\circ}29'$ -  $37^{\circ}33'$  north latitude and  $29^{\circ}37'$ - $29^{\circ}41'$  east longitude. The location of Lake Salda in the country is shown in Figure 1.

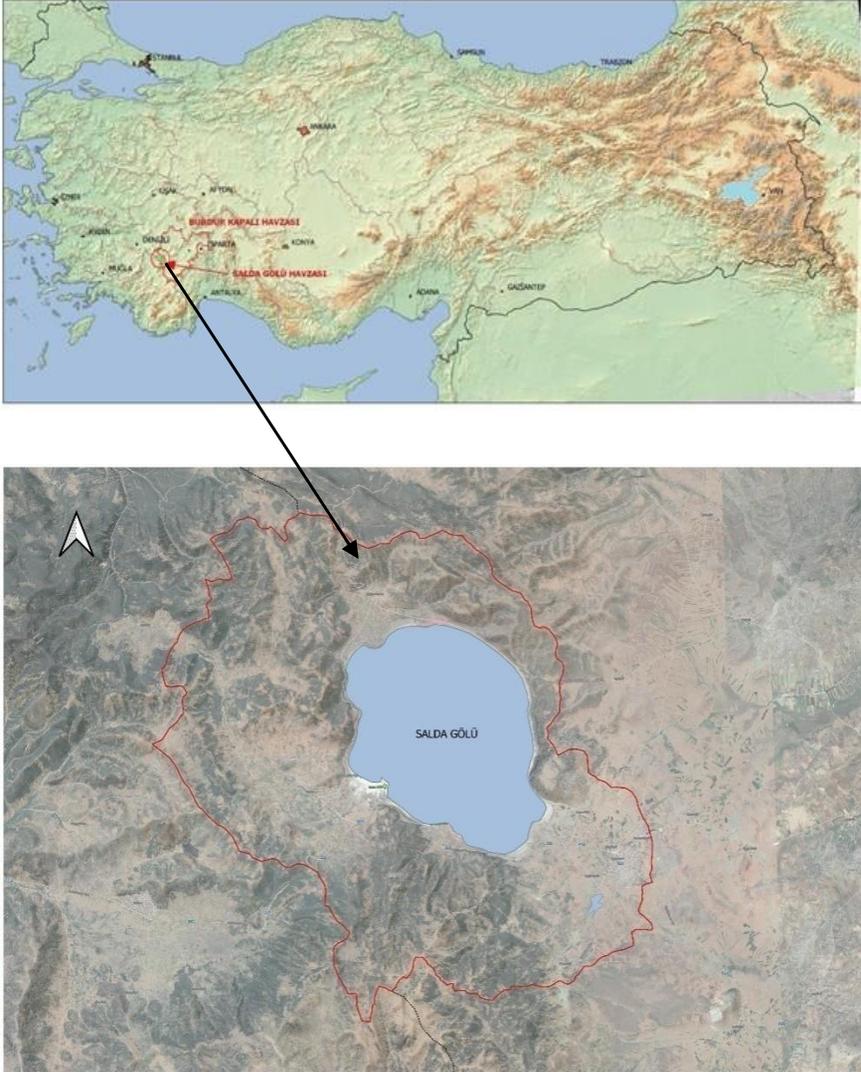
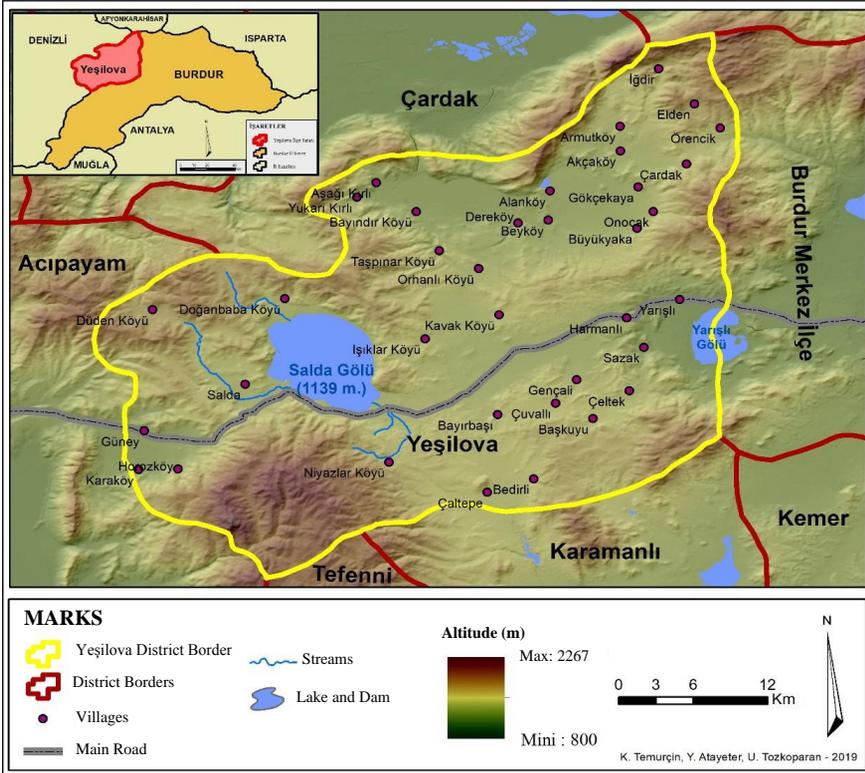


Figure 1: Place of Salt Lake in Turkey

Yeşilova District has an area of 1351 km<sup>2</sup> an average altitude of 1200 meters and 36 villages. Burdur Province and Yeşilova District are located on the roads going to Denizli-Antalya-Muğla provinces which host the most important tourism centers of Turkey, in the region called Region of Lakes, on a route from Mediterranean Region to Aegean Region and central regions of our country, hosting its natural, historical and cultural tourism assets. (Figure 2) (Temurçin, et al, 2019).



**Figure 2.** Location and Topographic View of Lake Salda (Temurçin, et al, 2019)

Burdur provides the highways connection between Central Anatolia and Aegean Region and between the Mediterranean and Aegean Region. It is located on the D650 highway route starting from Sakarya and ending in Antalya. The city is connected to Izmir, Ankara, Isparta, Afyon, Denizli and Istanbul by railway, which is not active today.

Yeşilova district, where Lake Salda is located, is approximately 60 km away from Burdur Center and is on the Denizli-Burdur D330 highway route. The distance of Lake Salda to Yeşilova settlement is 4 kilometers. It is 56 kilometers from Burdur, 96 kilometers from Denizli, 107 kilometers from Isparta and 172.6 kilometers from Muğla, which are the closest settlements to Lake Salda. The nearest airports are Isparta

Süleyman Demirel Airport, which is 109 km away, and Antalya Airport, which is 159 km away. Antalya Airport has international standards and has a high passenger carrying capacity.

Lake Salda is within the borders of 3 neighborhoods in Yeşilova District, namely Kayadibi, Yukarı Salda and Aşağı Salda. Lake Salda and its surroundings are under the authority and responsibility of Yeşilova Municipality and Special Provincial Administration.

Ministry of Culture and Tourism is registered as follows: "*While Lake Salda and its surroundings were registered and protected as a 1st degree Natural Site Area on 14.06.1989, this decision was amended by the new decision of the Antalya Board of Cultural and Natural Heritage dated 28.07.1992 and numbered 1501 and some sites on the shore of Lake Salda have been registered as 2nd degree Natural Protected Areas.*"<sup>4</sup>

Lake Salda Basin is located within the Burdur Closed Basin. Burdur Basin is located in southwest Turkey, in the northwest of the Mediterranean region and east of the Aegean Region, and remains the center and the west and northwest of the Central and Western Taurus combined, known as the Lake District. The basin is located between 37°-38° north latitudes and 29°-30° east longitudes. The basin is surrounded by Akarçay in the northeast, Antalya in the southeast, the Western Mediterranean in the southwest and the Büyük Menderes in the northwest, and as the name suggests, it is a closed basin.

Burdur Closed Basin precipitation area is 6,296 km<sup>2</sup>. The basin is administratively located in a part of Antalya, Afyonkarahisar, Burdur, Denizli and Isparta provinces. (OSIB, 2018)

Lake Salda is located within the borders of Yeşilova district of Burdur Province. The lake area is around 44 km<sup>2</sup>. The lake surface is 43.7 km<sup>2</sup> (4370 ha) according to the 2013 State Hydraulic Works (DSİ) data, and 45.78 km<sup>2</sup> (4578 ha) according to the 2016 DSİ data, and varies during the winter and summer.

Lake Salda Basin is also a closed basin and its precipitation area (including the lake area) is 215 km<sup>2</sup>. The height of the lake surface above sea level is around 1140 m. The lake has a depth of 184 meters, and besides being the third deepest lake in Turkey, is the second deepest lake among the freshwater lakes. It is fed by its own rainfall basin (DSİ, 2013), (Figure 3).

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<sup>4</sup> Ministry of Culture and Tourism Burdur Provincial Directorate of Culture and Salt, <https://burdur.ktb.gov.tr/TR-154881/orsan-golu.html>, Access date 18.06.2020

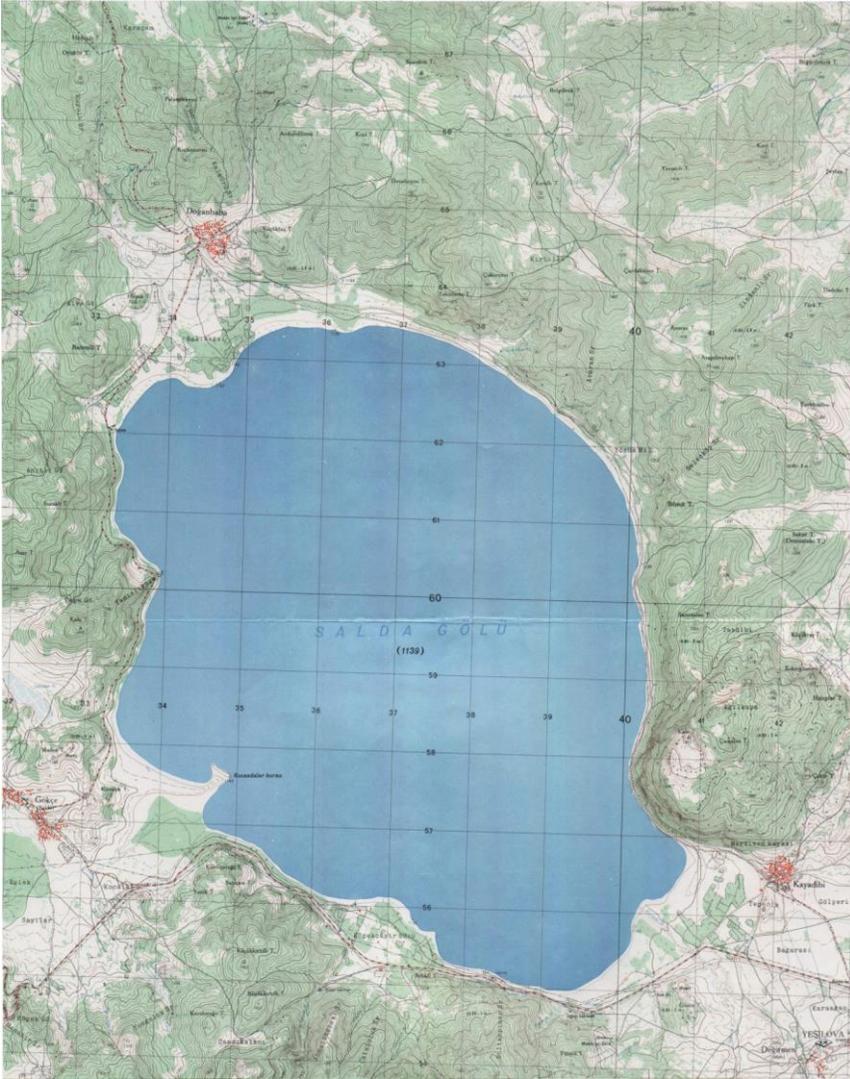


Figure 3. Geographical Map of Lake Salda (URL-1)

It is an area with international and national importance with geological and chemical characteristics, hosting the endemic species meeting the criteria for "Key Biodiversity Areas and Important Bird Areas" and which should be protected under the conditions<sup>5</sup> (EN) explained by "International Nature Conservation Union (IUCN)".

<sup>5</sup> IUCN. 2016. Rules of Procedure for IUCN Red List Assessments 2017–2020. Version 3.0. Approved by the IUCN SSC Steering Committee in September 2016. [http://cmsdocs.s3.amazonaws.com/keydocuments/Rules\\_of\\_Procedure\\_for\\_Red\\_List\\_2017-2020.pdf](http://cmsdocs.s3.amazonaws.com/keydocuments/Rules_of_Procedure_for_Red_List_2017-2020.pdf). Accessed on 18.06.2020

Studies conducted in the region show that Lake Salda is one of the two regions in the world, which bear the surface features of the planet Mars (magnesium-loaded white rocks). (Balçı et al., 2018)

There are habitats such as wetland, stream, dune, coniferous forest, woodland, mountain steppe, rocky and agriculture in Lake Salda and its surroundings. The coniferous forest habitats around Lake Salda are all around the lake except the eastern part, comprising red pine, larch, tall junipers consist, pure and mixed forests and sparse forests in places. It also hosts a significant number of populations of some waterfowl species at certain times. The fact that Lake Salda is quite clean, oligotrophic, low-salt and has high alkalinity features is a determining factor in the biological diversity and productivity of the lake, and it is a lake whose ecosystem balance is still intact. The fact that it is a geologically closed basin has determined the ecological characteristics of the lake to a great extent. Although this feature limits the species diversity and utilization possibilities of the lake, it also shows the feature of a shield that protects the lake from invading and alien species. (OSIB, 2018)

It has been stated that hydromagnesite deposition and organomineral formations on threadlike algae (Cyanobacteria etc.) such as Lake Salda are in 6 places in the world and continue. Lake Salda is the seventh of these places. In order for such a valuable natural wonder ecosystem to be protected and not polluted, the construction of a facility should be prevented, regardless of its nature.

## 2. CLIMATE FEATURES AND HYDROLOGY

### 2.1. CLIMATE

Although Burdur Closed Basin can be considered as a transition zone between the Mediterranean climate and the Central Anatolian climate, it is heavily influenced by the Central Anatolian climate: Winters are cold and rainy and summers are hot and dry.

The Lake Salda basin also shows similar climatic characteristics. In order to better understand the climate characteristics of the region, the statistics regarding some meteorological values measured at the Burdur Meteorology Station (MI) are given in Table 1 and the meteorology stations and observation periods that will represent the Lake Salda basin are given in Table 2.

BURDUR	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Measurement Period (1932-2018)													
Average Temperature (°C)	2.6	3.8	6.9	11.7	16.5	21.2	24.7	24.5	20.0	14.2	8.7	4.3	13.3
Average Highest Temperature (°C)	6.7	8.7	12.6	17.8	23.0	28.0	31.9	32.1	27.8	21.4	14.3	8.4	19.4
Average Lowest Temperature (°C)	-1.0	-0.3	1.9	6.0	10.2	13.9	17.0	16.9	12.8	8.4	4.0	0.8	7.5
Average Sunbathing Time (hours)	3.8	4.9	5.9	7.1	8.9	10.9	11.8	11.0	9.2	7.2	5.5	3.3	89.5
Average Number of Rainy Days	11.3	9.8	10.0	9.5	9.7	9.9	2.8	2.2	3.1	6.1	7.1	11.2	88.7
Average Monthly Total Rainfall (mm)	57.0	41.7	45.3	43.3	45.3	27.8	11.9	8.2	14.9	32.4	36.9	62.2	426.9
Measurement Period (1932-2018)													
Average Temperature (°C)	16.8	23.4	27.8	30.7	34.5	38.7	41.0	41.0	39.0	32.4	25.6	19.9	41.0
Average Highest Temperature (°C)	-16.7	-15.0	-11.6	-7.0	-0.4	3.8	9.0	8.8	3.4	-12.0	-12.0	-15.3	-16.7

Table 1: Some Meteorological Parameters and Statistics Observed at Burdur Meteorology Station (MI) ( Source MGM, 2019)

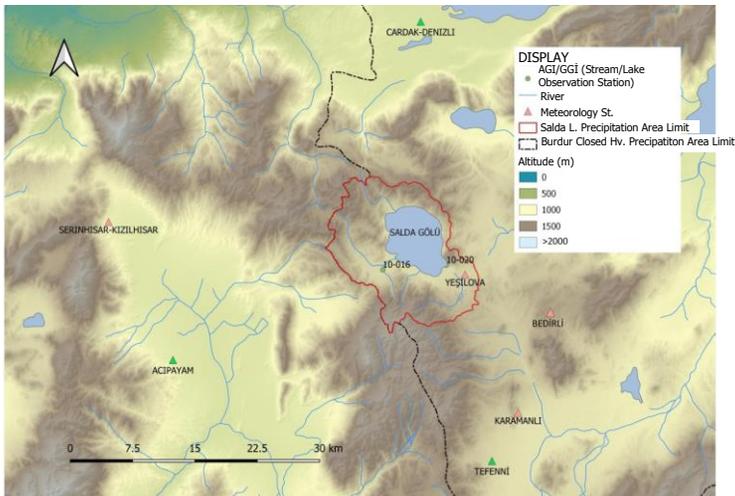


Figure 4: Lake Salda Hydrometeorological Network map

The Hydrometeorological network map of Lake Salda is given in Figure 5.

There is the Yeşilova meteorology station opened by the General Directorate of Meteorology (MGM) in the Lake Salda rainfall area. The station was opened in 1952 and closed in 1988. However, after 2015, Yeşilova Automatic Meteorology Observation Station (OMGI) was opened again in the basin with the station number 18113. They are the most suitable station that can represent the Lake Salda basin with the long-term observation data of Acıpayam and Tefenni Meteorology Stations, which are among the meteorological stations around the basin, which are still open (Table 2).

MI	Location	Height (m)	Observation Period
Yesilova	In the Basin	1250	1952 - 1988
Tefenni	Out of Basin	1142	1952 - 2015 (Open)
Acıpayam	Out of Basin	941	1950 - 2015 (Open)
Cardak-Denizli	Out of Basin	920	1963 - 1991
Bedirli-Yeşilova (DSI)	Out of Basin	1300	1973 - 2000

Table 2: Some Meteorology Stations and Observation Periods in and around the Lake Salda Basin

For the 1952-1988 period of the Yeşilova Meteorology Station, the average annual precipitation for several years is 451.6 mm. The monthly total precipitation values of Yeşilova meteorology station for many years are given in Table 3.

JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	YEARLY
67.9	53.0	44.5	34.6	39.6	23.5	15.4	10.2	16.2	33.4	40.5	73.0	451st6

Table 3: Yeşilova MI The Average of Monthly Total Precipitation Values in the Period 1952 - 1988, mm.

Gradient distribution of precipitation observed at the station is shown in Table 4.

YEŞİLOVA Mİ	Winter	Spring	Summer	Autumn	Total
Total Seasonal Rainfall, mm	193.8	118.7	49.1	90.0	451st6
Seasonal Precipitation Distribution,%	42.9	26.3	10.9	19.9	100.0

Table 4: Yeşilova MI The Distribution of Monthly Total Fats According to the Seasons in the Period of 1952 - 1988

The long-term average of monthly total precipitation values for Acıpayam and Tefenni meteorology stations are as follows. As can be seen from the table, Yeşilova meteorology station receives less precipitation than Acıpayam and Tefenni meteorology stations.

Tefenni MI	JANUARY	FEBRUARY	MARCH	ENGLAND	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	YEARLY
(1952 - 1988)	82.8	59.9	44.4	38.9	37.9	25.1	19.1	10.8	18.2	32.5	49.9	77.3	496.7
(1952-2016)	70.9	54.6	44.0	40.4	40.3	24.7	18.4	14.0	17.7	32.9	50.0	75.2	483.2

Table 5: Tefenni MI Long Years Average Monthly Total Precipitation Values, mm.

Acipayam MI	JANUARY	FEBRUARY	MARCH	ENGLAND	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	YEARLY
(1952 - 1988)	96.6	66.5	57.0	39.8	38.9	21st9	15.7	12.1	17.6	32.3	56.4	93.0	547.9
(1950-2016)	108.3	67.7	52.6	35.1	38.3	21st8	15.9	11st0	14.0	32.3	54.0	98.1	549.0

Table 6: Acipayam MI Long Years Average Monthly Total Precipitation Values, mm.

As can be seen from Table 5 and Table 6, when the precipitation data of Acipayam and Tefenni meteorology stations during the 1952 - 1988 Period and their observation periods are examined, there is no significant difference in monthly/seasonal distribution of precipitation and annual total precipitation values. Therefore, as can be seen from the Tefenni Meteorology Station (Mi) Annual Total Rainfall Chart below, it can be said that there is no serious change in the precipitation regime in the region (Figure 5).

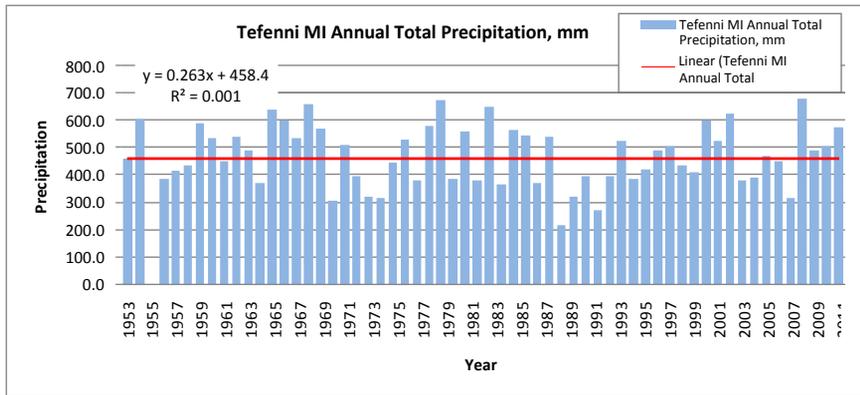


Figure 5: Tefenni MI Annual Total Precipitation (1953 - 2012)

Yeşilova meteorology station has only 5-year temperature data for the period 1983 - 1988. In order to extend the temperature data of the station, its correlation with the Tefenni meteorological station was examined. The correlation graph between the two stations is given below (Figure 6). There is a conjugate relationship between the two station temperatures. Therefore, it is okay to use extended temperature values instead of observed temperature values of Yeşilova meteorology station.

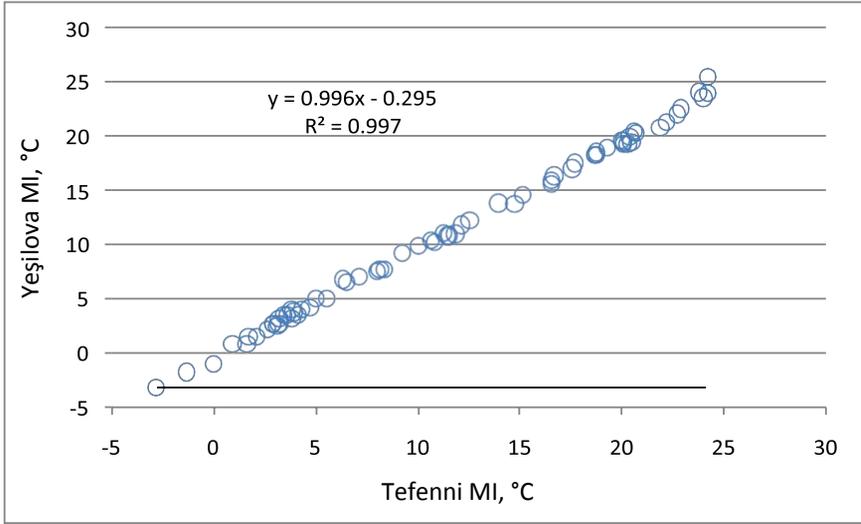


Figure 6: Tefenni - Yeşilova Meteorology Stations Temperature Correlation Graph

With the correlation relation given below between the two stations, the temperature values of the Yeşilova meteorology station were extended to the 1964 - 2015 period.

$$T_{\text{Yeşilova Mİ}} = 0.996 \times T_{\text{Tefenni Mİ}} - 0.295 \quad R^2 = 0.997$$

The long-term average of the monthly extended temperature values of the Yeşilova meteorology station is given below. As can be seen from Table 7, the temperature values of the two stations are very close to each other.

Station	Height(m)	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	Avrg.
Tefenni Mİ	1142	1st1	2.4	5.9	10.4	15.2	19.9	23.2	23.0	18.5	12.9	7.0	2.8	11st8
Yeşilova Mİ (Extended)	1250	0.8	2.1	5.5	10.0	14.8	19.5	22.9	22.6	18.1	12.5	6.7	2.5	11st5

Table 7: Yeşilova and Tefenni Mİ Monthly Average Temperatures (1963 - 2016)

The annual average temperature graphs of the Yeşilova and Tefenni meteorology stations are given in Figure 7. As can be seen from the average temperature graph for the period of 1963 - 2012, there is an increasing trend in local temperatures. It was the coldest year for the Lake Salda basin with an annual average of 10.1 °C in the period 1963 - 2012; and it was the hottest year with an annual average of 13.0 °C.

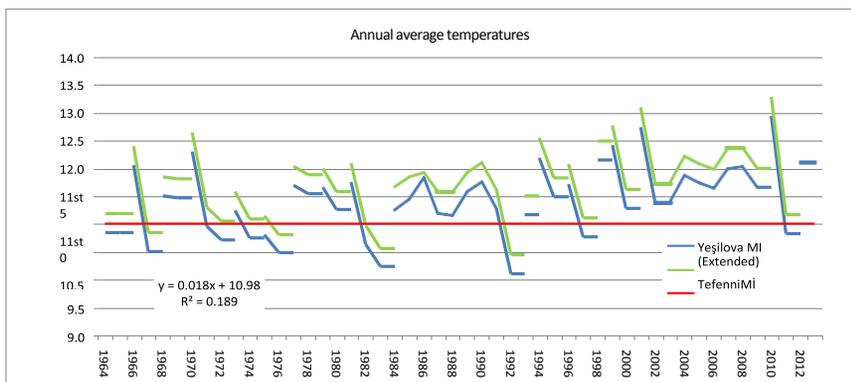


Figure 7: Annual Average Temperatures of Tefenni - Yeşilova Meteorology Stations (1963 - 2012)

Acıpayam meteorology station operated by the General Directorate of Meteorology (MGM), which conducts evaporation observation, and the Bedirli meteorology station operated by DSI, which also performs evaporation measurement, are available in the region. Evaporation measurements were made in the period 1973 - 2000 at the Bedirli meteorology station. The station is at a height of 1300 m.

The Bedirli meteorology station was chosen for the evaporation calculations of Lake Salda, since the Bedirli meteorology station is located within the Burdur Closed basin and is closer to Lake Salda. The monthly average values of the station's evaporation observations for many years are given below (Table 8).

BEDİRLİ Mİ(DSI)	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	YEARLY
Evaporation, mm				114.1	210.4	280.1	359.1	360.3	261st7	149.9			1735.8
Evaporation* 0.7 (YTDK), mm				79.9	147.3	196.1	251st4	252.2	183.2	104.9			1215.0
Average Temperature (°C)	-0.1	1st2	4.4	9.3	14.3	18.8	22.1	21st7	17.5	12.0	5.8	1st8	10.7

Table 8: Costly MI Monthly (Class A Pan) Temperature Values with Total Evaporation (1973 - 2000)

Temperature observation was not conducted at the Bedirli meteorology station. For this reason, the temperature values of the Bedirli meteorology station are 0,6 °C/100 m. It was moved from the Tefenni meteorological station with the vertical change rate.

The temperature-evaporation correlation graph of the Bedirli meteorology station is given in Figure 8. As can be seen from the graph, there is a very strong relationship between the station's temperatures and evaporation.

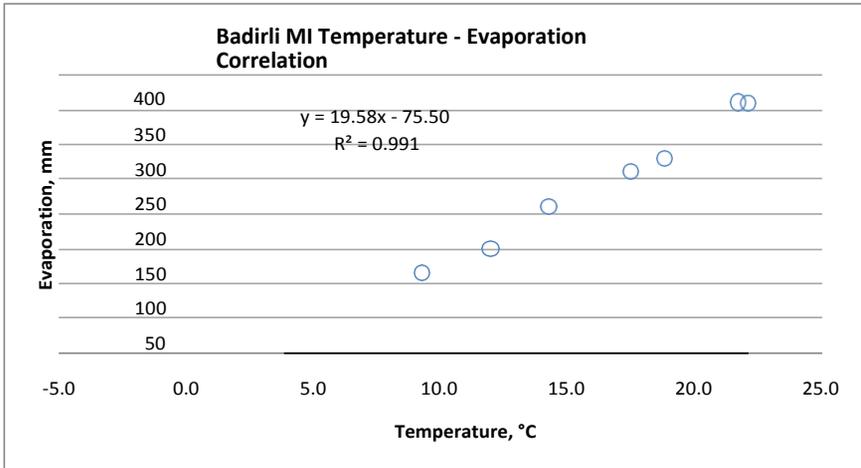


Figure 8: Badirli MI Temperature - Evaporation Correlation Graph

In order to find the evaporation from the lake surface in Salda, the temperature evaporation relationship of the Badirli meteorology station was used. The temperature values of the Tefenni meteorology station were preferred because they are at almost the same elevation for lake surface temperatures. Accordingly, the monthly total evaporation values from the Lake Salda surface were obtained as follows. As can be seen from Table 9, the annual total evaporation value from Lake Salda is 1125.1 mm.

LAKE SALDA EVAPORATION CALCULATION	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
Tefenni MI Avg. Temperatures (°C)	1st1	2.4	5.9	10.4	15.2	19.9	23.2	23.0	18.5	12.9	7.0	2.8	
Lake Salda Average Temperatures (°C)	0.9	2.2	5.7	10.2	15.0	19.7	23.0	22.8	18.3	12.7	6.8	2.6	
Lake Salda Round Pan Evaporation (mm)			35.4	123.5	218.1	310.3	375.8	370.6	283.3	172.5	57.4		1946.9
Lake Face Evaporation in Salda (mm) (Pan Eva. * 0,70)			24.7	86.5	152.7	217.2	263.0	259.4	198.3	120.7	40.2		1362.8
Lake Salda Area Precipitation (mm) (Yeşilova. Met. St.)	67.9	53.0	44.5	34.6	39.6	23.5	15.4	10.2	16.2	33.4	40.5	73.0	451st6
<b>Lake Salda Net Evaporations (mm)</b>	-	-	-	<b>51st9</b>	<b>113.1</b>	<b>193.7</b>	<b>247.7</b>	<b>249.2</b>	<b>182.1</b>	<b>87.4</b>	-	-	<b>1125.1</b>

Table 9: Lake Salda Evaporation Calculation Detailed Calculation Table

## 2.2. Hydrometry Stations

### 2.2.1. River Observation Stations (AGI)

There is D10A016 Killik D.-Salda AGI opened by DSI on Killik Creek within the Lake Salda rainfall area. The station was opened between 1970 and 1972 and has 2 years of observation. D10A016 AGI has a precipitation area of 24.1 km<sup>2</sup> and its average flow during the observation period is 0.095 m<sup>3</sup> / s.

## 2.2.2. Lake Observation Stations (GGİ)

### Lake Salda Level Observations

There are lake observation stations opened by DSİ and Annulled EİE on Lake Salda to observe lake levels. E10G006 Lake Salda-Kayadibi and E10G013 Lake Salda-Kayadibi are lake observation stations operated by EİE, and D10G020 Lake Salda Lake Observation Station (GGİ) is the lake observation station opened by DSİ. The chart of the level values measured from these stations and the lake level values of Lake Salda for the water years 1998-2016 are given below. Accordingly, the lowest level observed in the lake during the observation period was 1134.86 m in November 2008. The highest level value was 1137.27 m reached in July 2015. It is seen that the general decline in year 2008 was a result of meteorological drought experience overall Turkey between 2005 - 2007 (Figure 9).

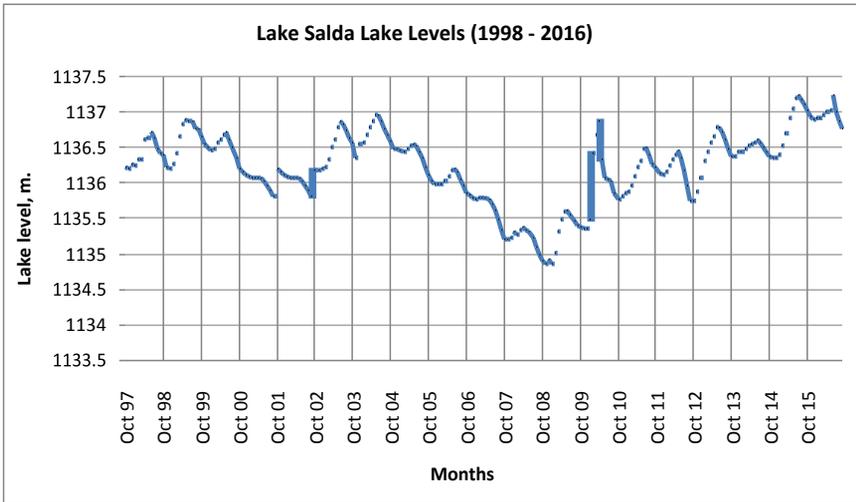


Figure 9: Lake Salda Levels (1998 - -2016)

## 2.3. Basin Water Uses

### 2.3.1. Irrigation Facilities

The Değirmendere Pond is currently located within the Lake Salda basin. The pond is located on the Değirmen Creek, which joins the Lake Salda from the south of Lake Salda. The pond was put into operation in 2006 and is intended for irrigation. The storage volume of the pond is 1.35 hm<sup>3</sup> and it is aimed to irrigate 173 ha of land.

According to the information given in the "General Directorate of Water Management (SYGM) Burdur Closed Basin Drought Management Plan Final Report" for the development situation in the basin, Kayadibi Pond (Storage volume 0.7 hm<sup>3</sup>), Yeşilova Pond (Storage volume 2.8 hm<sup>3</sup>), Salda Pond (Storage volume 1,7 hm<sup>3</sup>) Storage facilities are planned.

## 2.4. Basin Water Potential

### 2.4.1. Underground Water Potential

In the "SYGM Burdur Closed Basin Drought Management Plan Final Report", it is stated that the groundwater recharge of Lake Salda is 10.6 hm<sup>3</sup> / year.

### 2.4.2. Basin Water Budget

Lake Salda does not have a lake foot. Therefore, losses in the lake consist of water to be drawn from the lake and evaporation from the lake. No information could be obtained about the waters drawn from the lake. If there is, it is thought to be of negligible size. Therefore, evaporation losses are the only losses. The water budget of the lake can be expressed with the following equation.

$$\text{Input} - \text{Loss} = 0$$

Here the Loss is just Evaporation as stated above.

Input is

$$\text{Input} = \text{Surface Flow} + \text{Rainfall} + \text{Groundwater Recharge}$$

According to the rainfall data of the Yeşilova meteorology station, the annual average rainfall in the Lake Salda Basin is 451,6 mm, with a total precipitation of 97 hm<sup>3</sup>/year. However, as a function of many physical parameters such as climatic conditions, topography, vegetation etc. Only 20% - 40% of the precipitation falling in the Lake Salda basin will be able to flow. As stated above, according to the value given in the SYGM Report, the annual groundwater recharge is 10.6 hm<sup>3</sup>/year. In this case, the basin surface flow with precipitation will be equal to the difference between evaporation and groundwater recharge in the basin. As can be seen from the calculations given under the heading "Evaporation" above, the annual evaporation loss in the basin was found to be 49.5 hm<sup>3</sup>/year. According to this

$$\text{Surface Flow (including precipitation component)} = \text{Evaporation} - \text{Groundwater recharge}$$

$$\text{Surface Flow (including precipitation component)} = 49.5 \text{ hm}^3 - 10.6 \text{ hm}^3$$

$$\text{Surface Flow (Including precipitation component)} = 38.9 \text{ hm}^3$$

was found.

## 2.5. Evaluation

As can be understood from the calculations given in the report, the water budget of the lake is based on very delicate balances. Especially, the average temperatures in the basin are in an increasing trend. If similar climatic conditions continue, snowmelt, which is the main source of the basin groundwater, will cause the snow cover to decrease from year to year. Therefore, groundwater supply to Lake Salda will decrease in the coming years. On the other hand, the increase in average temperatures will cause an increase in evaporation from the lake.

Due to climate change (warming/drought effect), the water was drawn between 3-4 m on the shallow shores and the surface of the lake and its surface became slightly smaller. The depth of the lake is 184 m. The water level was determined as  $1140 \pm 3.8$  m in 1955 and  $1136.5 \pm 1$  m in 2011, Abolished Electrical Works Survey Administration (EİE). The water level of 1140 m (in 1955) given in the General Directorate's 2017 publication is in line with the level of 1136.6 m (year 2011) given in later studies. The difference between the two elevations is the effect of evaporation with water withdrawn from groundwater for irrigation in the 60-year period. The effect of the ponds built into the streams feeding Lake Salda on the lake level will be observed later.

Lake Salda has no outflow. Surface waters feeding the lake; Düden-Kayadibi Stream-Salda (Karakova Reeds) Stream, Doğanbaba Stream, Kopek Stream, Karanlık Stream, Kuruçay. The balance between the water coming from these streams and the water coming from karstic springs and the amount of water evaporating from the lake surface has been disrupted. On the one hand, the water withdrawn from groundwater to irrigate agricultural lands, on the other hand, the increasing temperature and evaporation during the climate change process were effective in the deterioration of the balance.

Changing the vegetation cover in the basin, various water structures, projects to increase water use, etc. and similar artificial interventions will accelerate the process of deteriorating the water budget of Lake Salda. Therefore, the protection of Lake Salda alone is not sufficient, it is essential to protect the entire Lake Salda basin.

Necessary legal arrangements should be made as soon as possible to protect the entire Lake Salda Basin. Otherwise, it may be too late tomorrow to prevent the destruction of this natural wonder region.

### 3. FORMATION OF LAKE SALDA, ITS GEOLOGIC AND BIOLOGIC CHARACTERISTICS

#### 3.1. Geology

Lake Salda is a lake of tectonic origin, it started to form at the end of the Neogene and took its current form with the tectonic movements that occurred later (Akkuş, 1987). The lake was formed by the accumulation of surrounding waters in an anticline area and a part where fold axes are lowered (Alıntılı, 1955). It is included in the "Taurus Tectonic Union" in the classification of the tectonic units of Anatolia. The current structure was gained by the Alpine Orogeny. It is among the serpentinized ophiolites in places. There are limestones on Kale Hill, just southeast of the lake, north of Kaledibi village. The surrounding of the lake is composed of Peridotites and is found together with Mesozoic limestones in places (Figure 11) (Erentöz, 1974).

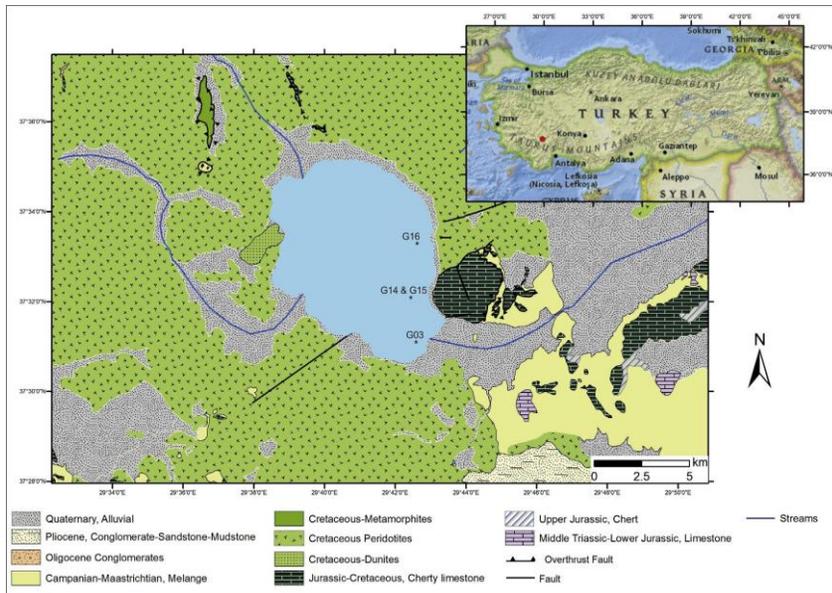


Figure 10. Geological Map of Lake Salda (edited from MTA 2010 data).

In Lake Salda, which is an alkaline lake, it has been observed that microbial stromatolites along the shore contain diatoms and cyanobacteria microflora associated with biofilms (Braithwaite and Zedef, 1994; 1996).

When entering the lake, surface waters pass through alluvial deltas consisting of serpentinite pebbles and carry the magnesium from the pebbles to the lake. These waters are colder than lake surface water. Up to date sediments observed on the coastal line

are formed by mechanical degradation of microbiolites. The terraces, which are clearly observed in the two regions, consist of similar sediments, indicating that the mechanical fragmentation function has been going on for a long time. Terrace deposits are replaced by various superficial functions, including hydromagnetic cement growth. Microbial structures disappear in terraces that pass through these processes and therefore cannot be observed.

Schmid (1987) observed that magnesite deposition continued in Lake Salda and heavily altered serpentines were outcropping around the lake. The entire lake shore is covered with different widths of weathered gabbro, dunnite, harzburgite and hydromagnezite pebbles (Figure 12) (Bilgin et al., 1990).

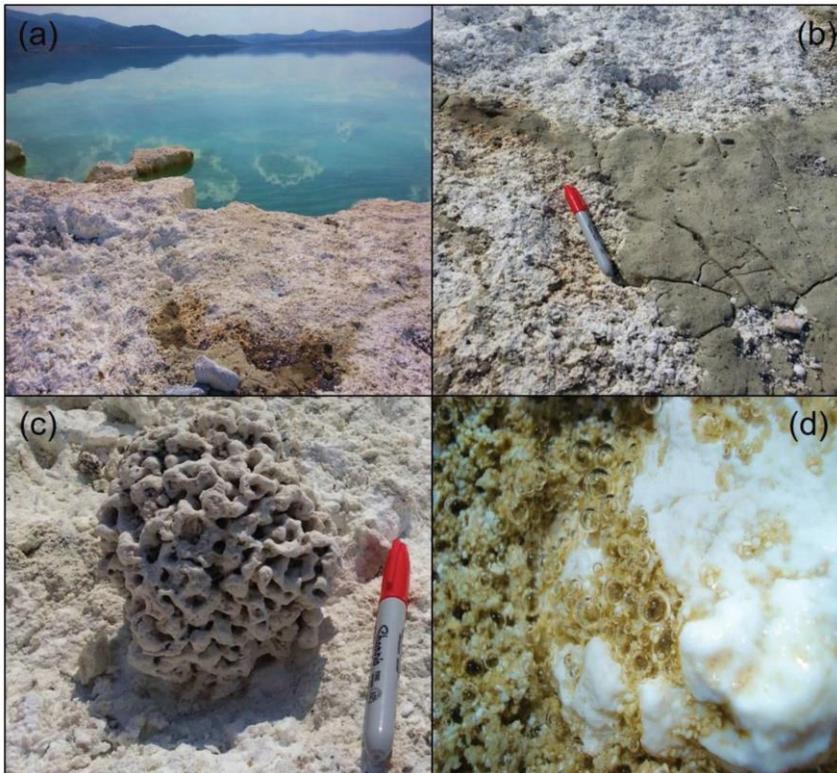


Figure 11. General views of Lake Salda and hydromagnetic deposits: (a) Hydromagnetic terrace deposits and surfaced stromatolites (b) Hydromagnetic clay / sludge and interlayer (c) Fossil Salda stromatolite (d) Gas exits due to up to date stromatolites (Balcı et al., 2018).

At the bottom of the Lake Salda and its surrounding region is the Late Jurassic-Early Cretaceous Yeşilova ophiolite, and on top of it the Kızılcadağ Melange and the Jurassic Doğanbaba limestones with tectonic contact. Magnesite in the region was formed as a result of the withdrawal of lake water in winter and the contact of the muds on the shore with the atmosphere and absorbing CO<sub>2</sub> in the atmosphere (Özpinar et al., 1996).

Understanding the formation mechanisms of stromatolites, which are thought to contain important data on primitive life forms and environmental conditions, and the geobiological factors that control these processes will not only provide important information about the beginning of life on Earth, but will also provide important clues for revealing the traces of life outside the Earth. The stromatolite formations of Lake Salda, the subject of this study, first attracted attention with the study conducted by Russell et al. In 1999. In 1996, Professor of Glasgow University of Scotland. Dr. Mike Russel and his team, in their 4-year research on the soil and soil structure of Lake Salda, suggested that the hydromagnesite-containing stromatolites currently formed in Lake Salda are similar to the carbonate-containing rocks on Mars, and these structures are applied for the investigation of extraterrestrial life traces. (Williams and Zimbelman, 1994 Russell et al., 1999; Braithwaite and Zedef, 1994; 1996; Edwards et al., 2005; Shirokova et al., 2013; Kaiser et al., 2016).

According to Balcı et al. (2018), Salda stromatolites develop as a common product of chemical, biological, physical and climatic conditions in a certain balance. Detailed investigation of these structures, which will shed light on the emergence and development processes of life commonly formed in the early period of the Earth, will produce important data for determining the traces of life in the geological record.

Lake Salda, which has excessive lake water chemistry, is an important example of natural storage of CO<sub>2</sub> (Kazancı et al., 2004; Shirokova et al., 2013; Kaiser et al., 2016). The water budget of the lake is significantly under the influence of evaporation.

The chemistry of the lake water was formed as a result of the interaction of partially serpentinized harzburgite and locally occurring dunnite outcrops of the Upper Cretaceous aged Yeşilova ophiolites, which cover most of the lithology of the lake environment with meteoric waters (Braithwaite and Zedef, 1996; Russell et al., 1999; Kazancı et al., 2004; Doyen et al., 2014;). In addition to the ophiolites, the Upper Cretaceous limestones seen on the eastern shores of the lake in tectonic contact also contribute to lake water alkalinity (Russell et al., 1999). Another

hydrological event that changed the water chemistry of the lake was determined as the water column reversal in April and October (Kazancı et al., 2004).

In addition to these, the use of groundwater for irrigation, evaporation and karstic aquifers around the lake were seen as the reason for the change in the water level by approximately 50 cm per year (Kazancı et al., 2004:). This situation may cause the relative enrichment of ion and metal concentrations in lake water (Russell et al., 1999; Kazancı et al., 2004).

The dominant phytoplankton and zooplankton populations of Lake Salda were determined as *Peridinium cictum* and *Brachionus urceolaris*, respectively (Kazancı et al., 2004). There are protozoans and nematodes in the lake (Braithwaite and Zedef 1994). Especially in microscopic studies performed on Salda stromatolites, diatoms were detected and their similarities to *Navicula* sp., *Cymbella* sp., *Pinnularia* sp., *Amphora* sp., *Coscinodiscus* sp., *Cyclotella* sp., *Stephanodiscus* sp. and *Surirella* sp. were mentioned (Braithwaite and Zedef, 1994; 1996; Kaiser et al., 2016). The bacterial population of the lake has not been determined in detail by previous studies. However, in studies conducted on the lake, the potential presence of bacteria of the Cyanobacterium branch *Lyngbya majuscula*, *Gloeocapsa aeruginosa*, *Synechococcus* sp., *Microcystis aeruginosa*, *Chroococcus turgidus* and *Oscillatoria limnosa* was addressed (Braithwaite and Zedef, 1996; Kazancı et al., 1996.; 2013). *The only study on the archaea population of the lake is performed by Özcan et al. (2007), who determined that the species found had a high degree affinity (<99%) to Natrine- me altuner reason, I xinjang Halorub France, Haloarcula sp. AJ4, Halobacteriaceae gene. sp. and unspecified Natrialba sp. species.* Bacteria and species belonging to the archaea domain have been identified in lake waters (Poyraz and Mutlu 2017).

It is the white rocks of bacterial origin that gave the water its blue color and started to form in the archaic period called Stromatolite, which forms the lake floor and still continues to form.

Stromatolites first formed 3.45 billion years ago in the Archaean period. The examples in the world are Shark Bay (Western Australia), Exuma Sound (Bahamas) and only Lake Salda in our country.

Current stromatolite formations are observed on the littoral zone covering southwest and east of the lake. The most common stromatolite formations in the lake are located in Kocaadalar Cape. The heights of structures, which are eroded and dissolved in time under natural and anthropogenic conditions, can reach up to 10 m (Braithwaite and Zedef, 1994; 1996; Russell et al., 1999).

The stromatolites seen in the southeast of the lake are observed in the form of hydromagnetic terraces, as semi-solidified mud-loam mixed with clay.

Salda stromatolites are observed as fossil stromatolites with typical cauliflower morphology and in partly smaller domes at the south part of the lake.

It is observed in the form of underwater formations. Current stromatolites are covered with a biofilm layer up to approximately 1 cm in thickness (Balci et al, 2018).

### 3.2. Lake Geochemistry

The water of the lake contains calcium bicarbonate [ $\text{Ca}(\text{HCO}_3)_2$ ], magnesium bicarbonate [ $\text{Mg}(\text{HCO}_3)_2$ ] and sodium bicarbonate ( $\text{NaHCO}_3$ ). For this reason, the lake's water is alkaline. In shallow water, these salts first precipitate as hydro-magnesite and gradually turn into huntite minerals. In such an environment, the high Mg ( $\text{HCO}_3)_2$  and  $\text{Ca}(\text{HCO}_3)_2$  in the Lake Salda water condense and precipitate as hydromagnesite on the threadlike networks of blue algae (Cyanobacteria) in the lake (Hydrous Magnesium carbonate  $\text{Mg}_5(\text{CO}_3)_4(\text{OH})_2 \cdot 4(\text{H}_2\text{O})$  or  $(\text{MgCO}_3 \cdot \text{Mg}(\text{OH})_2 \cdot \text{Xh}_2\text{O})$ ). Later, the hydromagnesite, which loses its water on the coasts, turns into huntite mineral (Organomineral stromatolite). These minerals are used in heat insulation in industry. The purpose of the mining licenses on Lake Salda should be these minerals.

It is observed that the pH of the lake water changes between 8.5-9.2 and the temperature between 17.8-35.4 °C. Average total alkalinity in lake waters is approximately 1700 mg/L; and the concentrations of  $\text{Mg}_2^+$ ,  $\text{Na}^+$  and  $\text{Ca}_2^+$  321.5 mg/L, 344.1 mg/L and 16.9 mg/L respectively. In previous studies, the  $\text{Ca}_2^+$  concentration of the lake was 2-40.8 mg/L, Mg concentration was 194-390 mg/L and the concentration of Na was 68-214 mg/L (Braithwaite and Zedef, 1994; 1996; Russell et al., 1999; Kazancı et al., 2004; Yıldız and Balık, 2005; Shirokova et al., 2013). The increase in  $\text{Ca}_2^+$ ,  $\text{Mg}_2^+$  and especially  $\text{Na}^+$  concentrations of lake waters shows the effect of increasing evaporation on the chemistry of lake waters (Balci et al 2018). Locations where the current stromatolite occurrences are observed and the high alkalinity and ammonium values of the lagoon waters formed in the shallow part of the lake and where red algae being common indicate the microbial consortium.

The MgO values of sediment, recent stromatolite (cs) and fossil stromatolites (st) taken from different parts of the lake vary between 39.88% and 54.67%. The lowest MgO value was found in lagoon sediments behind the lake with 39.88%. It is noteworthy that the chemical contents of the stromatolite samples differ depending on the formation locations. This difference is especially evident in Ni, Se, Sr elements. In addition, the MgO content of current stromatolite formations is 1-8% less than fossil equivalents. All data demonstrate that water-rock interaction in stromatolite formation stages; dissolution and ion exchange processes are effective at these stages (Balci et al 2018).



mostly contain rough stones and debris with little soil. As the speed of the surface flow decreases, the diameters of the pieces become smaller. They have good drainage. Soils are occasionally exposed to flooding. The natural vegetation on them depends on the climate. Those under agriculture give good yields when irrigated.

**Limeless Brown Forest Soils(N)** These soils have a dark coat on top and a slightly different coat on the bottom. The soils are lime-free and the reaction is acid, neutral or calcium. Their natural efficiency is not much.

Alluvial soils in the region are located on almost flat bottom lands, Colluvial soils are on flat lands or slightly sloping foothills. These lands are used for underground water irrigation, insufficient irrigated agriculture, dry farming and meadow-pasture. It is made dry in light and medium slope Limeless Brown Forest Soils, most of these soils are steep slopes and are used for forest, shrub and pasture.

Dry farming has traditionally been used in the agricultural areas of the villages in the Lake Salda Basin. Increasing the productivity in agricultural lands also required the use of chemical fertilizers and irrigation water. Irrigation water was provided from groundwater. Groundwater withdrawal caused the water level to drop in Lake Salda as well. Dams and ponds were also built in the streams that feed Lake Salda for irrigation. In recent years, the construction of the ponds has been objected, considering that it will lower the water level of the lake more.

Doğanbaba, Salda and Kopek Brooks are poured into Lake Salda. DSI was caught between the dilemma of providing irrigation water or protecting Lake Salda. If the water level of Lake Salda is to be preserved, the water needs of the agricultural areas will not be met. If irrigation water will be provided to agricultural areas, the lake will dry up. In this case, the Ministry of Agriculture would have to assume a role and support the farmer in the basin by purchasing the product obtained by dry farming at high prices. However, this was not done and the farmer was not supported. As a result, pond investments were made for nothing, lawsuits were dealt with and money and time was lost. Especially Güney dam, Kayabaşı Pond and Salda Creek pond to the west of Yeşilova have been examples of wasted investments.

For example; a lawsuit was filed at Isparta Administrative Court on 4.11.2016 for the annulment of the decision "EIA (Environmental impact assessment) is not required" in the construction of Kayadibi Pond and quarries project (DSI). Isparta Administrative Court stated that the decision of "EIA is not required" given by the Governorship of Burdur is not against the legislation and the law,

and decided to refuse (10.7.2017). The decision has been appealed. With the decision of the Council of State D.14 dated 15.2.2018, it has overturned the decision of Isparta Administrative Court. (with no way of correction). In the case heard again, Isparta Administrative Court this time canceled the pond project. However, in the course of time, Kayadibi Pond was completed. There is no water retained in the pond and it was abandoned as a structure for which money was wasted. The volume of Kayadibi Pond is 200 000 m<sup>3</sup> and it holds less water compared to the surface waters added to Lake Salda. However, considering the other ponds that have been or will be built in the basin, the water volume to be retained and used in irrigation reaches the level of 2 000 000 m. When calculated together with the Değirmen Brook Dam, 56-60% of the surface waters reaching Lake Salda will be retained. Although the Kayadibi Pond case is a small-scale pond case, when considered comprehensively, it has shown a very important, thought-provoking and guiding result in terms of the continuity of the raw Lake Salda and the needs of the people living in the basin.

Değirmen (Fabrika) Brook Dam was also effective in the lowering of the water level of Lake Salda. Değirmen Brook Dam was built for irrigation purposes. Farmers who use the water of the dam have held meetings and made complaints against chromium mine enterprises since 2015 due to their damages on agricultural plants. Work in the chrome plants has stopped. But the waste they left on the land continues to pollute the pond. It has been reported that since Değirmen Brook Dam is very full with material transported from chrome mine facilities, the water storage capacity is reduced and excess water is released into the stream bed. Dirty water also pollutes Lake Salda. Chromium (Cr) compounds cause soil and water pollution. It acts as a poison for soil microorganisms (bacteria and fungi) as well as for living beings in aquatic ecosystems. These loose materials piled outside of the open pit mine should be filled back into the pit and covered with twigs between the piles and afforested. Thus, it should be prevented from spreading to the environment by wind and being carried by precipitation water. The dam filling up with these materials and losing its water storage capacity means returning to dry agriculture and disappearing for the local farmer.

The fact that the soils around the lake and in the basins of the streams that feed the lake are shallow and stony requires the careful protection of the natural vegetation for forest and pasture use. The drought of the climate prevents the destroyed forest from covering the land again and rapidly. Torrential rains in the region turn into floods on sloping land. Floods cause the earth with destroyed vegetation to be transported and soil

erosion to occur. The carried soils and materials formed wide plains at the mouths of the streams. Materials transported by high precipitation fill the lake. Therefore, natural vegetation should be preserved in the lake basin. In addition, precautions should be taken to prevent the material from being transported to the lake in excavation and filling operations to be carried out for various purposes (Kantarci, 2020).

The bottom and shores of Lake Salda are covered with hydromagnetic stromatolites dating back 3.7 billion years. The White Earth-Rocks-Mars Soil formed in Lake Salda and the coastal areas of the lake was formed as a result of the formation of hydromagnesite stromatolite. Rocks formed as a result of hydromagnesia in the lake are the result of biological mineralization created by the water quality and mineral structure of the lake by very few aquatic creatures that form integrity and protection in the lake ecosystem for hundreds of thousands of years. This feature is due to the rock structure of the region, the climate, the streams feeding the lake and the water flow in the lake. Because; the water quality in the lake is the biological mineralization event created by its microscopic organisms and mineral structure. Magnesite in the Lake Salda surrounding was formed as a result of the withdrawal of lake water in winter and the contact of the muds on the shore with the atmosphere and absorbing CO in the atmosphere (Kesici et al., 2018).

The salinity of the lake water is between 1.27-1.33 ppt throughout the year, and it has been generally measured as 1.3 ppt. The salinity of the lake water is 1.3 ppt in 2012 measurements. The salinity of stream and spring waters is between 0.3-0.4 ppt. As a result of the evaporation that has continued since the formation of the lake, the salinity of the water has increased. The lake water tastes like "tasteless water-rough water". It cannot be used for irrigation of agricultural areas.

Total land assets of Burdur Province are 717.500 hectares. When Table 10 is examined, the ratio of agricultural land to the total land of the province is 29.24%. Arable soils are limited and agricultural products do not vary greatly in terms of species. Grains constitute the largest part of the products with 90%. Considering the distribution of agricultural and pasture lands by districts, the agricultural land in Yeşilova district is 36,238 hectares, 17.27% of the total agricultural land in the province, while the pasture land is 2,961 hectares and 1.41% of the total agricultural land in the province.

QUALITY	Area (Ha)	Rate (%)
FOREST AREA	325,601	45.38
AGRICULTURAL LAND	209,828	29.24
LAND NOT SUITABLE FOR AGRICULTURE	143,251	19.97
WATER SURFACES	29,693	4.14
PASTURELAND	9,127	1st27
<b>TOTAL</b>	<b>717,500</b>	<b>100.0</b>

Table 10. Burdur Province Land Assets (2.018).

According to Burdur Province Environmental Status Report 2017, the reduction of agricultural lands in Burdur is the biggest problem in terms of land use. Compared to the increase in the amount of artificial areas, serious decreases in the amount of agricultural lands and forest lands occur on a yearly basis. The fact that mining activities are intense in the province causes the reduction of forest, pasture and agricultural lands and nature destruction along with other problems (MEU, 2018).

In the opinion number 11771203-230.04.02-E.2153473 taken from Burdur Governorship Provincial Directorate of Agriculture and Forestry, it was stated that, in Burdur Yeşilova district, Lake Salda and its surroundings, there are 53,2620 hectares of irrigated agricultural land, 29,5562 hectares of dry planted agricultural land, 32,8721 hectares of irrigated absolute agricultural land, 17,8091 hectares of dry absolute agricultural land, 90,1886 hectares of irrigated special crop land, It was stated that 172.4916 hectares of dry private crop land, 15.0871 hectares of irrigated marginal agricultural land and 44.5428 hectares of dry marginal agricultural land.

Residential Area on an area of 320 hectares in Lake Salda and its surrounding constitutes a part of 0.38%. There is also no licensed residential area in the area where there is no settled population. There is also a building ban in the planning area, which is a 1<sup>st</sup> Degree Natural Site. The area usage situation is given in Table 11.

AREA NAME	STATUS (m <sup>2</sup> )	RATE
Woodland	401208.03	12.54
Ruin	233.48	0.01
House Structure	12312.47	0.38
Greenhouse	7598.28	0.24
Trade Structure	8554.89	0.27
Free Space	694461.83	21st70
Stream	49571.44	1st55
Area to Protect Natural Character	392432.21	12.26
Camping area	2813.46	0.09
Residential Garden	28725.66	0.90
Agricultural Area:	1445258.75	45.16
Trade	26656.33	0.83
Road	130173.7	4.07
<b>TOTAL</b>	<b>3,200,000</b>	<b>100</b>

Table 11. Lake Salda and Its Vicinity Land Use Table (2018)

The most intensive land use type in the area is agriculture. Agricultural areas, which cover 45.16% of the total area, are followed by empty areas with 21.70%.

Today, lavender planting has started in some villages of Yeşilova because lavender gardens are preferred by tourists and lavender stands out as an economic value in terms of agricultural production. Due to the fact that lavender gardens have attracted the attention of tourists in recent years, the Lavender Stream Project was implemented in the Akçaköy Village of Yeşilova, and the local people started to consider lavender not only as an agricultural product, but also as a touristic product from which they gain economic gain within the scope of rural tourism activities (Temurçin et al., 2019).

## 5. FLORA AND FAUNA OF LAKE SALDA AND ITS SURROUNDINGS, ENDEMIC SPECIES, LAKE FISH AND ORNITOLOGY

Lake Salda and its surroundings create a habitat for many plants, animals and other living species.

The Freshwater Sponge (*Spongilla cf. lacustris*) developed on the hydromagnesite stromatolite rocks in the lake formation and adapted to life in Lake Salda. Half-winged insects (*hemiptera*), round worms (*nematoda*), current aged ostracoda (*limnocythere inopinata*) (Salihoğlu and Ön, 2017), damselfly (*odonata*) live in the lake. The most important source on flora and fauna in Lake Salda is the study of "Biological Diversity Survey of Lake Salda Wetland Sub-Basin (2013)" prepared by the Ministry of Forestry and Water.

Especially endemic plants and animals belonging to the lake and its surroundings are given below.

### 5.1. Lake Salda Plant Presence (Flora)

Lake Salda and its surroundings; There are many plant species from terrestrial and aquatic plant specimens, including plant species with agricultural and commercial value, medicinal and pharmacological plant species and plants that can be consumed as food.



(a)



(b)

Figure 13. Plants Seen in Lake Salda (OSİB, 2013).

There are 301 aquatic and terrestrial plant species belonging to 61 families in the area. The shores of the lake, which has a very sensitive vegetation, contain 9 different endemic and endangered plant species on a global scale. *Verbascum dudleyanum* (Salda Marsh Bovine Tail, Figure 14 [a]) and *Verbascum flabellifolium* (Figure 14 [b]) are important endemic species. These endemic species live in the regions where the streams in Salda, Doğanbaba and Kayadibi parts are located, starting from the lake until the belt where annual herbaceous plants are predominant, with small plants tolerant to brackish water and woody plants (Figure 14).

While the Important Plant Area (IPA) was taken under protection as a 1st degree Natural Protected Area on 14.06.1989, the protection degree of the Protected Area was reduced in 1992 in order to allow limited construction in and around the lake. IPA is located in the area defined as the Southwest Anatolia Plant Diversity Center (SWA No.16). In the Important Plant Area flora, which is not fully studied (IPA), it is known that about 22 endangered taxa are found, and out of 27 taxa 20 are endemic to Turkey: Especially 20 which are grown at small wetlands around the lake and on serpentine slopes, are endemic to Turkey. Of the endemic plants, *Verbascum dudleyanum* is only found limited here. In addition, some other endemics such as *Apera triaristata*, *Ekimia bornmuelleri* and *Saponaria halophila* are very rare plants registered in only a few areas except IPA. Of these, *Saponaria halophila* is a globally Endangered plant included in Bern Convention Annex List I.

To look together; there is *Saponaria halophila* as 1 taxon in Globally Endangered Species. There are 19 Taxa in Endangered Species of the European Scale, which are *Alyssum huber-morathii*, *Apera triaristata*, *Asparagus smokii*, *Astragalus dirmilensis*, *A.serpentinicola*, *Bolanthus thymoides*, *Dorycnium axilliflorum*, *Ekimia bornmuelleri*, *Genista burdurensis*, *Phlomis carica*, *angcorzonis*, *P. pisidica*, *Sideritis pisidica*, *Silene cariensis*, *Trigonella sirjaevii*, *Verbascum adenophorum*, *V. dudleyanum*, *V. Flabellifolium*. There are 2 taxa, *Alyssum cypricum* and *Plantago crassifolia*, among Rare Species at National Scale. (Ministry of Environment and Urbanization, 2008)

Forests constitute the most common vegetation in the Lake Salda sub-basin. In some parts of the forests that have expanded with afforestation works, there are dwarf shrubs and in some parts there are pure and mixed needle forests. Forest

vegetation is found as red pine and larch on the slope; tall juniper species are found on the higher floors. There are juniper, larch, myrtle, kermes oak and maple woodland and shrubs on the bush level.

Peridotites, ophiolites (submarine lavas) common around Lake Salda and serpentines formed by their transformation at high temperatures are hard rocks. They are difficult to decompose and become soil and require a long time. Shallow and stony soils were formed from ophiolite and serpentines. Since these contain high amounts of magnesium, a special Ophiolite/serpentine flora has developed. Since the crack systems are narrow, the forests have turned into scrub and garig (*Frigana*) type bushes where the forest is destroyed and the soil is moved.

## 5.2. Lake Salda Animal Presence (Fauna)

The different habitats and climatic conditions in and around Lake Salda allow many animal species with different ecological demands to breed and feed in the area. 4 fish, 1 reptile and 1 amphibian species live in the lake. Salda algae (*Aphanius splendens*), one of the fish species, is an endemic species that only lives in Lake Salda in the world. Grass fish (*Pseudophoxinus cf. ninae*) living in the lake, endemic to Burdur, is another important fish species (Figures 14, 15).



Figure 14. Salda Seaweed Fish (*Aphanius splendens*) male (top) and female (bottom) individual in Lake Salda © İskender Gülle



Figure 15. Herb Fish (*Pseudophoxinus cf. ninae*) endemic to Burdur, spreading in Lake Salda © İskender Gülle

4 fish carp (*Cyprinus carpio*), Grass fish (*Pseudophoxinus*) in Lake Salda (*Pseudophoxinus cf. ninae*), Salda Seaweed fish (*Aphanius splendens*), *Oxynoemacheilus*, 1 reptile dice eel (*Natrix tessellata*) and an amphibian lowland frog (*Pelophilax ridibundus*). Among the fish species, the weed fish endemic to Burdur and the Salda Seaweed fish endemic to Lake Salda are the most important species.

It is also known that an endemic fish population, Toothed Carp (*Aphanius anatolicus*) lives in the freshwater inlets of the lake.

### 5.3. Birds

Lake Salda has been identified as an important Bird Area (IBA No. 27) due to its large number of ferruginous calico and chaff-tail populations in winter.

In the Lower Basin of Lake Salda, 110 bird species have been identified, 62 of which are songbirds, 38 are waterfowl, 9 are daytime and 1 are night predators (Ministry of Forestry, 2013). 75 of these species are under protection under the "Bern Convention". Considering the danger status of the species observed in the sub-basin, the *common tail* (*Oxyura leucocephala*) is classified as endangered (EN) (IUCN Red List) (Figure 16).

Lake Salda Sub-Basin serves as an important stopover and habitat for waterfowl, especially in autumn and winter. As a result of field studies and literature researches carried out in September, October and November 2012 in the field, it was revealed that 38 different water birds were present in the area in various periods. Looking at the top 10 most common species of these species, it is seen that the most common species are coot, pochard, and mallard. In addition to this, the great crested grebe,

which is a diver bird, as well as eared grebe are frequently seen on the lake, in addition to pochard, tufted duck and red crested pochard, which are diver ducks. (OSİB, 2013).

Looking at the average number of individuals of water birds observed in the lake, it is seen that the bird population of the lake is predominantly formed by coot, teal and pochard species, among the first 11 species with the highest number. Although white-headed duck is not seen frequently in the lake, it is seen that it is among the species that characterize the lake numerically in the years it was seen. They are species specific to Mediterranean ecosystems such as Anatolian nuthatch, red bunting and Sardinian warbler in the region and make the area valuable for birdwatching tourism (OSİB, 2013).



Figure 16. Endangered white-headed duck ( *Oxyura leucocephala* )

#### 5.4. Butterflies

The researches and records made so far demonstrate that 9 different butterfly species live in the region, including *Maniola telmessia* (Doğu maniola jurtina), *Polyommatus admetus* (Anormal çokgözlü), *Polyommatus daphnis* (Çokgözlü Anadolu Beyazı), *Polyommatus thersites* (Çokgözlü Menekşe Mavisi), *Pontia edusa* (Yeni Benekli Melek), *Pseudochazara mniszeczhii* (Step yalancı cadısı) and *Thmelicus lineolu* (Siyah Antenli Zıpzıp). Of these species, only *Polyommatus menalcas* (Multi-eyed Anatolian white) is endemic (OSİB, 2013).

### 5.5. Wild Animals

In previous studies in the region, fox (*Vulpes vulpes*), wild boar (*Sus scrofa*), wild rabbit (*Lepus europeaus*) were recorded around Lake Salda (OSİB, 2013).

## 6. EARTHQUAKE ANALYSIS OF LAKE SALDA AND ITS VICINITY

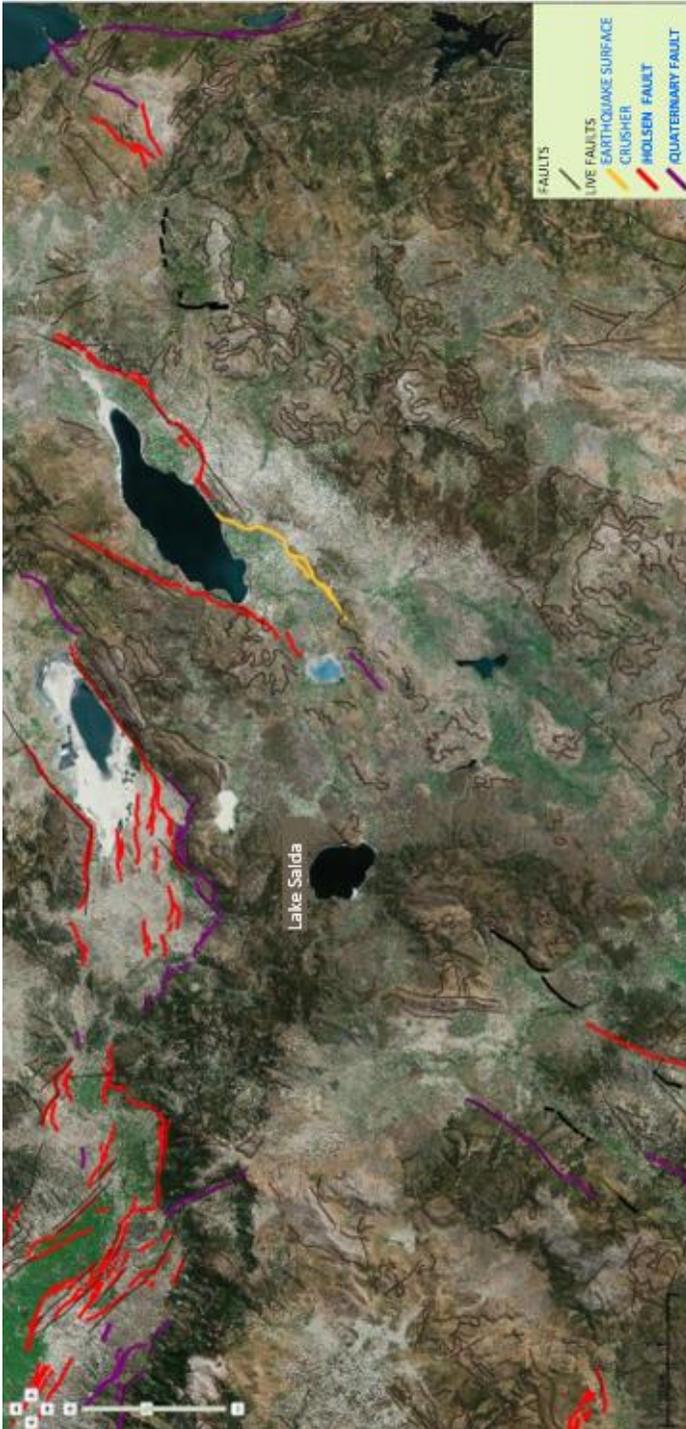


Figure 17. Live fault map around Lake Salda

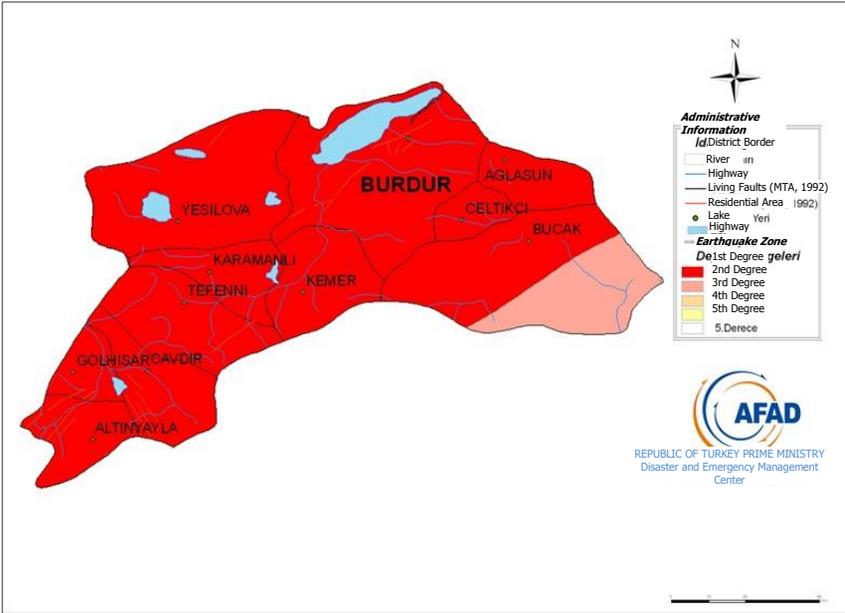


Figure 18: Earthquake Map of Burdur Province (AFAD 2018)

The active fault map within the 100 km radius area with Lake Salda being the center is given in the following figure. These faults are Sultandağ Fault, Tatarlı Fault, Burdur Fault, and Kumdanlı Fault (Figure 17).

Lake Salda, located in Burdur province, Yesiloca district, is included under "1st Grade Earthquake Region" according to the Turkish Earthquake Risk Map published in the repeated Official Gazette dated 18 March 2018 No. 30364 (Figure 18).

242 earthquakes were detected between 1900-2019. Among the Yeşilova earthquakes detected in the last 50 years, the most severe earthquake seen in Yeşilova was 5.9 in 1971. The lowest earthquake was 1971 with a magnitude of 4.5, which occurred in 1972 and 1974.

According to the European Seismological Commission (ESC) Classification, as a result of the calculations made for earthquakes with magnitude  $M \geq 4.5$  in the area of 100 km radius between 1900-2019 in the area of 100 km radius, the hazard level was determined as "High Hazard" for earthquakes with magnitude  $M = 7.5$ .

### 6.1. Earthquake Risk Analysis

In the 100 Km radius of the study area, earthquakes with  $M \geq 4.5$  and larger earthquakes, which occurred in a period of 119 years from 1900 to the present, were investigated. In the 100 Km radius area where the study area is located, 168 earthquake occurred between  $4.5 \leq M < 5$ , 56

earthquakes between  $5 \leq M < 5.5$ , 14 earthquakes between  $5.5 \leq M < 6$ , 3 earthquakes between  $6.0 \leq M < 6.5$ , 1 earthquake between  $6.5 \leq M < 7$ .

In the Probabilistic Earthquake Hazard Analysis calculations of the region with a radius of 100 Km surrounding the study area, the relation between Size and Formation Numbers was investigated by applying the Poisson Probability Distribution method.

The probability of an earthquake of  $M = 4.5$  magnitude to occur in 10 years is 91.5%, the probability of occurrence in 50 years is 100.0%, the probability of occurrence in 75 years is 100.0%, the probability of occurrence in 100 years is 100.0%, and the average recurrence period is 4 years.

The probability of a  $M = 5.0$  magnitude earthquake occurring in 10 years is 84.9%, the probability of occurrence in 50 years is 100.0%, the probability of occurrence in 75 years is 100.0%, the probability of occurrence in 100 years is 100.0%, and the average recurrence period is 5 years.

The probability of an earthquake of  $M = 5.5$  in 10 years is 76.5%, the probability of occurring in 50 years is 99.9%, the probability of occurrence in 75 years is 100.0%, the probability of occurrence in 100 years is 100.0%, and the average recurrence period is 7 years.

The probability of an earthquake of  $M = 6.0$  in 10 years is 67.1%, the probability of occurring in 50 years is 99.6%, the probability of occurrence in 75 years is 100.0%, the probability of occurrence in 100 years is 100.0%, and the average recurrence period is 9 years.

The probability of an earthquake of  $M = 6.5$  in 10 years is 57.4%, the probability of occurring in 50 years is 98.6%, the probability of occurrence in 75 years is 99.8%, the probability of occurrence in 100 years is 100.0%, and the average recurrence period is 12 years.

The probability of an earthquake of  $M = 7.0$  in 10 years is 48.0%, it is 96.2% in 50 years, 99.3% in 75 years, 99.9% in 100 years, and the average recurrence period is 15 years.

The probability of a  $M = 7.5$  magnitude earthquake occurring in 10 years is 39.5%, the probability of occurring in 50 years is 91.9%, the probability of occurrence in 75 years is 97.7%, the probability of occurrence within 100 years is 99.3%, and the average recurrence period is 20 years.

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## 7. DETERMINATION OF THE WATER REGIME OF LAKE SALDA AND THE SOURCES OF POLLUTION AND RECOMMENDATIONS

The main sources of pollution and activities affecting the water regime in and around Lake Salda are:

- Effects of quarries and mines on the lake basin
- The deterioration of the water resources feeding the lake, the ponds that have been and will be built and the water regime
- Agricultural activities and input use
- Development and tourism activities

There are very important environmental problems caused by human activities in and around the lake. The main problems are the springs that feed the lake and the dams and ponds built on surface waters. In addition, the fertilizers and pesticides formed during the agricultural activities around the lake and the activities of the stone and marble quarries in the mountains around the lake have negative effects. Activities such as picnics, camping, cycling and offroad tours and festivals, which are seen far above the carrying capacity of the lake and its surroundings, threaten the lake, which has sensitive features.

According to MoEU 2018 data; within the boundaries of Burdur province, wastes constitute the first priority problem. There are serious difficulties in the disposal of wastes, especially from mining activities. The amount of rust formed in the mines is very large. As a result of these wastes being discharged to the nature by the operators, a large amount of pollution occurs in the environment. While mining activities are currently reducing forest cover, it is seen that these spilled mine residues damage forests and agricultural lands.

Lake Salda and its shores are huntite mineral deposits. Therefore, the lake and its surroundings were closed with mining licenses. Two chrome mine open pit mines in the village of Niyazlar in the south of the lake caused a significant pollution and caused complaints from the public. A chrome mine is on the Düden Köy road.



Figure 19. Niyazlar Village Lower Open Chrome Mine Wastes Released to the Değirmen Stream, Celal Güzelyürek, 2016

Upon the request of the General Directorate of Agriculture and Forestry Trade Union and the appointment of KMO Denizli Branch Presidency, the chromium mine enterprises in Niyazlar Village in Burdur Province Yeşilova district were examined by a delegation on 15.11.2016, in line with the request of the village headman.<sup>66</sup> The delegation consisted of representatives of Chambers affiliated to TMMOB and representatives of the Turkish Medical Association and Union of Bar Associations. The agenda ended with a public press conference after the review. "According to Burdur - Yeşilova – Niyazlar Village Mining Quarries Report; in the enrichment process performed by washing the mine with water in sieves in the mine quarries, the washing water is collected in a waste collection pool. It was determined that the waste collection pools were not built in accordance with the relevant regulation principles, and the earth pools were not insulated. The waste water accumulated in the pools is poured into Değirmenlik Stream and collected in Yeşilova Pond for irrigation purposes (Figures 19, 20).

<sup>66</sup> REPORT ON THE IMPACT OF KMO BURDUR-YEŞİLOVA NİYAZLAR VILLAGE MINE QUARIES ON THE ENVIRONMENT. (nd). Accessed on June 19, 2020, [http://www.kmo.org.tr/genel/bizden\\_detay.php?kod=3140&tipi=0&sube=0](http://www.kmo.org.tr/genel/bizden_detay.php?kod=3140&tipi=0&sube=0)



Figure 20. Niyazlar Village Lower Open Chrome Mine Wastes Released to the Değirmen Stream, Celal Güzelyürek, 2016

The collected water is used for irrigation of the agricultural areas in Yeşilova and Kayadibi Village. If the heavy metal content in wastewater exceeds the acceptable limits in the relevant regulation, agricultural products such as vegetables and fruits that are grown and offered to the public may pose a serious threat to public health and environmental health. It is inevitable that thousands of tons of harmful wastes piled up around the two mines located near the lake will pollute the whole environment and even underground water resources with the effect of the wind and rainfalls in the winter months, if no precautions are taken. In this case, if drinking water is supplied through drilling, serious health problems may occur in people who use it for public health. If the water level in the pond used for irrigation increases, the excess water is discharged and given to Lake Salda, a natural wonder. This creates a pollution threat for the lake (For the content of the Report signed by Celal Güzelyürek, see: URL-2).

There are mainly 3 brooks coming out of Eşeler Mountain and pouring into Lake Salda. Salda Stream flows into Lake Salda following a 5 km bed, Doğan Baba Stream and Köfek Stream by following 8 km. The deterioration of the water regime, including the water sources feeding the lake and built ponds, is examined in Chapter 4.

Protection of lake water from agricultural pollution (chemical fertilizers, pest control compounds; pesticides, fungicides and herbicides) and pollution of human waste and utility water (Dish, detergent, bath etc.)

are required. These are controllable sources of pollution. The lake is a "closed freshwater ecosystem". It does not drain the incoming pollution, but accumulates it inside. The accumulated pollution is deposited at the bottom of the lake and with anaerobic (oxygen-free) decomposition, hydrogen sulphide ( $H_2S$ ), methane ( $CH_4$ ), ammonium ( $NH_3+H_2O\rightarrow NH_4OH$ ), which are toxic to aquatic creatures, are formed (Kantarci, 2020).

Lake Salda and its nature park is a natural heritage located in a closed basin. The fact that this heritage is opened unlimitedly to the visitors without considering the necessary conditions for the existence of the lake and the nature park in an unplanned way will cause Lake Salda and the nature park to lose their characteristics and lose their attractiveness in a very short time.

Human activities in the coastal part of Lake Salda in the past years have caused the magnesite soils to darken and the structure containing vitality to be destroyed. As part of these activities, sad scenes and results have emerged with the offroad and bicycle festivals on the lake shore and various wastes created by the tents set up. The use of Lake Salda by disregarding the existing conservation boundaries and showing the traditional picnic area-parking lot treatment instead of the protection-use principles has caused losses in the ecosystem with very sensitive balances (Cutter et al., 2018).

The National Garden was not included in the "Burdur Provincial Development Plan and Development Strategies" Report prepared in 2019 in cooperation with Burdur Governorship, Burdur Mehmet Akif Ersoy University (MAKU) and West Mediterranean Development Agency (BAKA). Among the Short-Term Goals, the following determinations and suggestions are made under the heading of "Regulation of Lake Salda and Nature Park for Sustainable Tourism". *"Lake Salda is a natural wonder in itself. In recent years, visibility of the lake has increased, especially through social media and festivals. However, it is necessary to make arrangements for tourism activities around the lake and for visitors to have a pleasant time without damaging the lake. Most of the current visitors of the lake and its surroundings are those who live in the surrounding areas such as Denizli, Burdur and Antalya. Visitors usually stay in makeshift tents that they set up with their own means. The service provided for cleaning, water and general needs is very limited. The said visitors stay around the lake in a very busy and uncontrolled way in a short period between the end of June and the end of August. The short-term intensity in question harms both the lake and tourism because of its inability to meet the needs properly and its uncontrolled openness to*

*visitors. Therefore, the areas around the lake where tents can be set up should be limited and controlled. In addition, increasing the number of toilets and shower areas in order to meet the needs of the visitors completely and correctly. It is necessary to arrange the collection points in a way that does not harm the lake, and the number and quality of enterprises that meet daily needs such as food and beverage should be increased. The soil and water structure of the lake has a unique feature. Necessary precautions should also be taken in order not to lose this feature. Lake Salda has a visually unique beauty. Therefore, visitors want to walk around and watch the lake. Therefore, there is a need for walking and cycling paths covering the lake environment.*<sup>7</sup> (Burdur Governorship et al., 2019).

In the context of the National Garden, which is on the agenda; the pollution left by people who will come to the National Garden on the shore of Lake Salda to have a picnic and wander from kilometers away causes the destruction of the lake, which is a closed water ecosystem. Nitrate and ammonium amounts in water samples taken in July 2015 indicate human-induced pollution.



Figure 21. Construction machines put into the lake on April 13, 2020 for the construction of the National Garden project.

<sup>7</sup> Burdur Provincial Development Plan and Development Strategies. (nd). Accessed on June 16, 2020, <https://www.baka.gov.tr/dokuman-merkezi/dokumanlar/burdur/burdur-il-gelisim-plani-ve-gelisim-stratejileri>

It was reported in the press that the National Garden Project tender was held on 31 July 2019 and the project was approved on 3 March 2020. On 14 April 2020, as a result of the serious reaction that occurred after the start of the excavation and transportation activities of the construction equipment on the beach within the scope of the National Garden project, the activity was stopped, and then the beach arrangement works were carried out again. At this stage, where the apology messages of the Minister of Environment and Urbanization and TOKI President came to the agenda, the destruction that occurred should be evaluated as the massacre of the natural heritage beyond pollution (Figure 21).

In summary; the white formation on the shores of Lake Salda, which has the characteristics of Mars, is an important natural museum and laboratory with the quality of the water. This feature must be preserved (Cutter et al., 2018, Balci et al., 2018).

## 8. LAKE SALDA SURROUNDING PLANS AND PROCESSES

The planning process has a hierarchy in itself. It is possible to pave the way for the socio-economic and cultural development of the country with planning. The plans for the region covering Lake Salda and its environs and declared as Special Environmental Protection Area (SEPA) by the President were prepared by the Ministry of Environment and Urbanization and approved by the same Ministry on 19/12/2018.

Lake Salda and its surroundings, which constitute the planning area boundaries, have been approved by the abolished İzmir II Numbered Cultural and Natural Heritage Preservation Board's decision dated 14.06.1989 and numbered 786, and the abolished Antalya Cultural and Natural Heritage Regional Protection Board on 28.07.1992 and with its decision numbered 1501 and converted into 2<sup>nd</sup> Degree Natural Site Area. The Lake Salda and its surrounding plans are also within the boundaries of the Nature Park and Wetland.

Definitions and sanctions regarding Natural Sites have been taken from the authority of the Ministry of Culture and Tourism and given to the Ministry of Environment and Urbanization. The definition of Natural Sites has been redefined and 2nd degree Natural Sites have been opened to construction.

With the last decision published by the Presidency on 7 December 2019, the principle decision was changed for the second time. This change completely paves the way for construction in areas to be strictly protected. This decision is against the essence of Law No. 2863.

Lake Salda and its vicinity, which form the planning area, are within the borders of 3 neighborhoods, Kayadibi, Yukarı Salda and Aşağı Salda, within the borders of Yeşilova District. Lake Salda and its surroundings, which form the planning area, remain under the authority and responsibility of the Yeşilova district and the Special Provincial Administration (Figure 22).

Conservation Master Plan boundaries cover a total of 320 hectares of land, including 1<sup>st</sup> and 2<sup>nd</sup> Degree Natural Protected Site, Wetland Absolute Protection Area, Forest, Agricultural lands, Shrub and Heather, Scrub Key Biodiversity Area, Beach, Settlement areas.

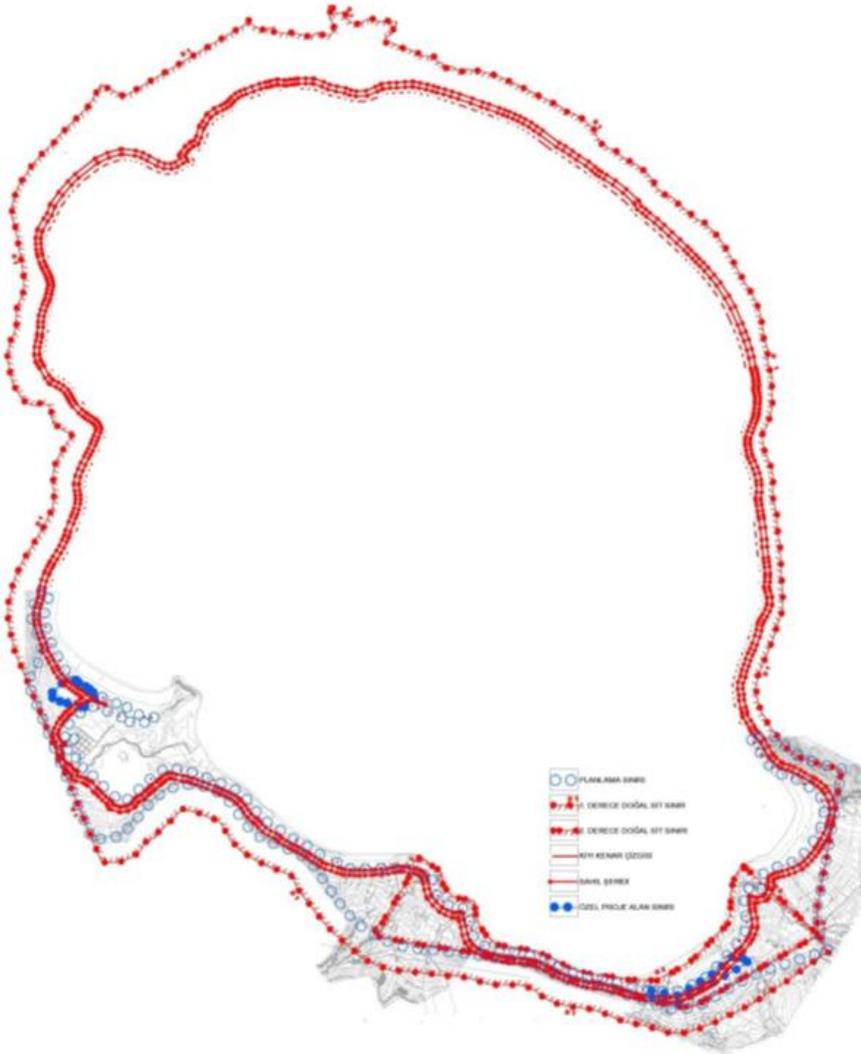


Figure 22. Protection Area Boundaries and Special Project area borders in the planning area (ÖPA1-ÖPA2)

The planning stages of Lake Salda and its surroundings and plans from Upper Scale to Lower Scale are discussed below.

### **8.1. 100.000 Scale Land Use Plans:**

#### **8.1.1. Processes of 1/100.000 Scale Land Use Plan:**

- On 24.07.2007;  
It has been approved by the Ministry of Environment and Forestry as the "Antalya-Burdur Planning Area 1/100.000 scaled Land Use Plan" covering the Antalya and Burdur provincial borders.
- On 03.09.2009;  
Upon the decision for the "Suspension of Execution" of the 6th Chamber of the Council of State upon the lawsuit filed by the Chamber of Architects, the objections made by the Ministry of Environment and Forestry during the suspension period were also evaluated and approved again based on the Regulation on Land Use Plans issued in the same year.
- On 15.04.2014;  
As a result of the second lawsuit filed by the Chamber of Architects Antalya Branch, the Ministry of Environment and Urbanization approved the "Antalya-Burdur-Isparta Planning Area 1 / 100.000 scaled Land Use Plan".
- On 23.03.2015;  
After evaluating the objections during the suspension process, it was re-approved by the Ministry.
- On 27.08.2015;  
The objections submitted during the re-suspension process were evaluated and approved by the Ministry.
- Between 27.08.2015 - 08.03.2019;  
Various changes in the plan have been approved.

#### **8.1.2. Antalya-Burdur-Isparta Planning Area 100.000 Scale Land Use Plan Approved by the Ministry of Environment and Urbanization:**

In Antalya-Burdur-Isparta Planning Area 1001/ 100.000 Scale Land Use Plan Approved by the Ministry of Environment and Urbanization:

- Lake Salda and its Vicinity remains in Antalya-Burdur-Planning Zone "D Natural Site" within the "Wetland Buffer Zone Boundary" in the 1/100.000 scaled Land Use Plan,

- In the Plan, in Lake, Wetland Protection Area,
- a large part of the surrounding area of the lake is "Forest Area" and the lands of Doğanbaba Village, Salda Village and Kayadibi Village are "Agricultural Land",
- South of the lake, east of Gökçe (Salda) Village and north of Kayadibi Village cover the "Culture and Tourism Protection and Development Area / Tourism Center",
- Unlike the Antalya-Burdur-Isparta Planning Area 1/100.000 Scale Land Use Plan approved by the Ministry of Environment and Forestry, two regions within the "Culture and Tourism Conservation and Development Area/Tourism Center", one region in the west of the lake, one in the south of Doğanbaba Village are named as "G Daily Area", and the region at the east of Salda Village is named as "Wetland Absolute Protection Zone"

On the 1/100.000 scaled plan, the approval limit of the "Burdur–Lake Salda 1/25.000 scaled Land Use Plan" approved on 30.05.2019 was processed (Figures 23, 24).

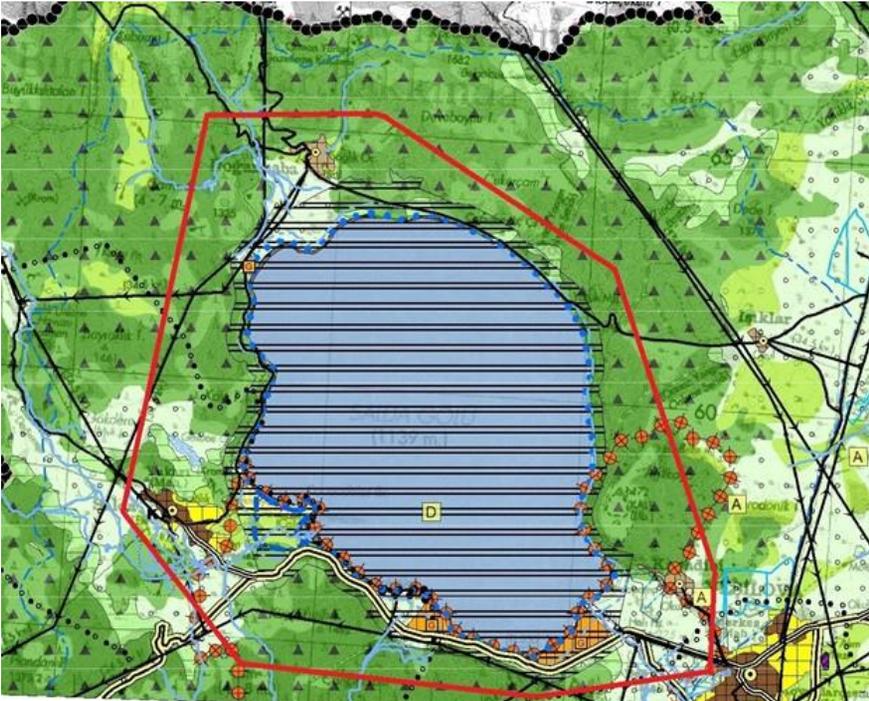


Figure 23.1 / 100.000 Scaled Antalya – Burdur – Isparta Land Use Plan Display

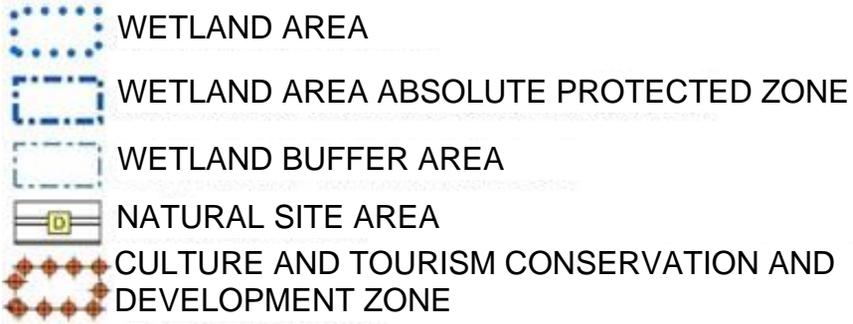


Figure 24. Antalya - Burdur - Isparta 1 / 100.000 Scale Land Use Plan Approved by the Ministry of Environment and Urbanization (Sheet No: Denizli - 23M)

In the Antalya-Burdur-Isparta Planning Region 1/100.000 scaled Land Use Plan Decisions and Implementation Provisions, the following are stated:

*"Wetland: For the purpose of the "Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Agreement)" published in the Official Gazette dated 17.05.1994 and numbered 21937 and approved with the Law No. 3958, these are fresh, bitter or salty waters and swamps, reeds, wet meadows and peatlands.*

*"Absolute Protection Zone: It refers to areas within the Protection Areas where water birds incubate intensively and collectively and spend the night; and it refers to the important breeding areas of rare and endangered bird species and areas where there are natural plant species that are endangered or dependent on a narrow range of wetlands.*

*"Buffer Zone: According to the geographical condition of the wetland basin, its topographic features and the current use of the land; these are the regions that are separated in order to protect the wetland ecosystem and not to exceed the water catchment basin boundary and if there is no ecological impact zone, so as not to be less than 2500 meters from the wetland area.*

*"Natural Assets (" D "Natural Site): In these areas, implementation will be made in accordance with the decisions of the relevant boards and commissions as well as the Law on the Protection of Cultural and Natural Assets No. 2863 and its relevant regulation.*

*"Daily Facility Area: In these areas, no accommodation is made and there are restaurants, casinos, tea gardens, entertainment areas, and facilities where handicrafts and local products are sold and exhibited, made of portable materials and intended for temporary daily use only for tourism purposes. In these areas, facilities could be constructed which provide for eating and drinking, recreation, entertainment and sports*

*Accommodation facility cannot be made"*

## **8.2. 1/25.000 Scaled Land Use Plan:**

### **8.2.1. 1 / 25.000 Scale Land Use Plan, dated 30.05.2019:**

In the 1/25.000 scaled Land Use Plan of Burdur–Lake Salda, which was prepared by the Ministry of Environment and Urbanization in line with the decisions of the Antalya–Burdur–Isparta Planning Region 1/100.000 scaled Land Use Plan and approved on 30.05.2019;

- A large part of Lake Salda and its Surroundings, “1<sup>st</sup> Degree Natural Site Boundary” remain in Region removed from “1<sup>st</sup> Degree Natural Site Border” and, in the 1/100.000 scaled Land Use Plan, a decision is made for being used as “Daily Area”, “2<sup>nd</sup> Degree Natural Site Boundary”
- a large part of the surrounding area of the lake remain in the "Forest Area" and the lands of Doğanbaba Village, Salda Village and Kayadibi Village are "Agricultural Land",
- southern coasts of the Lake remain in “Recreation Area”
- The region on the south of Doganbaba Village to the west of the Lake remain in Daily Use Area as stated in Antalya–Burdur–Isparta 1/100.000 Scaled Land Use Plan,
- A region between the Lake and the Vehicle Road within the borders of “2<sup>nd</sup> Degree Natural Site Boundary” from among the areas for which “Recreation Area” decision is made, remains in, “ÖPA–1=Special Project Area–1” and on the east of Salda Village, in a “2nd Degree Natural Site Boundary”, “ÖPA–2=Special Project Area–2”,

(Figure 26)

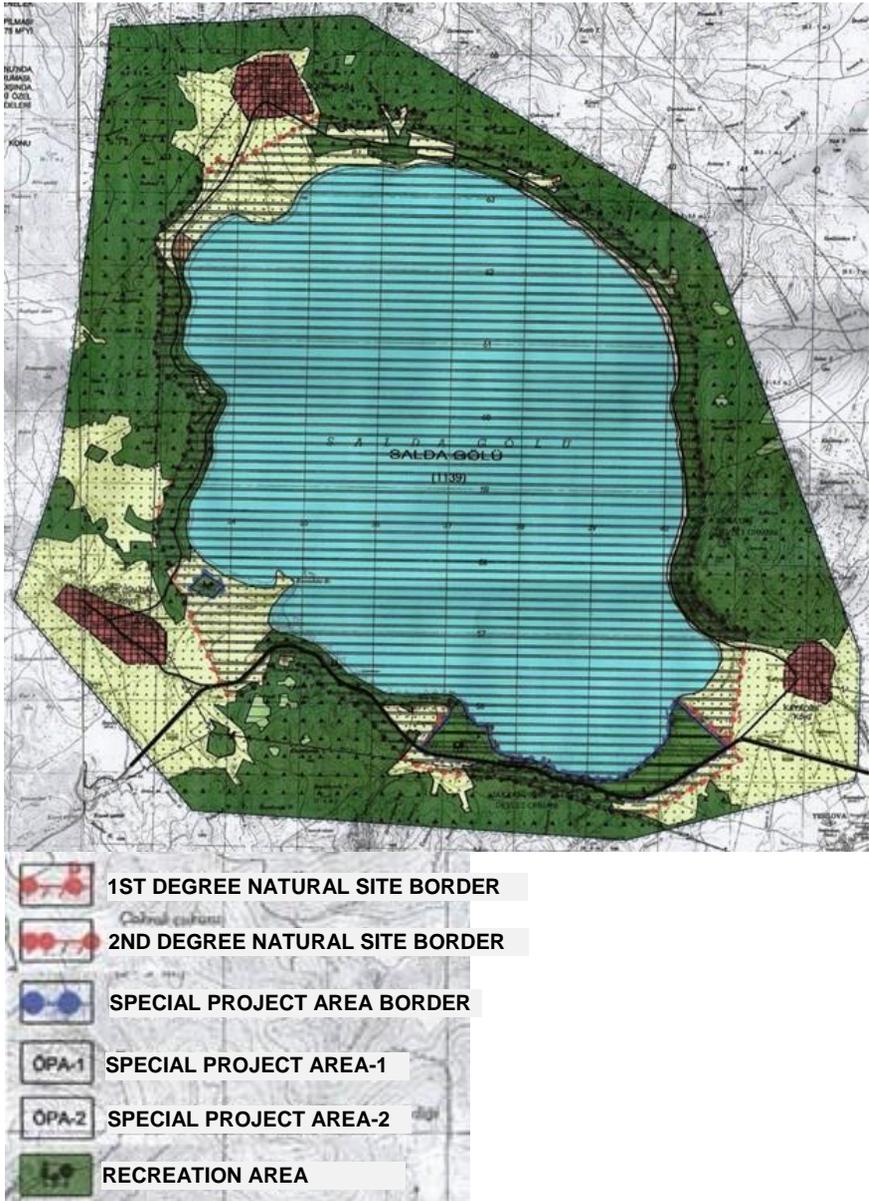


Figure 25. Burdur - Lake Salda 1/25.000 Scale Land Use Plan and Plan Display  
 Approved by the Ministry of Environment and Urbanization (Sheet No: Denizli - M23 -  
 d3, d4)

In Burdur – Lake Salda 1/25.000 Scale Land Use Plan Provisions, the following are stated:

*"In Recreation Areas; Shower, Seating Areas, Picnic Tables, Shade, Dressing Cabin, Masjid, WC (with sealed septic tank), Cafe-Bar, Patisserie, Restaurant, Teahouse, Outdoor Sports Areas, Access Control Units and Feature Buildings and Facilities, including the Exhibition and Sales Units of the handicraft products that carry them, can be built.*

*"Tents and Bungalows, Shade Areas, Shower, WC, Parking Lot etc. can be used in ÖPA-1 area.*

*"In the ÖPA-2 Area; areas for recreational activities only, shower, WC, parking lot etc. can be used."*

#### **8.2.2. 1/25.000 Scale Environmental Scheme dated 12.09.2019 Plan:**

- The Wetland Area, Wetland Absolute Protection Zone and Wetland Ecological Impact Zone have been transferred to the 1/25000 Scale Land Use Plan (Figure 27).

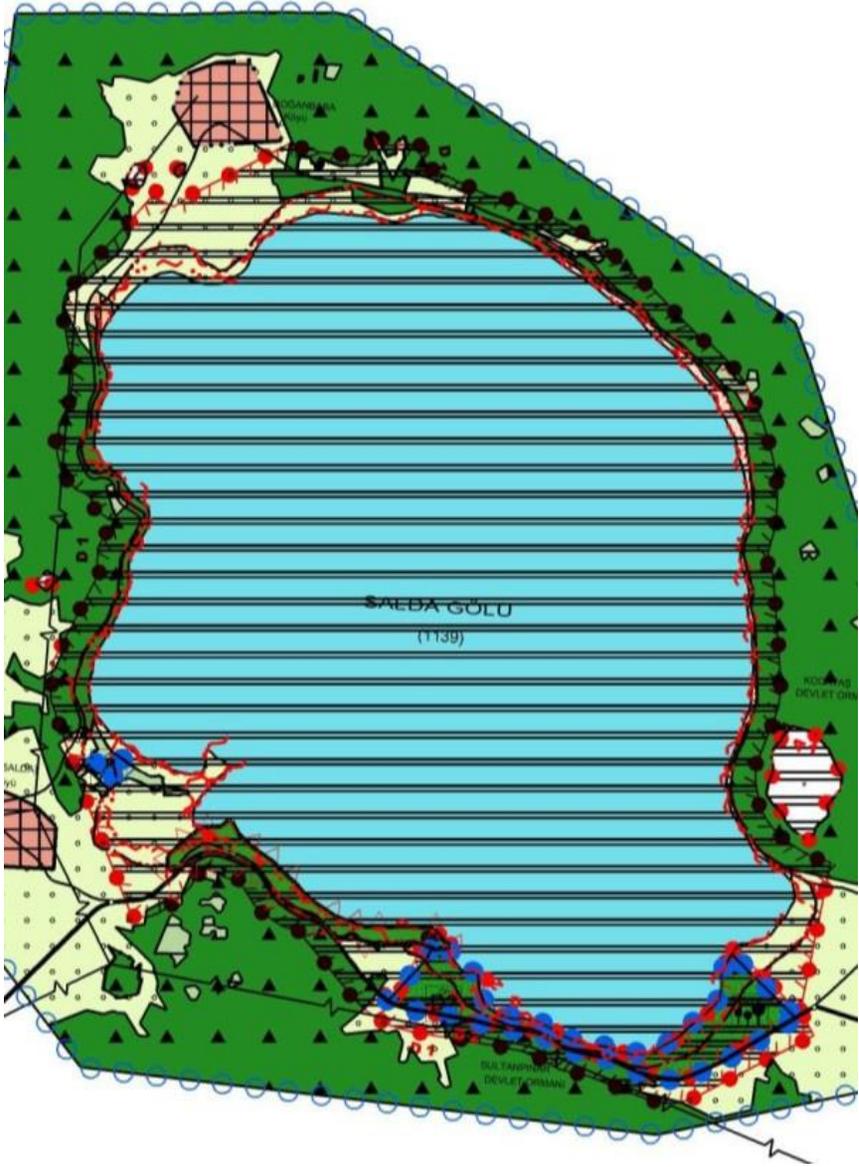


Figure 26. 1 / 25.000 Scale Land Use Plan, dated 12.09.2019

### 8.3. 1 / 5.000 Scale Conservation Purpose Master Development Plan:

In line with the decisions of Burdur–Lake Salda 1/25.000 scaled Environment Plan; 1 / 5.000 scaled Conservation Master Plan prepared for Salda Special Environmental Protection Area, Burdur Province Yeşilova District, Lake Salda and its surroundings was approved by the Ministry of Environment and Urbanization on 30.05.2019 (Figure 28).



Figure 27. Lake Salda and its Vicinity 1/5.000 Scale Conservation Master Plan Display Sheet

### 8.3.1. Lake Salda and Its Vicinity 1/5.000 Scale Conservation Purpose Master Development Plan 30.05.2019.

In the plan;

- The approval limit of the plan covering the region south of Lake Salda, which was obtained by reducing the 1/1.000 scaled Development Plan approved on the same day, starts in the north of Salda Village and ends in the north of Kayadibi Village.
- Since the “Base Map”, which forms the base of the plan, was obtained by scaling down the 1/1.000 scale existing map, even the plan decisions on it are difficult to understand.
- In accordance with the provisions of the "Coastal Line" and the provisions of the Regulation on the Implementation of the Coastal Law No. 3621 and its annex Coastal Law, the most important data that will guide planning decisions, namely a total of 100 meters wide consisting of two sections, "First 50 Meters" and "Second 50 Meters" "Coastline" has been processed.
- "Construction Rights", which will create problems in terms of building density in practice, have been brought to the areas for the use of people.
  - One of these decisions is that for the "Recreation Areas" proposed within the second 50 meters of the coastline, under the provisions of the Regulation on the Implementation of the Coastal Law (E=0.20 and H=4.50 meters, H=5.50 meters in case of a mezzanine floor), it was decided to build "Building" and "Facility".
  - Another is that, for the following plates which are defined as Urban Design Area in the Plan Provisions under Special Project Area in the Display; inside the “1<sup>st</sup> Degree Natural Site boundary” on the “1<sup>st</sup> Section Plan Plate”; and in the “2<sup>nd</sup> Degree Natural Site boundary on “Special Project Area–2” and “5<sup>th</sup> Section Plan Plate” adjacent to the areas recommended as “Coast, Beach”, and “Any Type of Construction Rights” for areas planned as “Special Project Area–1” between the Lake and 40 m Vehicle Path.
  - Another is that the buildings to be built in the "Camping Area" will be determined by "Urban Design".

The objections to this plan were evaluated and the approved changes were made on 12.09.2019 according to the objections (Figure 29).

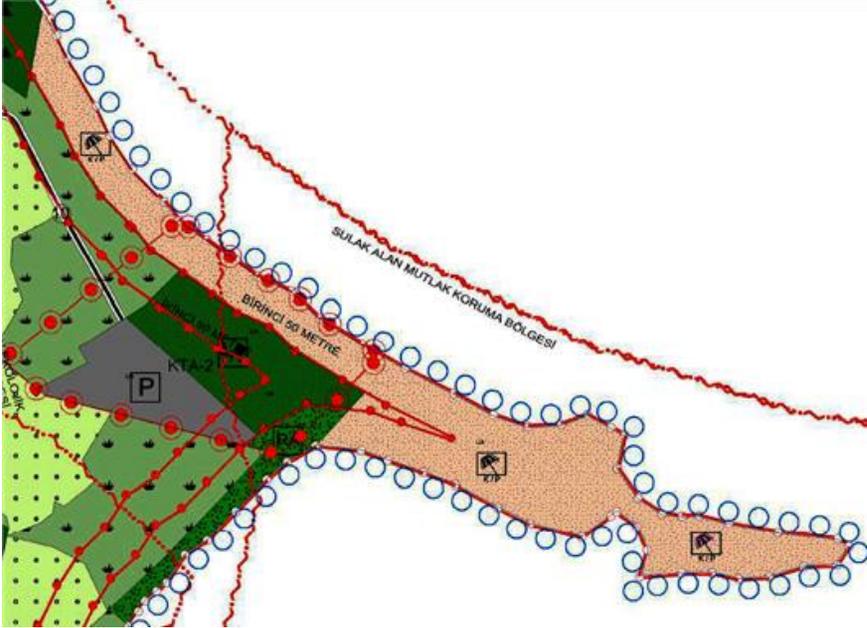
### **8.3.2. The 1/5.000 Scale Conservation Master Plan for Lake Salda and its Vicinity dated 12.09.2019 Changes**

#### **8.3.2.1. Amendments Made in the Legend of the Conservation Master Plan and Plan Provisions:**

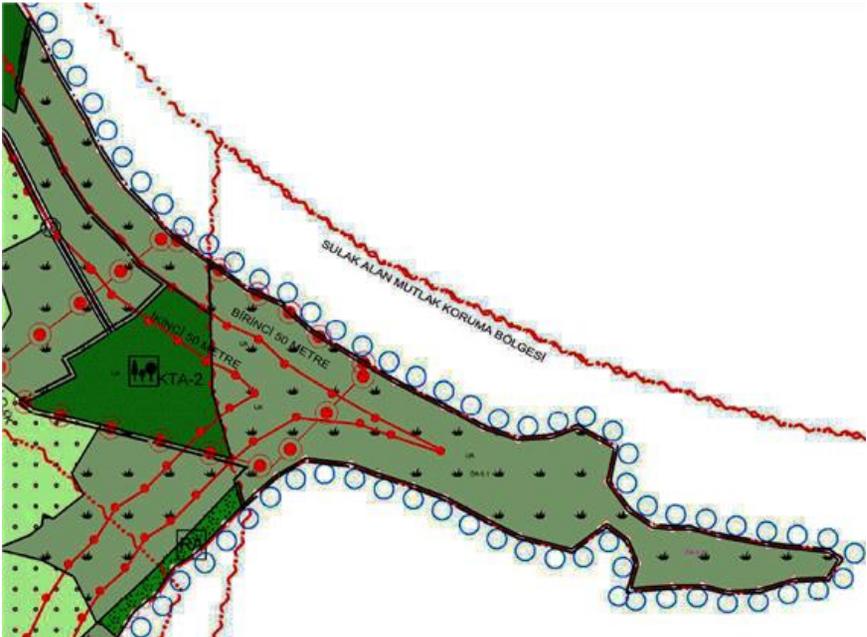
- The decision to use the "Camping Area" in Tourism Areas has been annulled.
- "Sandy Beach" usage decision display has been removed.
- The following article was included in the General Provisions: "New Mines Cannot Be Opened in These Areas
- License Periods of Existing Quarries Cannot Be Extended".
- From the Special Provisions related to "Beach Areas" and "Camping Areas" have been removed.
- In Areas Where Natural Character Should Be Protected, the phrase "Including the Wetland Absolute Protection Area" was added after the expression "Within the Scope of the Protected Area".

#### **8.3.2.2. Changes Made on the Conservation Master Development Plan:**

- In the "ÖPA-2 Area" (2<sup>nd</sup> Urban Design Area), the "Recreation Area" was taken to the border of the "Absolute Protection Area" in the direction of the lake and included in the "Parking Area Recreation Area". A part of the area around which is defined as "Recreation Area" is defined as "Area whose Natural Character will be Preserved" (Figure 29).



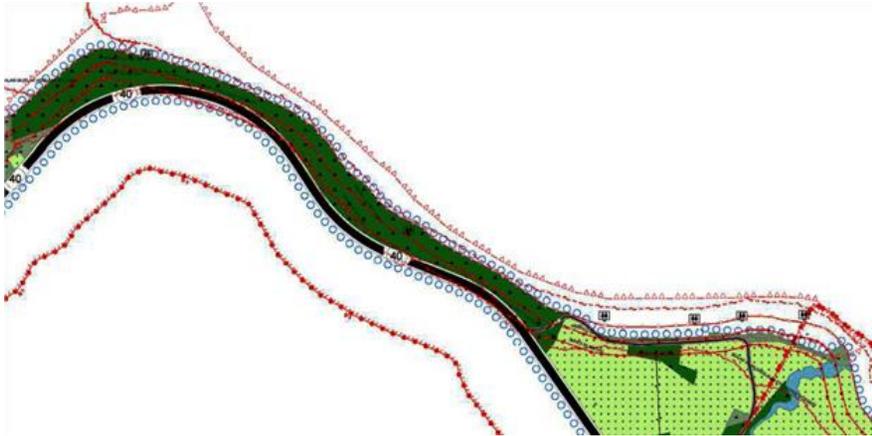
New regulation



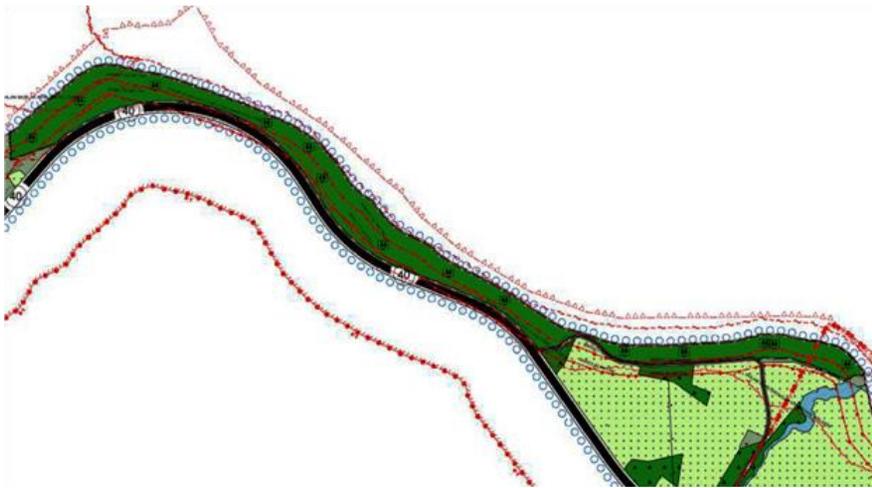
before objection

Figure 28. Conservation Master Development Plan

- The parts of the "Nature Park" in the plan, which were not included in the plan and remained in the direction of the land with the shore edge line, were included in the plan and the whole "Nature Park Area" was shown as "Natural Park Area (TP)" (Figure 2)



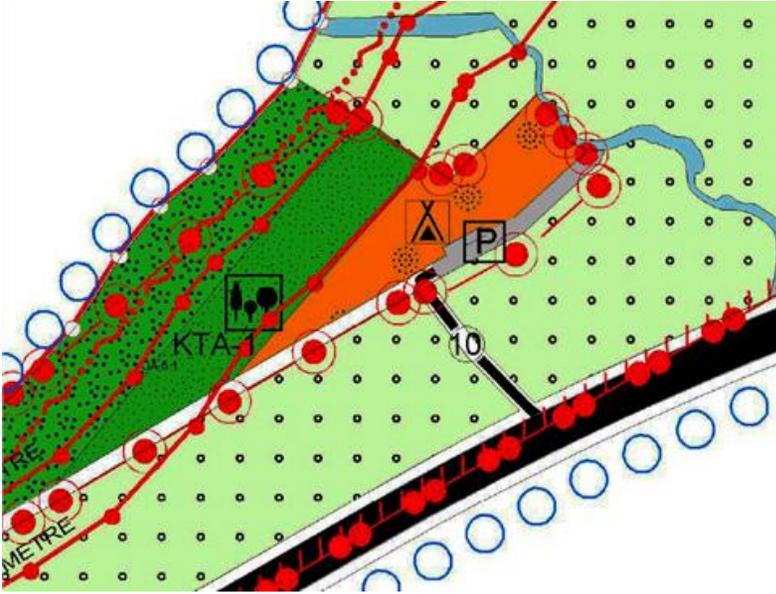
**New regulation**



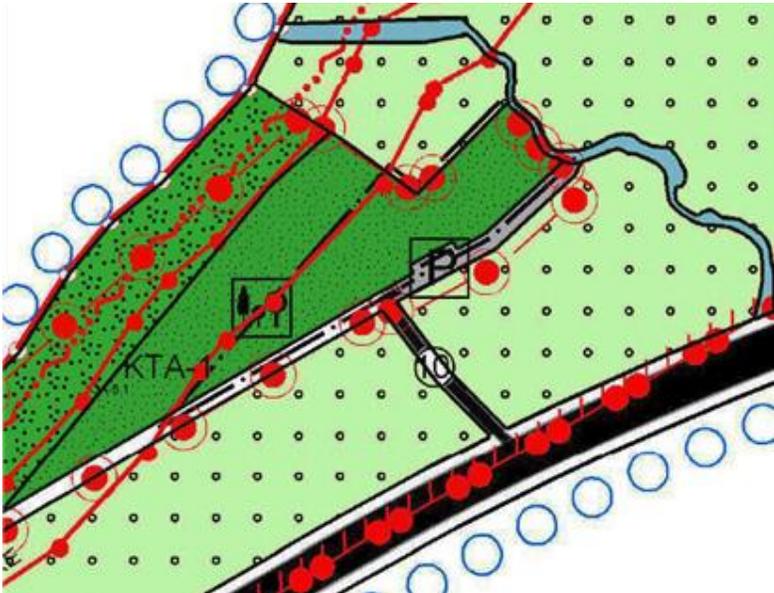
**before objection**

Figure 29. Conservation Master Development Plan

- The use of the "Camping Area" in the "ÖPA-1 Area" (1<sup>st</sup> Urban Design Area) in the 1/5000 Scale Master Development Plan was removed and the area was included in the use of the "Recreation Area" (Figure 30).



New regulation



before objection

Figure 30. Conservation Master Development Plan

## **8.4. 1/1.000 Scale Conservation development Plan:**

### **8.4.1. 30.05.2019 Conservation development Plan**

The Lake Salda and its Vicinity 1/1.000 scale Protection Purpose Implementation Plan was approved by the Ministry of Environment and Urbanization on 30.05.2019, just like the 1/5.000 scale Conservation Master Plan for Lake Salda and its Environment.

The objections to this plan were evaluated and the approved changes were made on 12.09.2019 according to the objections.

### **8.4.2. Conservation development Plan Dated 12.09.2019**

#### **8.4.2.1. Changes Made in the Plan Legend and Plan Provisions:**

- The decision to use the "Camping Area" in Tourism Areas has been abolished,
- The display of "Coastal Beach" In Areas to Be Preserved by Continuing Current Land Use has been removed,
- The following article was included in the General Provisions: "New Mines Cannot Be Opened in These Areas License Periods of Existing Quarries Cannot Be Extended",
- From the Special Provisions, provisions related to "Beach Areas" and "Camping Areas" have been abolished,
- Changed as "Maximum Precedent 0.05" in Recreation Areas and the condition of "Bar" could be constructed has been removed,
- In the Areas where Natural Character is to be Protected, the phrase "Including the Wetland Absolute Protection Area" was added after the phrase "Within the Scope of the Protected Area",
- Provisions regarding the construction of "Camping Areas, Caravan Areas and Bungalows" in Urban Design Areas have been abolished, but the provision that "Units such as Cafe, Shower, Dressing Cabin, Buffet, Sales Unit, Masjid, Seating Area, Executive Units can be included" remains the same (Figure 32. 33).

**DISPLAY LIMITS**



Figure 31<sup>st</sup> Plan Legend

# APPLICATION ZONING PLAN PROVISIONS FOR PROTECTION OF LAKE SALDA

## 1. GENERAL PROVISIONS

1.1. SALDA LAKE IN SALDA LAKE SPECIAL ENVIRONMENTAL PROTECTION ZONE AND IMPLEMENTATION ZONING PLAN FOR PROTECTION OF ITS ENVIRONMENT WORK AREA BORDERS 1ST AND 2TH DEGREE NATURAL SITE BORDERS COVERED APPROXIMATELY 320 HECTORS OF AREA.

1.2. IMPLEMENTARY DEVELOPMENT FOR LAKE SALDA AND ITS ENVIRONMENT PROTECTION. PLAN EXPLANATION REPORT AND PLAN PROVISIONS ARE A WHOLE.

1.3. IN THE MATTERS NOT SPECIFIED IN THIS PLAN AND IN THE IMPLEMENTATION OF THE PLAN:

- THE LAW NO. 2843 ON THE PROTECTION OF CULTURE AND NATURAL ASSETS AND RELATED REGULATIONS, THE RESOLUTIONS OF THE HIGH BOARD OF PROTECTION AND THE RESOLUTIONS OF THE ANTALYA REGIONAL COMMISSION FOR THE PROTECTION OF NATURAL ASSETS, APPLY.
  - ENVIRONMENTAL LAW NO 2872 AND RELATED REGULATIONS.
  - NATIONAL PARKS LAW NO 2873 AND RELATED REGULATIONS AND [APPLICABLE DEVELOPMENT PLAN
  - DEVELOPMENT LAW NO 3194 AND RELATED REGULATIONS.
  - COASTAL LAW NO 3621 AND RELATED REGULATIONS.
  - FOREST LAW NO 6231 AND RELEVANT REGULATIONS.
  - TOURISM INCENTIVE LAW NO.2634 AND RELATED REGULATIONS.
  - REGULATION REGARDING THE FACILITIES TO BE BUILT AND OPEN ON THE SIDE OF HIGHWAYS.
  - NUMBER 167 LAW ON GROUNDWATERS AND RELATED REGULATIONS AND PROTOCOL
  - REGULATION TO PROTECT THE AIR QUALITY.
  - ELECTRIC STRONG CURRENT FACILITIES REGULATION.
  - REGULATIONS ON BUILDING IN EARTHQUAKE ZONES.
  - REFUGE REGULATION.
  - PARKING REGULATION.
  - REGULATION ON THE PROTECTION OF UNDERGROUND WATERS FROM POLLUTION AND DEGRADATION.
  - IMPLEMENTATION PRINCIPLES REGARDING THE PROTECTION ZONES MENTIONED IN ARTICLES 18, 19, 20 AND 21 OF THE "REGULATION ON THE PROTECTION OF WATER AREAS" IN THE WATER AREA
  - ISSUES IN THE TECHNICAL PROCEDURES COMMUNICATION OF WATER POLLUTION CONTROL REGULATION PUBLISHED ON THE OFFICIAL GAZETTE ON 07.01.1991 NO 20748
  - DEVELOPMENT LAW NO 3194 AND RELATED REGULATIONS.
  - ANTALYA - BURDUR - ISPARTA PLANNING REGION 1/100.000 SCALE LAYOUT PLAN AND PLAN PROVISIONS AND OTHER RELEVANT LEGISLATION PROVISIONS MUST BE FOLLOWED.
- 1.4. IN THE FIELD OF PLANNING, IT IS MANDATORY TO TAKE THE MEASURES SPECIFIED IN THE CONCLUSION AND RECOMMENDATIONS SECTION OF THE GEOLOGICAL-GEOTECHNICAL SURVEY REPORT BASED ON THE ZONING PLAN APPROVED BY THE MINISTRY OF ENVIRONMENT AND URBANITY ON 19/12/2018.
- 1.5. SHIFTS UP TO 3 METERS BETWEEN THE PLAN DECISION AND THE CADASTRAL STATE IN THE APPLICATION CAN BE ACCEPTED AS ERROR AND THE CADASTRAL STABILITY CAN BE TAKEN INTO CONSIDERATION.
- 1.6. IN ACCORDANCE WITH THE LETTER OF ISPARTA FORESTRY REGIONAL DIRECTORATE DATED 09.05.2018 NO. 982732, BY CORRECTING THE SCIENTIFIC ERRORS MENTIONED IN THE FORESTRY CADASTRE WORKS OF SALDA LAKE IN YESILOVA DISTRICT OF BURDUR PROVINCE AND COMPLETING THE WORKS, ANY SHIFTS BETWEEN THE PLAN DECISION AND THE CADASTRAL STATUS SHALL BE ACCEPTED AS ERROR AND NEW FOREST CADASTRE LINE MAY BE ACCEPTED.
- 1.7. APPLICATIONS TO BE MADE ON A HIGHWAY SIDE SHALL BE FOLLOWED WITH THE REGULATION PROVISIONS REGARDING THE FACILITIES TO BE MADE AND OPENED.
- 1.8. ANY STRUCTURE TO BE MADE WITHIN THE TERMS OF THE "ACCESSIBILITY MONITORING SUPERVISION" BASED ON THE LAW NO 5378. FACILITY ROAD, KALOIRIMLAR ETC. AND OTHER EQUIPMENT MUST BE MANUFACTURED IN ACCORDANCE WITH THE ACCESSIBILITY AND USE CONDITIONS OF THE DISABLED.
- 1.9. NOISE AND VISUAL POLLUTION THAT WILL DEFEAT THE NATURAL CHARACTER OF THE AREA WITHIN THE BOUNDARIES OF THE PLAN APPROVAL.
- 1.10. IT WILL PROVIDE SOLUTIONS SUITABLE FOR TOPOGRAPHY AND NATURAL PLANT COVER IN THE ARCHITECTURAL PROJECTS OF ALL KINDS OF STRUCTURES THAT WILL BE INCLUDED IN THE PLANNING AREA. IT IS MANDATORY TO SELECT MATERIALS AND PROJECTS THAT ARE INTEGRATED WITH NATURE AND THAT DO NOT DEFEAT LOCAL ARCHITECTURE.
- 1.11. NO APPLICATION CAN BE MADE ON COMMON AREAS OF USE UNTIL EXPROPRIATED. IN THE PARCELS WHERE THE EQUIPMENT AREAS SHOWN IN THE PLAN, APPLICATION CAN NOT BE MADE WITHOUT ALLOTING PART OF THE PARCEL THAT REMAINS IN THE OUTFITS AND LEAVING THE SAME TO PUBLIC.
- 1.12 THE CAPACITY DETERMINED IN THE PLANNING AREA CANNOT BE INCREASED IN ANY WAY. AMENDMENTS AND ADDITIONS CANNOT BE MADE UNLESS THE APPROPRIATE OPINION OF THE ANTALYA REGIONAL COMMISSION FOR THE PROTECTION OF NATURAL ASSETS.
- 1.13. NEW MINE STORES CANNOT BE OPENED IN THESE AREAS. THE LICENSE PERIOD OF THE EXISTING QUARRIES CANNOT BE EXTENDED.

Figure 32 (a). Lake Salda Conservation Plan Provisions

**2.9. URBAN DESIGN AREAS**

**2.9.1.** AREAS OF NATURAL QUALITY TO BE PROTECTED IN THESE AREAS, BEACH AREAS, RECREATIVE AREAS AND RECREATION AREAS. THE RELEVANT PROVISIONS SET FORTH IN THIS PLAN NOTES WILL BE FOLLOWED.

**2.9.2.** IN THE REGION DESIGNATED AS THE URBAN DESIGN PROJECT AREA, FOR SERVING THE USER OF THE AREA USES AND PARKING AREAS MAY TAKE PLACE. SUCH AS SHADOWING ELEMENTS, WASTE COLLECTING AREAS, FOUNTAINS, SEALED PHOSSEPTIC TOILETS, SHOWER AND DRESSING CABINETS, OPEN AREA ARRANGEMENTS, BUFFET, SALES UNITS LKAAE, LIVING AREA, PASSENGER DISHWASHER, MANAGEMENT UNIT. ALL KIND OF CONSTRUCTION RECOMMENDED IN THESE AREAS SHALL BE DESIGNED IN LINE WITH REGION-SPECIFIC CHARACTER, WITH SPECIFIC DETAILS AND SCALE, SECTION, APPEARANCE, PERSPECTIVE ETC. AND THREE-DIMENSIONAL SURVEYS. MAXIMUM AREA OF THE STRUCTURES TO BE BUILT ON THESE AREAS SHALL BE 200 M2.

**2.9.3.** URBAN DESIGN PROJECTS THAT WILL BE PREPARED IN THIS AREA WILL BE SUBMITTED TO THE MINISTRY APPROVAL WITH THE REVIEW OF THE REGIONAL COMMISSION FOR THE PROTECTION OF NATURAL ASSETS IN ANTALYA. NO APPLICATION WILL BE MADE WITHOUT MINISTRY'S APPROVAL.

**2.9.4.** IN AREAS WHICH ARE DEFINED AS URBAN DESIGN PROJECT AREA, AREA OPEN SPACE ARRANGEMENTS TO SERVE AREA VISITORS AND SPACES TO MEET THE DAILY NEEDS OF THE VISITORS WILL BE PROVIDED. INSIDE THE WORK AREA BORDERS, 2 URBAN DESIGN BORDERS ARE INCLUDED.

**2.9.4.1. 1. URBAN DESIGN AREA (KTA1)** 1. IN THE SOUTHEAST OF THE FIRST DEGREE NATURAL SITE BORDER, IT COVERS A TOTAL AREA OF 82.617 M2. RECREATIVE AREAS AND RECREATION AREAS CAN BE PLACED IN THE REGIONS DESCRIBED IN THIS PLAN.

IN AREAS DESIGNATED AS **RECREATION AREAS**;

- UNITS SUCH AS CAFE, SHOWER, WC, LOCKER CABINET, BUFFET, SALES UNIT, CLOSURE, SITTING AREA, EXECUTIVE UNIT CAN BE PROVIDED.

**2.9.4.2 2. URBAN DESIGN AREA (KTA2)** 1. COVERS A TOTAL OF 75,421 M2 OF AREA IN THE NORTHWEST OF THE FIRST DEGREE NATURAL SITE BORDER. IN THE 2nd URBAN DESIGN AREA WHICH WILL BE LOCATED IN THE NORTHWEST OF THE PLANNING AREA; - UNITS SUCH AS CAFE, SHOWER, WC, LOCKER CABINET, BUFFET, SALES UNIT, CLOSURE, SITTING AREA, EXECUTIVE UNIT CAN BE PROVIDED.

**2.9.5.** DETAILS SUCH AS THE LOCATIONS, MATERIALS, SIZES OF THE UNITS OF NON-PERMANENT QUALITY IN URBAN DESIGN WILL BE DETERMINED IN THE DESIGN PROJECT.

**2.10. ROADS AND GENERAL PARKING AREAS**

**2.10.1.** ON THE PLANNED PEDESTRIAN ROUTES. FLOORING, LIGHTING ELEMENTS, SITTING GROUPS, LANDSCAPE ELEMENTS WILL BE DESIGNED TO DIRECT THE PASSENGER AND IN ACCORDANCE WITH THE ARCHITECTURAL CHARACTER. COATING OTHER THAN NATURAL MATERIALS MAY NOT BE MADE ON ROAD AND PARKING AREAS.

**2.10.2.** OTHER PEDESTRIAN ROUTES AND MAIN PEDESTRIAN AXES. IT CAN BE OPENED TO VEHICLE TRAFFIC AT SPECIFIC HOURS OF THE DAY FOR SERVICE PURPOSES.

**2.10.3.** IN THE ARRANGEMENT OF OPEN PARKING AREAS, IN TO PREVENT NOISE AND IMAGE POLLUTION, PLANTING SUITABLE FOR THIS PURPOSE COULD BE PROVIDED IN ADDITION TO PLANTING SUITABLE FOR THE REGIONAL CHARACTERISTICS FOR INSULATION PURPOSES.

**2.10.4.** IN THESE AREAS, UNITS THAT DO NOT EXCEED THE SIZE OF 6 M2 AND A HEIGHT OF 3.50 METERS CAN BE BUILT AS A WC AND WATCHDOG HUT, WHICH SHALL BE SUITABLE WITH REGIONAL ARCHITECTURAL CHARACTERISTICS AND WHICH SHALL NOT BE PERMANENT.

**2.10.5.** REGULATION WILL BE FOLLOWED FOR ALL PARKING AREAS TO BE BUILT IN THE AREA. VEHICLE ROAD SIDES CANNOT BE USED AS PARKING.

**2.11. BROOK AREAS**

**2.11.1.** REGARDING THE IMPLEMENTATION OF THE STREAMS IN THE PLANNING AREA, ACCORDING TO THE LETTER OF THE MINISTRY OF FORESTRY AND WATER AFFAIRS, DEPARTMENT OF STUDY PLANNING AND ALLOCATION, DATE OF 16.05.2018:

- REGULATED SECTIONS OF KURUÇAY STREET IN THE PLANNING AREA WILL BE KEPT SAME.
- THE STREET BEDS AND ROUTES IN THE INSTITUTION'S VIEW SHALL BE FOLLOWED. SERVICE ROADS WITH A CONTINUITY OF FIVE METERS WILL BE SEPARATED ON THE STREET SIDES.
- OPINION OF DSI ISPARTA 18TH REGIONAL DIRECTORATE WILL BE RECEIVED ON THE PLANNING OF TRANSITION STRUCTURES SO AS TO TRANSMIT THE OVERFLOW OF BROOKS AT BROOK ROAD PASSAGES

**2.11.2.** THE EXISTING STREET ROUTES WILL NOT BE OBSTACLE TO REVISION MAINTENANCE AND REPAIR WORKS. "REGULATION ON THE PROTECTION OF UNDERGROUND WATERS FROM POLLUTION AND DEGRADATION". THE PROVISIONS OF THE PRIME MINISTRY CERTIFICATE ON "STREAM BEDS AND FLOWS", NO.2006 / 27, PUBLISHED IN THE OFFICIAL GAZETTE DATED 09.09.2008 AND NO.26284, WILL BE FOLLOWED.

**2.12. ENERGY TRANSMISSION LINES**

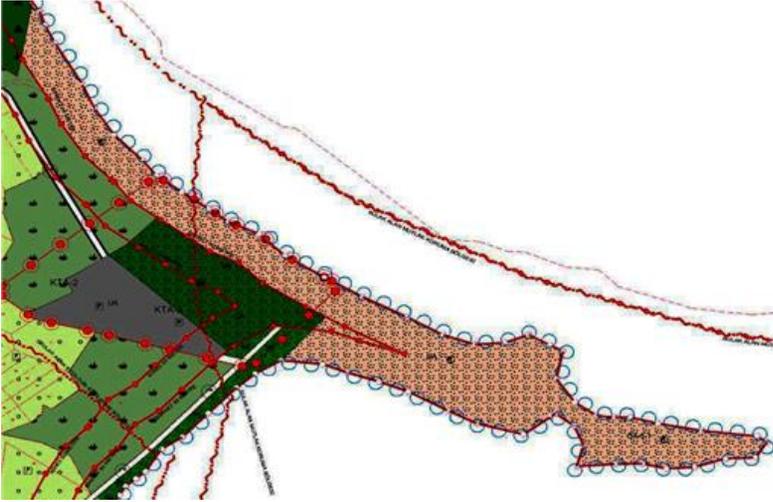
**2.12.1.** THE PROVISIONS OF THE "ELECTRIC STRONG CURRENT FACILITIES REGULATION" PROVISIONS APPLY IN THE AREAS WHERE ENERGY TRANSMISSION LINES pass.

**2.12.2.** ON THE ROUTES THAT THE ENERGY TRANSMISSION LINES PASS THROUGH THE ALIGNMENT CORRIDOR IN THE AREAS WHERE THE ENERGY TRANSMISSION LINE PASSES, THE APPLICATION WILL BE TAKEN BY THE RELATED ORGANIZATION.

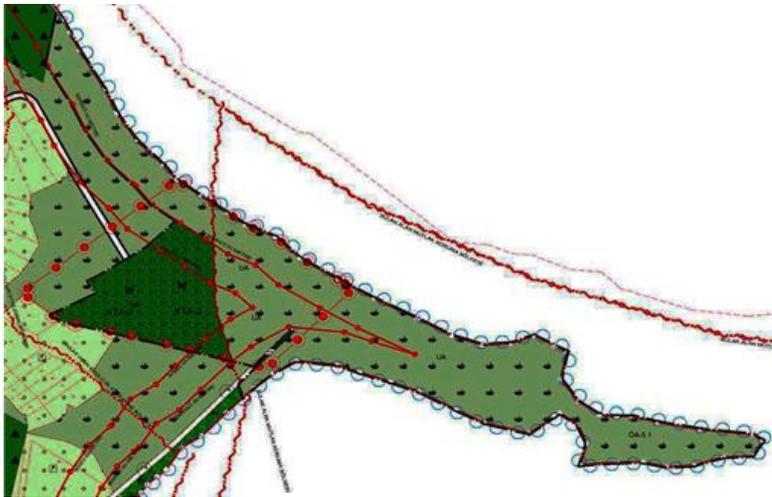
Figure 32 (b). Lake Salda Conservation Plan Provisions

#### 8.4.2.2. Changes Made According to Objections on the Conservation Plan:

- In the "ÖPA-2 Area" (2nd Urban Design Area), the "Recreation Area" was taken to the border of the "Absolute Protection Area" in the direction of the lake and included in the "Parking Area Recreation Area". A part of the surrounding area defined as "Recreation Area" has been defined as "The Area whose Natural Character will be Preserved" (Figure 34).



New regulation



before objection

Figure 33. Conservation Development Plan

- In the 1/1000 Scale Implementation Development Plan, the parts of the Nature Park that are in the direction of the coastline and the land that are not included in the plan are included in the plan and the whole of the Nature Park Area is shown as the "Natural Park Area (TP)" (Figure 35).

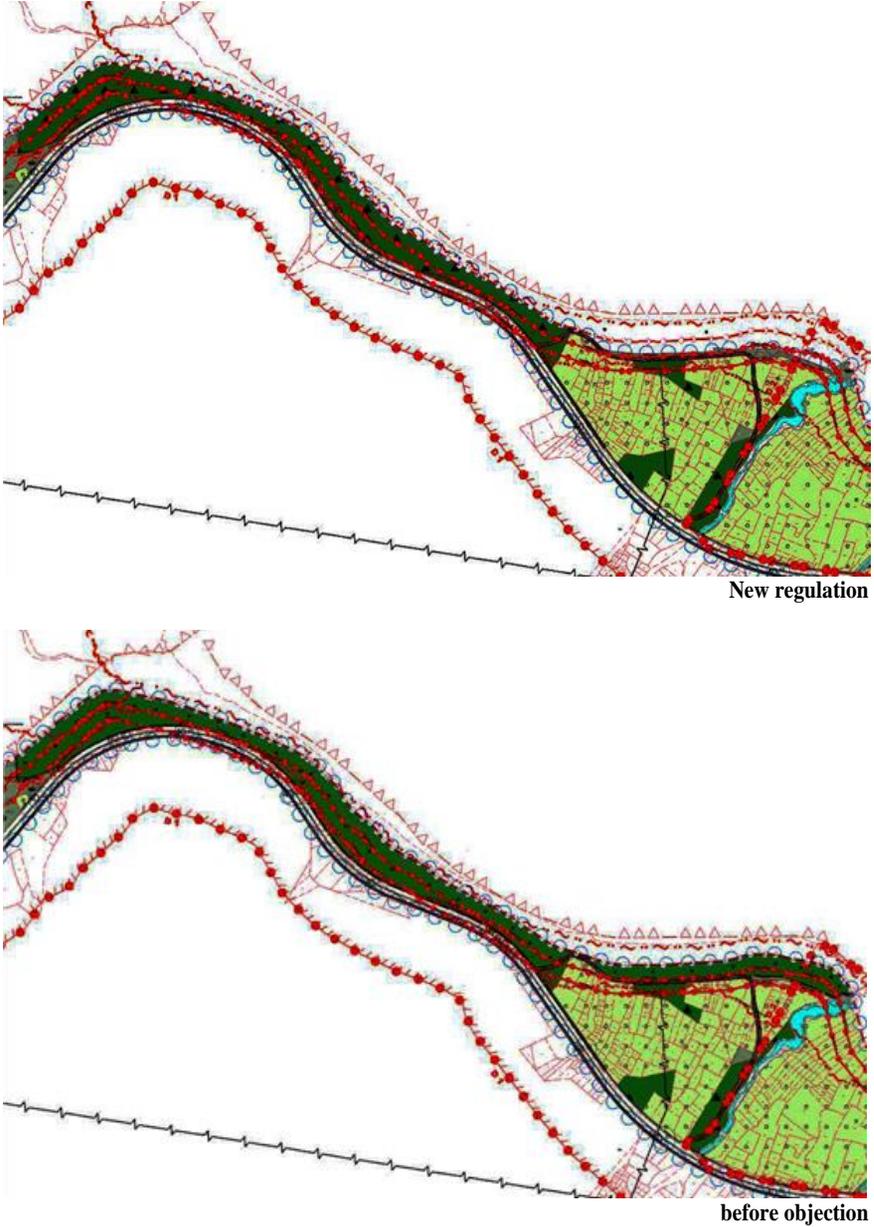


Figure 34. Conservation Development Plan

- By removing the use of "Special" Camping Area "in the plan, the area is included in the use of "Recreation Area" (Figure 36).



New regulation



before objection

Figure 35. Conservation Development Plan

### 8.4.2.3. Conservation development Plant Suspension Objections Adjustment Land Use Distribution:

Land Name	Condition (m <sup>2</sup> )	Ratio (%)
Recreation Areas	56,949.43	1st69
Nature Park	256,484.81	7.60
Pasture Area	44,946.47	1st33
Forest Areas	137,234.13	4.07
Reactive Fields	106,266.44	3.15
Areas to Protect Natural Character	619,428.62	18.36
Agricultural Areas	1,476,205.32	43.77
Brook	48,146.54	1st43
Parking Areas	1,487.65	0.04
Park area	56,894.67	1st69
Refuge	32,642.59	0.97
Roads	536,265.30	15.90
<b>Total</b>	<b>3,372,951st94</b>	<b>100.00</b>

Table 12. Conservation development Plan Suspension Objection Adjustment Land Use Distribution

## 8.5. Layout Plan of the National Garden Architectural Projects on the Current Map:

In the plans approved by the Ministry around Lake Salda; in the areas designated as ÖPA1 (Special Project Area 1) and ÖPA2 (Special Project Area 2), Urban Design Area 1 (KTA1) and Urban Design Area 2 (KTA2) projects are planned. These Conservation Plans were suspended on 10 July 2019. Before the suspension period was completed (suspension period of one month according to the Development Law No. 3194), the tender was made on 31 July 2019 through TOKI to implement the National Garden Project, which is planned to be built in the Urban Design Areas, whose project is given below.

### 8.5.1. 1<sup>st</sup> Urban Design Area Layout Plan:

Under Article 2.9.4.1 of General Provisions of the "1st Urban Design Area" with a size of 82.617,00 m<sup>2</sup> in the "Lake Salda and Its Vicinity Conservation development Plan Scaled 1/1.000" Layout Plan of which was approved on 30.05.2019, it is stated to be prepared for the use of

"Cafe, Shower, Dressing Cabin, Masjid, Seating Area and Executive Units" and the following structures are located in the Layout Plan. (Table 13)

6 Buffets	: 247.56 m <sup>2</sup> (A1, A2, A3, A4, A5 and A6 Blocks = 6x41,26 m <sup>2</sup> ):
4 Dressing Units	: 277.36 m <sup>2</sup> (B1, B2, B3 and B4 Blocks = 4 x 69.34 m <sup>2</sup> )
2 Cafes	: 157.90 m <sup>2</sup> (C1 and C2 Blocks = 2 x 78,95 m <sup>2</sup> )
2 Masjids	: 251.20 m <sup>2</sup> (D1 and D2 Blocks = 2 x 125.60 m <sup>2</sup> )
1 National Cafeteria	: 332.70 m <sup>2</sup> (E1 Block = 332.70 m <sup>2</sup> )
2 Executive Units	: 129.48 m <sup>2</sup> (F1 and F2 Blocks = 2 x 64,74 m <sup>2</sup> )
5 WCs	: 497.20 m <sup>2</sup> (G1, G2, G3, G4 and G5 Blocks = 5 x 99.44 m <sup>2</sup> )
1 Health Unit	: 109.12 m <sup>2</sup> (H1 Block = 109.12 m <sup>2</sup> )
1 Kitchen Unit	: 77.44 m <sup>2</sup> (I Block = 77.44 m <sup>2</sup> )
1 dishwasher	: 71.78 m <sup>2</sup> (J Block = 71st78 m <sup>2</sup> )
1 Seating Unit	: 141.62 m <sup>2</sup> (K1 Block = 141st62 m <sup>2</sup> )
2 Sales Units	: 153.56 m <sup>2</sup> (N1 and N2 Blocks = 2 x 71,78 m <sup>2</sup> )
1 Septic tank	: 62.73 m <sup>2</sup> (P1Block = 62.73 m <sup>2</sup> )
2 Lifeguard Units	: 18.26 m <sup>2</sup> (D1 and D2 Blocks = 2 x 9,13 m <sup>2</sup> )
<b>Total</b>	<b>: 2.517,91 m<sup>2</sup> Construction Area</b>

Table 13. 1<sup>st</sup> Urban Design Area Layout Plan

In the Site Plan; apart from these blocks, there are 10 Bungalows and a total of 70 Tent Areas, 50 of which are within the Second 50 Meters of the Coastline (Figure 37).



For a clearer understanding of the location of the blocks, "Site Plan" is below; given in sections from West to East (Figures 38, 39, 40, 41).

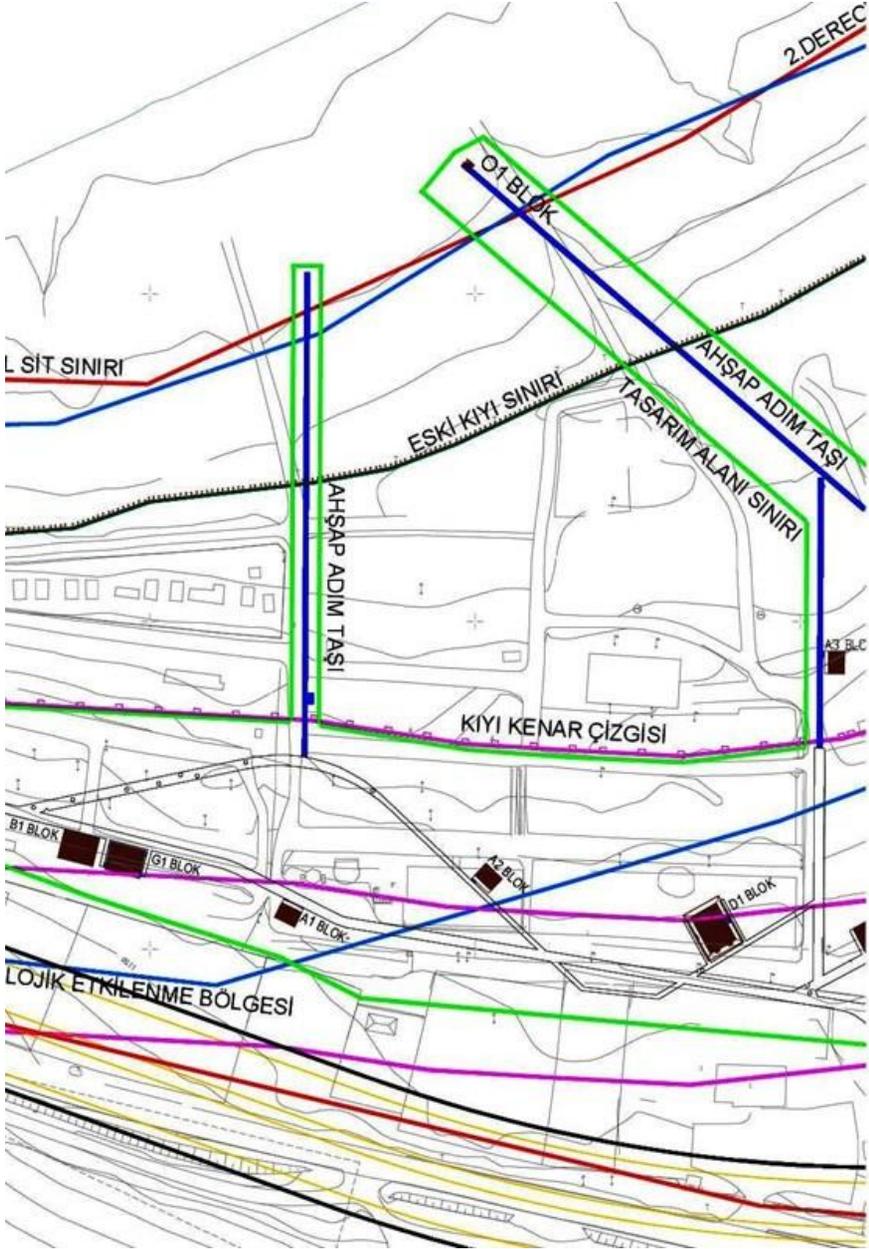


Figure 37. A2 Block, B1 Block, G1 Block and D1 Block are partially within the "First 50 Meters".

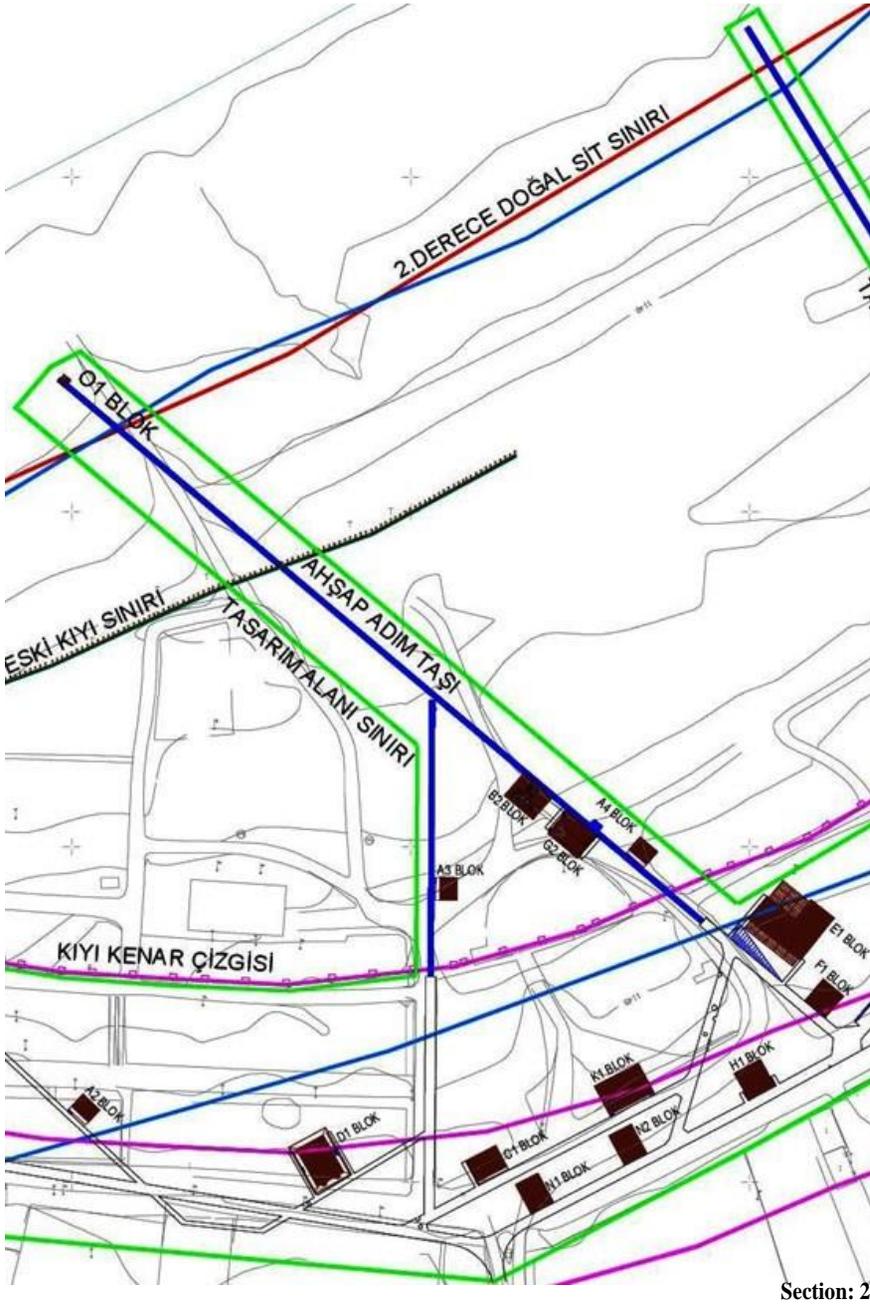
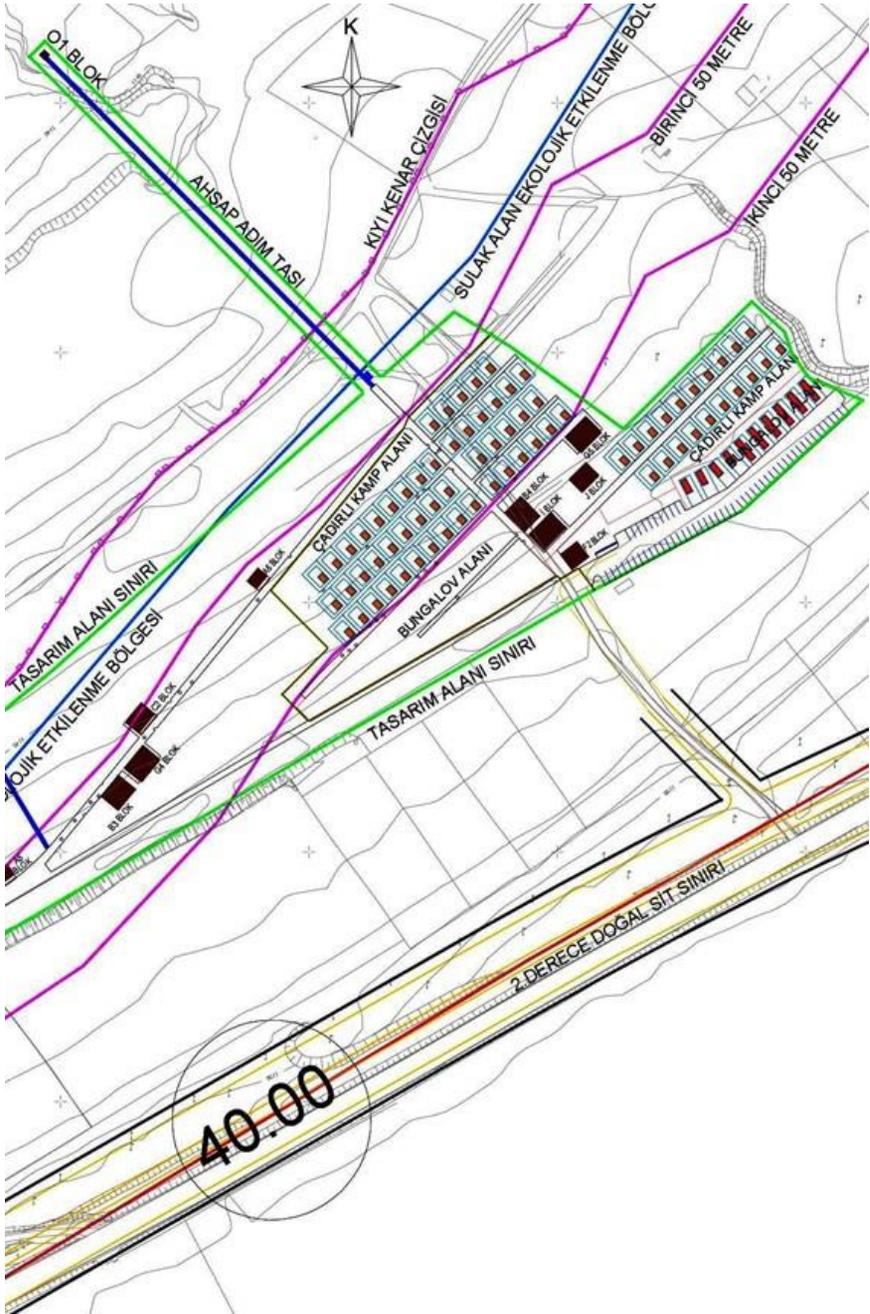


Figure 38. A3 Block, A4 Block, B2 Block and G2 Block are in the “Shore” A2 Block, E1 Block, F1 Block and D1 Block and K1 Block are partially within the “First 50 Meters”.



Section: 3

Figure 39. (D2 Block, E1 Block, F1 Block and G3 Block are partially within the "First 50 Meters".)



Section 4''

Figure 40. C2 Block is partially within the "First 50 Meters".

### 8.5.2. 2. Urban Design Area Layout Plan:

Under Article 2.9.4.2 of General Provisions of the "2st Urban Design Area" with a size of 75.421,00 m<sup>2</sup> in the "Lake Salda and Its Vicinity Conservation development Plan Scaled 1/1.000" Layout Plan of which was approved on 30.05.2019, it is stated that "Units such as Cafe, Shower, Dressing Room, Buffet, Sales Unit, Masjid, Seating Area, and Executive Units may take place" and the following structures are prepared according to usage and as seen in the Layout Plan (Figure 42, Table 14).

1 Buffets	: 4126.56 m <sup>2</sup> (A7 Block = 41st26 m <sup>2</sup> )
2 Dressing Unit	: 138.64 m <sup>2</sup> (B5 and B6 Blocks = 2 x 69,34 m <sup>2</sup> )
2 Cafeterias	: 157.90 m <sup>2</sup> (C1 and C2 Blocks = 2 x 78,95 m <sup>2</sup> )
1 Masjid	: 125.60 m <sup>2</sup> (D3 Block = 125.60 m <sup>2</sup> )
1 National Cafeteria	: 332.70 m <sup>2</sup> (E2 Block = 332.70 m <sup>2</sup> )
1 Executive Unit	: 64.74 m <sup>2</sup> (F2 Block = 64.74 m <sup>2</sup> )
3 WC	: 298.32 m <sup>2</sup> (G6, G7 and G8 Blocks = 3 x 99.44 m <sup>2</sup> )
1 Health Unit	: 109.12 m <sup>2</sup> (H2 Block = 109.12 m <sup>2</sup> )
1 Seating Unit	: 141.62 m <sup>2</sup> (K2 Block = 141st62 m <sup>2</sup> )
2 Large Sales Unit	: 283.24 m <sup>2</sup> (M1 and M2 Blocks = 2 x 141,62 m <sup>2</sup> )
1 Small Sales Unit	: 71.78 m <sup>2</sup> (N3 Block = 71st78 m <sup>2</sup> )
1 Septic Tank	: 62.73 m <sup>2</sup> (P1Block = 62.73 m <sup>2</sup> )
2 Lifesaver Unit	: 18,26 m <sup>2</sup> (D1 and D2 Blocks = 2 x 9,13 m <sup>2</sup> )
<b>Total</b>	<b>: 1.895,78 m<sup>2</sup> Construction Area</b>

Table 14. 2. Urban Design Area Layout Plan



Figure 41 (a). 2. Close View of the Layout Plan of the Urban Design Area



Figure 41 (b). 2. The Complete Site Plan of the Urban Design Area

## **8.6. FINDINGS IN LAYOUT PLANS ACCORDING TO THE COASTAL LAW AND THE REGULATION ON THE IMPLEMENTATION OF COASTAL LAW**

### **8.6.1. Urban Design Area Layout Plan;**

A3 Block Buffet, A4 Block Buffet, B2 Block Dressing Unit, G2 Block WC and 01 Block Lifeguard Unit and 02 Block Lifeguard Unit are located in the "Shore" (between the lake and the shore edge line).

A2 Block Buffet, B1 Block Dressing Unit, G1 WC, D2 Block Masjid, E1 Block National Coffee, F1 Block Management Unit all within the "First 50 Meters of the Coastline" and C2 Block Cafe, D1 Block Masjid, Block G3 WC and K1 Block the Seating Unit partially falls within the "First 50 Meters of the Coastline".

### **8.6.2. Urban Design Area Layout Plan;**

B6 Block Dressing Unit, F2 Block Management Unit, K1 Block Seating Unit and N3 Block National Coffeehouse remain within the "First 50 Meters of the Coastline".

In the National Garden Architectural Project; "One of the Natural Wonders of the World in terms of Physical, Biological and Visuality" and "Lake Salda", which has a closed basin, is proposed to be built like a dense one even for a beach with an open sea. The proposed Building Area in the Project is 4,413.69 square meters, of which 2,517.91 square meters are in the 1st Urban Design Area and 1,895.78 square meters in the 2<sup>nd</sup> Urban Design Area.

No mosque was suggested in any of the coastal plans made so far. The mosque is a place of worship and since it is not a necessary use on the shore, it is appropriate to be built in residential areas. There are enough mosques to be worshiped in the settlements around the lake.

The facilities proposed in the architectural project, including the mosque, reinforce the idea that these areas will open to Urban Settlement in the long term.

### **Positions of the Structures Proposed in the Architectural Project in the Layout Plan**

Despite the fact that, in Coastal Law No. 3621 and Regulation on Implementation of Coastal Law; it is stated that "*Coast: It is defined as the area between the coastal line and the shore edge line* " and for the utilization of coast, it is stated that "*The coast is open to everyone's enjoyment with equality and freedom, no construction can be built here, walls, fences, fence, wire mesh, ditch, piles and similar obstacles cannot be created* ", whereas it is seen that 6 buildings are located on the coast in the 1st Urban Design Area.

Again in relation to the project, it is *stated in the Regulation* that "Implementation plans including the first part of the coastline are arranged to be allocated to the use of the society as an open area", the planning was made to have 6 buildings in the 1st Urban Design Area, 4 buildings in the 2nd Urban Design Area, 4 buildings in "The First 50 Meters of the Coastline", one of which is a Masjid, which were planned to partially enter this area.

Despite the fact that, in the plans to be made in the "Second 50 Meters of the Coastline", it is stated in the Regulation; "... *Provided that it is open to the benefit of the society, it is arranged to include the daily tourism structures and facilities defined in this Regulation, sports facilities, golf fields, amusement park, fair and water games park*" place was allocated for 50 tents where 1st Urban Design Area Accommodation is provided.

### **8.7. EIA Status of the National Garden Architecture Project**

When the Lake Salda Landscaping (National Garden) implementation is examined; the project in question has the status of "Camping Caravan Area" and "Theme Park" after the implementation since there is no definition, implementation regulation, implementation principle, management plan of the National Garden in terms of both the area and the applications to be made in the project.

Therefore; it is required to be examined within the scope of the EIA Regulation dated 25.11st2014 and numbered 29186 and a "EIA Not Required" or "EIA Positive Decision" should be taken.

Annex-2 list of the said Regulation indicates the following;

*"Article 34- Permanent camp and caravan areas with an area of 50,000 m2 and above,*

*"Article 35- Theme parks, (Facilities established on an area of 50,000 m2 and above, providing monitoring, entertainment and information services to customers based on any theme such as science, culture, nature or sports. "*

In this context, the following are required:

- Environmental impact assessment (EIA): To carry out works in order to determine the positive and negative effects of the projects planned to be realized on the environment, to prevent the negative effects or to minimize the environmental damage, to determine and evaluate the selected location and technology alternatives, and to monitor and control the implementation of the projects,

- To ensure that the projects within the scope of Environmental Impact Assessment are monitored and inspected before application, before construction, during construction, during operation and after operation,

- During the preparation, construction and operation of a planned project or after the operation, the environmental elements should be revealed directly or indirectly, in the short or long term, temporarily or permanently, in a positive or negative way.

Also;

- EIA Regulation Article: 6/(3) (Amended: OJ-26/5 / 2017-30077) Unless the decision of "Environmental Impact Assessment Positive" or "Environmental Impact Assessment Not Required" decision is taken for projects subject to this Regulation, incentives for these projects, approval, permit, building and usage license cannot be given, investment cannot be initiated for the project or tendered. However, this does not prevent the application for such incentive, approval, permit and license processes. "

As it can be understood from the implementation phases of the project in question, it was tendered before the necessary conditions in Article 6 were fulfilled, and the implementation phase was started regarding the project.

Lake Salda and its surroundings are unique in the world, a sensitive ecosystem and Sensitive Region. It also includes many legislations stated in the lists under the heading of "Appendix-5 Sensitive Areas" of the EIA Regulation dated 25.11.2014 and numbered 29186. A comprehensive EIA study should be carried out by taking these issues into consideration for the project to be made.

The National Garden Project, prepared by the Ministry of Environment and Urbanization on 30.05.2019 by the Ministry of Environment and Urbanization, but has lost its validity, has been prepared in accordance with the 1/1.000 scaled Conservation Implementation Plan and Plan Provisions, and the Reconstruction Plans approved by the Ministry on 30.05.2019 has become legally invalid since it is in effect.

In this case, the tender for the National Garden should be canceled at the thesis time.

## **8.8. Relevant National and International Conventions within the Scope of National Garden Project**

The planned Lake Salda and its surrounding natural and cultural assets, have been preserved until today by National Laws, regulations and International Conventions.

These are as follows in the order of date:

**1971** - Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat

**1971** - Paris World Convention on the Protection of Cultural and Natural Heritage

**1972** - Stockholm UN Human and Environment Conference Declaration

**1973** - Washington (CITES) Convention on International Trade in Endangered Wild Plant and Animal Species

**1976** - Barcelona Convention on the Protection of the Marine Environment and Coastal Zone of the Mediterranean

**1979** - Bern Convention on the Conservation of Europe's Wildlife and Habitat

**1985** - Granada Convention on the Protection of the European Architectural Heritage

**1989** - Basel Convention on the Control of Transboundary Transport and Disposal of Hazardous Wastes

**1992** - Valetta Convention on the Protection of the European Archaeological Heritage

**1992** - Rio Convention on Biological Diversity

**1992** - Rio United Nations Framework Convention on Climate Change

**1992** - Rio UN Forestry Principles

**1994** - Paris United Nations Convention to Combat Severe Drought and / or Desertification, Especially in Africa

**1997** - Kyoto United Nations Framework Convention on Climate Change - Kyoto Protocol

**1998** - Aarhus Convention on Access to Information on Environmental Issues, Public Participation in Decision Making and Appeal to the Judiciary

**2000** - Florence European Landscape Convention

**2009** - Cartagena Biosafety Protocol

**2012** - Rio Rio + 20 UN Sustainable Development Conference

The essence and content of the National Garden Project is incompatible with the principles of National and International Conservation.

**Necessary legal initiatives should be initiated immediately to take Lake Salda into UNESCO World Heritage status.**

## 9. TBMM AGENDA AND LAKE SALDA

The construction of Lake Salda as a National Garden has also been brought to the agenda of the Turkish Grand National Assembly.

Apart from the speeches in the General Assembly, the Parliamentary Research Proposal and Written Questions and the responses given are attached to the contents of the motions in Tables 13 and 14.

Table 15. Parliamentary Research Proposals

<b>The Text of the Parliamentary Research Proposal</b>	
<b>Term and Legislative Year</b>	27/2
<b>Base Number</b>	10/1304
<b>Arrival Date to Presidency</b>	27/05/2019
<b>Summary of the Proposal</b>	Proposal in relation to a parliamentary investigation by Burdur Deputy Mehmet Göker and 21 deputies in order to determine the measures that can be taken to prevent the pollution that may occur in case of establishment of a National Garden in Lake Salda.
<b>Assembly Where It Is Read</b>	
<b>Final Status of the Proposal</b>	On the agenda
<b>Proposal Owner</b>	Burdur Deputy Mehmet GÖKER and 21 Deputies

Source: <https://www2.tbmm.gov.tr/d27/10/10-480027gen.pdf>, Accessed on :19.06.2020

Table 16. Written Parliamentary Proposals

Term and Year	Basis Number	Arrival Date to Presidency	Summary of the Proposal	Final status
27/3	7 / 26923	18/03/2020	Regarding the allegations that the National Garden will be built in <b>Lake Salda</b>	ANSWERED AFTER THE TIME HAS EXPIRED
27/2	7 / 17094	02/08/2019	relating to the tender for the construction of the National Garden while the suspension process of the <b>Lake Salda</b> Special Environmental Protection Area environmental scheme and development plans continues,	ANSWERED AFTER THE TIME HAS EXPIRED
27/2	7/9436	22/02/2019	Regarding the President's statements that <b>Lake Salda</b> will be declared as an environmental protection zone	ANSWERED AFTER THE TIME HAS EXPIRED

Source: [https://www.tbmm.gov.tr/develop/owa/yazili\\_sozlu\\_soru\\_sd.sorgu\\_yonlendirme](https://www.tbmm.gov.tr/develop/owa/yazili_sozlu_soru_sd.sorgu_yonlendirme),

Date of access 19.06.2020

It is necessary to open a Parliamentary Survey without delay in order to determine the measures that can be taken to prevent the pollution that may occur in case of the establishment of a National Garden in Lake Salda.

## 10. CONCLUSION and SUGGESTIONS

Lake Salda, which is a world heritage to nature and humanity from past to future, is one of the most special and important natural areas of our world and our country in terms of its geological formation and interaction with living things.

Lake Salda, located in Yeşilova district of Burdur province, is in danger of extinction due to various natural or artificial threats from past to present.

Having a special location in a closed basin, the lake is in integrity with its surroundings and needs to be protected with its surrounding area of interaction.

As of 2019, the lake has recently been brought to the agenda with a tight calendar and the initiatives/impositions that will cause the lake to disappear by opening the environment of the lake to construction with the plan changes that force the law by disabling local governments and the forced national garden project. During the period when the legal process is ongoing, in order to prevent Lake Salda from being sacrificed to unearned income and passion for earning profit through plans oriented towards construction but not protection, emergency tenders and site deliveries, by turning the COVID-19 process into an opportunity, we as TMMOB have prepared our report containing the determinations and recommendations as follows:

The danger of drying of Lake Salda due to natural and artificial factors should not be allowed.

Lake Salda was formed about 2 million years ago by the collection of waters coming from the environment and surface waters. Continuous rivers such as Salda (Karakova) Creek, Doğanbaba Creek, Dog Creek, and seasonal rivers such as Koyu Creek, Kuruçay, Kayadibi Creek pour into Lake Salda. Constructing ponds that prevent water flow to the streams feeding this closed lake, although some of them are stopped by judicial decision, will seriously affect the destruction of the lake. In addition, the withdrawal of groundwater and irrigated agriculture affect the water level in the lake.

Lake Salda is at risk of drought. The area and water level of the lake, which is fed by rivers, precipitation falling on the surface and groundwater and lost water by evaporation, changes over the years according to the rainfall, which is the main factor. The withdrawal, reaching 3-4 meters at the lake level for the last 20 years, still continues.

In addition to the analysis of meteorological data, according to the “Burdur Basin Drought Management Plan” published by the General Directorate of Water Management of the Ministry of Agriculture and Forestry in 2018, the lake and its surroundings are among the areas with the highest probability of being extremely dry.

Lake Salda should not be polluted and destroyed by mining activities and quarries.

Salda Lake faces the threat of contamination with mining activities and quarries. Problems in this regard are tried to be prevented by scientific reports and lawsuits.

It is stated that mines cannot be opened only in the "plan notes" for Lake Salda and its surrounding mines, which are not seen in the current Plan but known to exist but whose contract terms are unknown, and the license terms of existing mines cannot be extended. However, mining activities should not be allowed and permissions should be revoked.

Necessary interventions to protect nature and the lake should be made urgently by re-evaluating the mines and quarry licenses issued by the public administration.

Considering the fact that Lake Salda and its shores are huntite mineral deposits and the lake and its surroundings are covered with mining licenses, mining activities in the region should be evaluated within the scope of the "huntite" mine. Huntite is a calcium magnesium carbonate mineral and is included in the dolomite group under the carbonates class. The most important usage area of Huntite ore is its use as flame retardant filling material due to its CO<sub>2</sub> content when it is heated. In addition, it is used as a special binder and adhesive in paints, as a filling hardener in special tires and as a coating material in the paper industry. A private company was established in 1995 for the production of huntite - hydromagnesite mine in Denizli in our country, and Lake Salda is also in the area of interest of this company. Magnesium, sodium and calcium bicarbonates, which are present in high amounts in the lake water, precipitate, hydro-magnesite and huntite minerals gradually lose water. On 14 April 2020, the contractor company, which won the tender within the scope of the National Garden project, started excavation and transportation activities on the white beach with construction equipment and these works were stopped due to the public reaction. It should be carefully evaluated in terms of mining activities that the material that looks like white sand being transported is not sand, but the Huntite mineral is hydromagnesite. With the mineral exploration and operation licenses covering the lake and its surroundings, the operation of these mines should not be allowed.

The protection statuses should be changed and the new statuses that facilitate the construction in Lake Salda should be returned to absolute protection status.

Below is the conservation status of Lake Salda, on which the National Garden project is planned to be implemented by changing its protection status in 2019.

- 1989** First Degree Natural Site
- 1992** Second Degree Natural Site
- 2006** Tourism center
- 2008** Wetland
- 2011** Nature Park
- 2019** Declared as Special Environmental Protection Area
- 2019** Tourism Center status abolished

Lake Salda was founded on the 1<sup>st</sup> of 14 June 1989 with the decision of the Abrogated İzmir Numbered Cultural and Natural Heritage Conservation Board numbered 786. Degree Natural Site Area and the abolished Antalya Cultural and Natural Assets with the decision of the Regional Protection Board dated 28.07.1992 and numbered 1501<sup>st</sup> Degree Natural Site Area, in summary, has gained the status of NATURAL SITE AREA.

Lake Salda has the status of NATURAL PARK within the scope of the Long Term Development Plan (UDGP), whose approval date is 22.08.2017 by the Ministry of Agriculture and Forestry.

While Lake Salda was in the status of TOURISM CENTER with the decision of the Council of Ministers numbered 2006/11033, this status was abolished in 2019 with the Presidential Decree numbered 1532.

Lake Salda was determined and declared as a SPECIAL ENVIRONMENTAL PROTECTION ZONE with the Presidential Decree No. 824 dated 14.03.2019 with an area of 295.63 km<sup>2</sup>, and this decision was published in the Official Gazette dated 15.03.2019 and numbered 30715.

Some examples of areas that have been declared a Special Environmental Protection Area (SEPA) but cannot be protected are as follows:

- Muğla Province, Datça - Bozburun Special Environmental Protection Area 1/25000 Scale Land Use Plan Revision's Urban Planning Principles and Violation of Public Interest, 2004
- The reality of pollution caused by the discharge of waste water of the surrounding urban settlements to the lake together with industrial and domestic pollution in the Tuz Gölü Special Environmental Protection Area
- Problems created by intense and illegal activities in Uzungöl Special Environmental Protection Area
- In the Gulf of Saros, which was declared as OCK in 2010, in the Thrace Region Plan approved in 2011, the processing of coal-fired thermal power plants that will affect the bay, the pipeline by BOTAŞ and the establishment of a ship pier, and the urgent expropriation decision for this

- The complaint file accusing the International Mediterranean Sea Turtle Conservation Union (MEDASSET) of violating international conventions is still pending at the Permanent Board of the Bern Convention due to the summer villas whose construction was approved in 2012 in the Patara Special Environmental Protection Area
- The development plan changes in the process of permitting the Presidential Summer Palace in Marmaris Okluk Bay in the Gökova Special Environmental Protection Area
- The development plans prepared for the construction of 12 turbines in the Karaburun Special Environmental Protection Area were approved and suspended by the Ministry of Environment and Urbanization, which took the plan authority instead of İzmir Metropolitan Municipality, 2019

The protection statuses should be changed and the new statuses that facilitate the construction in Lake Salda should be returned to absolute protection status.

The unique flora and fauna of Lake Salda and its immediate surroundings must be protected.

The unique flora and fauna of Lake Salda and its immediate surroundings must be protected. It is an internationally important wetland that meets the criteria for Important Plant Area (IPA), Important Biodiversity Area (KBA) and Important Bird Area (IBA) with the endemic species it hosts.

There are 301 aquatic and terrestrial plant species belonging to 61 families in the area. The shores of the lake, which has a very sensitive vegetation, contain 9 different endemic and endangered plant species on a global scale. *Verbascum dudleyanum* (Salda Marsh Bovine Tail, Figure 14 [a]) and *Verbascum flabellifolium* (Figure 14 [b]) are important endemic species.

According to Burdur Province Environmental Status Report 2018, some of the threats and threatened species are as follows:

- *Hesperis pendula* subsp. *Dirmilensis*: In addition, unplanned structuring and road widening activities pose a threat for the taxa that spread around Lake Salda and its surroundings.
- *Ebenus pisidica* Huber-Mor. & Reese (*Dirmil morgeveni*): It is likely to be damaged by the tourist facilities and visitors around Lake Salda.

- *Ekimia bornmuelleri* (Hub.-Mor. & Reese): It is likely to be damaged by tourist facilities, road extensions and visitors around Lake Salda.
- *Verbascum trapifolium* (Stapf) Hub.-Mor. var. *Trapifolium*: It is likely to be damaged by the tourist facilities and visitors around Lake Salda.

4 fish, 1 reptile and 1 amphibian species live in the lake. Salda algae (*Aphanius splendens*), one of the fish species, is an endemic species that only lives in Lake Salda in the world. Grass fish (*Pseudophoxinus cf. ninae*) living in the lake, endemic to Burdur, is another important fish species.

In the Lower Basin of Lake Salda, 110 bird species have been identified, 62 of which are songbirds, 38 are waterfowl, 9 are daytime and 1 are night predators (Ministry of Forestry, 2013). 75 of these species are under protection under the "Bern Convention". Considering the danger status of the species observed in the sub-basin, the common tail (*Oxyura leucocephala*) is classified as endangered (EN).

It is the white rocks of bacterial origin that gave the water its blue color and started to form in the archaic period called Stromatolite, which forms the lake floor and still continues to form. Based on the facts that living processes such as live thread algae, cyanobacteria, heterotrophic bacteria, hydromagnesite deposition, organominerals, stromatolites, huntite formations being also found in Lake Salda outside 6 places in the world, and the absolute protection of a natural wonder ecosystem that contains such a valuable geological heritage, together with its environment, it should not be polluted and no facilities should be built on its coasts.

For these reasons, the unique flora and fauna of Lake Salda and its immediate surroundings must be protected.

Lake Salda Wetland must be protected within the scope of national legislation and international conventions.

Lake Salda has the status of WATER AREA with an area of 4,370 hectares in the Ministry of Agriculture and Forestry study area.

"Development Plans for Protection of Lake Salda and its Environment" have been made with an understanding that is not related to the purpose of the "Ramsar Convention" included in the Land Use Plan Decisions and Implementation Provisions.

Lake Salda is also the "Wetland Absolute Protection Area", and

it should also be taken under protection in accordance with the provisions of the Environmental Law No. 2872. In Article 2 of the Law, the purpose of which is "to ensure the protection of the environment, which is the common asset of all living things, in line with the principles of sustainable environment and sustainable development"; Wetland is defined as "Natural or artificial, continuous or temporary, with calm or flowing waters, sweet, bitter or salty, covering depths not exceeding six meters in the withdrawal phase of the tidal movements of the seas, and all waters that are important as the habitat of living creatures, especially waterfowl, marshes, reeds and turbines, from the shore edge line of these areas towards the land side in terms of ecological wetland areas", Natural Asset is defined as "all plants, animals, microorganisms and their habitats", Environmental Pollution is defined as "the health, environmental values and ecological values of living creatures occurring in the environment all kinds of negative effects that could distort the balance".

In Article 6.6 of the provisions of the Antalya–Burdur–Isparta Planning Region 1/100.000 scaled Land Use Plan prepared by the same Plan Author, it is stated as follows: "a decision could not be given for construction that could threaten sensitive areas, forest areas, agricultural areas, wetlands, sand dunes etc."

It is a necessity to evaluate Lake Salda and its surroundings within the scope of the EIA Regulation in case of opening to construction. If the legislation is open to different interpretations on this subject, a new protective regulation should be made in the legislation.

While both the National Garden Architectural Project, which was prepared without the EIA report, and the 1/1.000 scale Conservation Implementation Plan for Lake Salda and its Environment, should be made in order to protect the natural features and beauties of Lake Salda and its surroundings, it was as if it was prepared to finish Lake Salda and its surroundings. The human density brought about by the construction and construction, which will be formed by the decisions of the development plans and urban design plans, will upset the ecosystem around Lake Salda, which is of international importance as the "Waterfowl Habitat", and will cause the disappearance of white beaches.

If we want to protect the lake, it is a necessity to remove the "Units such as Showers, Dressing Cabins", which will definitely cause environmental pollution, from the units to be built in articles 2.9.4.1 and 2.9.4.2, where the construction conditions in the Urban Design Areas of the General Provisions of the Plan are determined, strictly preventing from entering into the lake, reducing the density of the building, and, in accordance with the provisions of the Coastal Law and the Regulation on the Implementation of the Coastal Law and at the same time in order to protect the White beach, which is a rare natural site in the world, no construction should be allowed on the "Shore of the Lake" and "The First 50 Meters of the Coastline".

This situation in the plans is against the essence of the Law No. 2863 on the Protection of Cultural and Natural Heritage, and is not compatible with the principles of National and International Protection.

Lake Salda should not be destroyed by the pressure of tourism and the "national garden" project.

Lake Salda faces the pressure of tourism and the threat of construction with the "National Garden Project". Within the scope of the National Garden, the protection status of Lake Salda was changed with the latest regulations, and it was tried to provide ease of construction on the lake shore.

Within the boundaries of Salda neighborhood, the area where the white islands are located passes through the Wetland Absolute Protection Boundary Urban Design Area-2 area. The public garden project allows construction in this area.

Below are the Lake Salda and its Vicinity Protection Purpose Plans, many of which belong to the Lake Salda Specially Protected Area.

- 1/100000 scale Antalya – Burdur – Isparta Land Use Plan (2014)
- 1/25000 scale Burdur Yeşilova Lake Salda TM Land Use Plan (1995)
- 1/25.000 scale Burdur Lake Salda Land Use Plan Revision (1995)
- 1/25000 scale Land Use Plan (2019)
- 1/5000 scaled Conservation Master Development Plan (2019)
- 1/1000 scale Conservation Implementation Development Plan (2019)

Regarding illegal construction; in the opinion taken from the Provincial Directorate of Environment and Urbanization of Burdur Governorship, dated 05.04.2018 and numbered 65271673-252.99-E.1516, the structures remaining in the 1<sup>st</sup> Degree Natural Site within the borders of the planning area were determined and related processes were experienced with their demolition. For the buildings where the island and parcels are specified, there are decisions of the Ministry of Environment and Urbanization, Antalya Regional Commission for the Protection of Natural Heritage. It is stated in the decision texts that the buildings should be licensed or demolished. The municipality applied to stop the demolition decisions of the building owners who were punished with fines in the decisions of the council.

However, Article 4 in the annex of the Lake Salda SEPA decision of 2019 creates legitimacy for the constructions that have been and are still being built.

The Tender decision dated 31.07.2019 for Lake Salda's "Nation's Garden and National Garden with Social Equipment and Infrastructure and Landscaping" was brought to the judiciary because it would lead to new constructions. However, the construction works started without waiting for the judicial process initiated by the local residents, Lake Salda Protection Association and our Chambers. With its Press Release titled "Lake Salda National Garden Tender Process Should Immediately Stop." Ankara Bar Association stated: "Do Not Act Against Public Financial Management and Control Law No. 5018 and Cause Public Loss" and filed a criminal complaint with the following reasons.

- Article 6 of the "Regulation on Plans to be Made in Protected Areas" stated: No tender could be made before long-term development plans are prepared...
- Article 35 of the Environmental Impact Assessment Regulation Annex-2 List states: the requirement to operate the EIA process for "Theme parks, (facilities established on an area of 50,000 m2 and above, providing monitoring, entertainment and information services to customers based on any theme such as science, culture, nature or sports"
- Environmental Law, Article 10 states: Unless "Environmental Impact Assessment Positive Decision" or "Environmental Impact Assessment Not Required" Decision is taken, no approval, permit, incentive, building and usage license can be issued for these projects; the investment for the project cannot be initiated and it cannot be tendered...
- According to the Public Procurement Law, the Environmental Impact Assessment (EIA) report had to be taken before the National Garden tender, but at the end of the tender, it was decided that 'EIA is not required' ...

In summary; in Lake Salda “1<sup>st</sup> and 2<sup>nd</sup> degree protected areas” and “a part of the wetland” are opened for use, and the right to speak and plan for the elected local administrations, is removed through authorities taken back to Ankara. Construction decisions for the Nation's Garden and tourism purposes and tenders for the construction of the National Garden and applications for unearned income purposes are against the public interest and benefit.

Our recommendations for protecting Lake Salda against all threats are as follows.

The lake in the closed basin, which is formed by nature's own borders, not by human hands, is directly affected by the activities in the region between the mountains that form the basin boundaries and the lake. The protection of Lake Salda should be handled with a holistic approach.

Lack of basic ecological knowledge and populist approaches in recreational uses are the main reasons why social support and protective use cannot be provided. The basic approach in the management of sensitive areas such as Lake Salda is the blending of national environmental policies, the principles of use of internationally protected areas and the traditional approach to be better protected and carried into the future. For this, it is absolutely necessary to protect the structure and biodiversity of the natural area and to be available to all living things in harmony.

If we want to promote and protect Lake Salda, it is necessary to invest in settlements around the Lake and improve their economies. While construction can be made for all functions including accommodation in rural development areas, the National Garden project should not be insisted on the shore of Lake Salda, the project should be canceled.

Since irreparable conditions could arise with the implementation of the National Garden Project and the 1/1.000 scaled Conservation Development Plan, which is obviously prepared for a number of interests, these projects will be abandoned as soon as possible and projects aimed at protecting Lake Salda are should be implemented.

In the environment where the deficiencies in the sustainable natural resource use and management of Lake Salda cause gradual deterioration of the lake's ecosystem as well as loss of habitat and biodiversity, environmental problems in festivals or similar activities should not be considered as "garbage and household waste" only. Controlled festivals should be able to be held outside the protection boundaries regarding the promotion and importance of Lake Salda. As an example of "nature tourism in protected areas" approaches where sustainability principles are prioritized in protected areas around the world; The Galapagos Islands in the Pacific Ocean, the Kevo Absolute Reserve in Finland, the Grand Canyon National Park in the USA, are known to use management tools such as restriction of use in terms of spatial, temporal and number of people, strict rules and development. Similar protective methods and tools should be used in Lake Salda.

Lake Salda and its surroundings should only be toured, picnics should be prohibited, the lake and its surroundings should be surrounded by a protection band, the white beaches on the shore of Lake Salda, which is a unique place for hiking, should not be stepped on with shoes, and passenger cars should be parked at points far from the lake. Informative signs and boards should be placed introducing the plant and animal genetic resources and endemic species of the lake. Education and promotion activities should be carried out on eco-tourism, nature tourism in protected areas.

As a result;

Development Plans and changes in all scales covering Lake Salda and its immediate surroundings should be revised and the plans should be changed to include protective provisions.

The National Garden Project should be evaluated with all its environmental impacts within the scope of the EIA Regulation.

The tender for the construction of the National Garden should be canceled and the construction and landscaping work should be stopped immediately in order to prevent damages that cannot be recovered with the actual works that started.

It should be kept in mind that nature does not belong to us, that we borrow nature from future generations, and Lake Salda should not be allowed to disappear with projects aimed at profit.

**NECESSARY LEGAL INTERVENTIONS SHOULD BE STARTED  
IMMEDIATELY TO MAKE LAKE SALDA UNESCO WORLD  
HERITAGE.**

**WE WILL PROTECT LAKE SALDA FROM UNLIMITED HUMAN  
THRILLS WITHOUT COMPROMISE.**

**LET'S PROTECT LAKE SALDA FROM IMPACTING DEVELOPMENT  
PLANS. LET'S PROTECT LAKE SALDA.**

## **ANNEXES:**



**TMMOB Statement, 28 October 2019 \*****"LAKE SALDA WORKSHOP AND FORUM" EVENT WAS HELD.**

"Lake Salda Workshop and Forum" was held in Yeşilova Municipality Wedding Hall, in Yeşilova district of Burdur province, on Saturday, October 26, 2019 by the "Don't Touch My Lake Platform". TMMOB Executive Board Member Baki Remzi Suiçmez attended the event and shared his views.

After the opening speeches of Yeşilova Mayor Mümtaz Şenel, Burdur CHP Deputy Mehmet Göker and Gazi Osman Şakar on behalf of the Platform, technical presentations were made in the event, which was held with an intense participation.

Following the presentations of Forest Master Engineer Prof. Dr. Doğan Kantarcı, TMMOB Board Member Baki Remzi Suiçmez, Architect Birsen Tanyeri and Att. Mustafa Şahin, a Forum was held, moderated by Hasan Yüksel, where the people of Yeşilovalı and the nature volunteers and life advocates from Antalya, Denizli, Uşak, İzmir and the surrounding provinces and districts expressed their views to support them.

Our Board Member Baki Remzi Suiçmez gave examples of the struggles of TMMOB against the attempts against the environment and nature plundering throughout the country, and shared our Association's views on the protection of Lake Salda. In summary; he stated that the Lake is faced with three main threats; that it faces the risk of drought, drying out, pollution by mining activities and quarries, pressure from tourism, and the threat of construction with the National Garden Project; 1st and 2nd degree site areas will be opened for use without considering the balance of conservation and use, elected local governments do not have the right to speak and plan in the region, that all authority is left to the Ministry of Environment and Urbanization, which is composed of those who have been appointed, and he emphasized that the obstacles in front of "Urban Design Area 1-2" and "Special Project Area" and "National Garden" are wanted to be overcome quickly from Ankara; adding that it should be known that we, as TMMOB, will fulfill whatever is our duty in order for Lake Salda to live in its natural state.

\*<http://www.tmmob.org.tr/icerik/salda-golu-calistayi-ve-forum-etkinliginde-tmmob-goruslerini-paylastik>, Accessed on 10.06.2020

**TMMOB Statement, 6 December 2019\*****TMMOB LAKE SALDA REPORT COMMISSION COMPLETED ITS TECHNICAL EXAMINATIONS**

The technical delegation formed from the TMMOB Lake Salda Report Commission completed the technical examinations on the development plan change planned to be made in Lake Salda and its surroundings in Yeşilova District of Burdur Province on 4-5 December 2019 and the national garden project planned to be built on the lake.

The team comprising TMMOB Lake Salda Report Commission members Baki Remzi Suiçmez (TMMOB Board Member), Dersim Gül (TMMOB Secretary General), Eren Şahiner (TMMOB Technical Officer), Atakan Yüklü (JFMO), Servet Cevni (JMO), Mehmet Soğancı (MMO), Haydar Şahin (MMO), Müzeyyen Gülşen Can (MO), Reyhan Erdoğan (Landscape MO), Caner Aksakal (ZMO) carried out technical studies in Yeşilova District and around Lake Salda upon the request of the Lake Salda Touching Platform Association and the local people.

After the current situation assessment meeting held by the technical delegation; Association Representatives exchanged ideas with residents of Yeşilova and surrounding villages. The development plan change desired to be made in Göle and the evaluations regarding the public garden project were shared with the local people.

Following the meetings, TMMOB Technical Delegation met with the Mayor of Yeşilova Mümtaz Şenel and then with Yeşilova District Governor Abdulhamit Karaca and exchanged ideas. During the meetings, technical evaluations about the project and its scope area were shared.

Following the meetings, TMMOB Technical Delegation held technical examinations and meetings with surrounding villages for two days in and around Lake Salda. In the villages around Lake Salda, ideas were exchanged on the needs, expectations and evaluations of the villagers with the meetings held at the village cafes.

After the technical examinations, the Technical Committee started its studies to start the report writing process.

\*<http://www.tmmob.org.tr/icerik/tmmob-salda-golu-raporu-komisyonu-teknik-incelemelerini-tamamladi>, Accessed on 10.06.2020

**TMMOB Press Statement, 15 December 2019\*****TMMOB SENT A SUPPORT MESSAGE TO THE ACTION IN LAKE SALDA**

*TMMOB Chairman of the Board Emin Koramaz sent a support message to the action held by the "Don't Touch My Lake Platform" on 15 December 2019 against the National Garden project and the opening of the lake for development in Lake Salda.*

**To the Lake Salda Touch Platform Association**

As the Union of Chambers of Turkish Engineers and Architects, we stand by the struggle of the people of Yesilova, who protect their land, water, nature and living space.

Lake Salda is one of the most special and important natural areas of our world and our country in terms of its geological formation and interaction with living things.

The lake is in integrity with its surroundings and needs to be protected with its surrounding area of interaction.

The plan changes and the nation's garden project brought to the agenda regarding the lake are the initiatives that will cause the lake to disappear by opening the surrounding area to construction.

TMMOB filed a lawsuit against these missteps and started to work on preparing the Lake Salda Report.

We all have a responsibility not to sacrifice Lake Salda to profits and greed.

We believe that we can save Lake Salda if we give it shoulder to shoulder. We are with your righteous struggle, we are next to Lake Salda.

We wish you luck.

**Emin KORAMAZ**  
**Chairman of the Board of TMMOB**

\*<https://www.tmmob.org.tr/icerik/tmmob-salda-golunde-yapilan-eyleme-destek-mesaji-goderdi>, Accessed on 10.06.2020

**TMMOB Press Statement, 4 April 2020\***

*TMMOB Chairman Emin Koramaz made a press release on April 14, 2020 in order to stop the construction activities that were started in Lake Salda due to the National Garden Project and caused the damage to the white beach surrounding the lake.*

**WORK STARTED IN LAKE SALDA SHOULD BE STOPPED IMMEDIATELY**

While the world and our country focused on protection and combat against the coronavirus epidemic, work was started for the construction of the National Garden project by introducing construction equipment to Lake Salda, which was closed to visitors due to the virus epidemic, as of April 13.

Those who turn the coronavirus epidemic into an opportunity, those who have their eyes on profiteering and profit are dragging Lake Salda to the brink of extinction.

The work machines that entered the area of the lake that should be absolutely protected, dug the white dunes and moved them to other regions. The excavated and transported white sand dunes are rare formations that will have to be preserved without even stepping on, with examples found only in a few places in the world. Working with construction equipment is an attack on Lake Salda. The images that emerge make everyone's conscience aching.

Lake Salda is one of the most special and important natural areas of our world and our country in terms of its geological formation and interaction with living things.

The lake, which needs to be protected, was opened for construction under the name of the national garden project and was brought to the brink of extinction if the project was implemented.

TMMOB and the local people filed a lawsuit about the project and the related plan change and the judicial process continues. TMMOB also continues the preparations for the Lake Salda Report. When the report is completed, it will be shared with the public and the subject of the case will be presented to the court.

Lake Salda is in integrity with its surroundings and needs to be protected with its surrounding area of interaction.

The work started with construction machines in Lake Salda by turning the coronavirus epidemic into an opportunity should be stopped immediately.

**Emin KORAMAZ**

**Chairman of the Board of TMMOB**

\*<http://www.tmmob.org.tr/icerik/salda-golunde-baslatilan-calisma-acilen-durdurulmalidir>, Accessed on 10.06.2020

**Press Statement of TMMOB Chamber of Architects Antalya  
Branch, 29 July 2019 \***

**LAKE SALDA SHOULD BE TRANSFERRED TO FUTURE  
GENERATIONS**

**FINDINGS AND PROBLEMS:**

The Minister of Environment and Urban Planning, Mr. Murat KURUM, stated that a National Garden, which can be used 24 hours, will be built that will make it possible to hold a festival in Lake Salda, which was declared "Lake Salda Nature Park" in 2011 by the Abolished Ministry of Agriculture and Forestry and for which the "Long Term Development Plan" was approved on 22.08.2017.

The Lake Salda and its surroundings, which are declared a natural protected area, are of great importance as one of the natural values of our country that should be protected with its sensitive ecosystems and habitats. There are many threats in terms of protection due to the various usage demands developed in this field in recent years. In this context, the problems caused by the explanation mentioned above are summarized below:

The objectives in the aforementioned statement are in contradiction with the officially recognized natural features of Lake Salda, which are worth protecting.

It is indicated on the website of the Ministry of Forestry and Water Affairs VI. Regional Directorate where information about the flora and fauna of the Lake Salda Nature Park

(<http://bolge6.ormansu.gov.tr/6bolge/AnaSayfa/tabiatparklari/saldagolutabiatparki.aspx?sflang=tr>)

that Lake Salda, with a depth of 184 m. was the deepest lake of Turkey;

that it is one of the two regions in the world that have clean, oligotrophic features, less salty, high alkaline values, and has surface features of the planet Mars,

that there are 4 fish species belonging to 3 families in the Nature Park, where fish species such as Carp, Grass fish, Salda algae fox, hare and wild boar live 110 bird species spread, 622 of these species are songbirds, 38 were waterfowl, 9 are daytime birds and 1 is night predator,

It is stated that the redbill duck, pochard, flamingo, grey heron are the main bird species.

On the web site of the Ministry of Environment and Urbanization that gives information on Lake Salda Natural Site, it is stated that

(<https://tvk.csb.gov.tr/salda-golu-dogal-sit-alani-haber-231661>)

Lake Salda is one of the lakes located within the boundaries of Burdur Lakes Basin and where the integrity of the ecosystem is best represented,

the area has a rich biological diversity in terms of flora and fauna,

5 of 20 plant species identified in the area are endemic according to Turkey's flora and that 5 are in danger of extinction;

as a result of the studies in the field at different times; a total of 114 vertebrate species including 8 inland fish, 5 amphibians, 27 reptiles, 69 birds, 5 mammals were determined;

69 bird species were observed in the area, 54 of which were local and / or summer migratory birds and 15 were winter migrants,

the intense flow of visitors to which the area has recently been exposed has increased anthropogenic pressure (resulting from human activities), and, in this context, in order to minimize this pressure in the area and to ensure a controlled use for both planning and use of the area, it is stated that on 12.09.2018 under the leadership of the General Directorate a series of visits and meetings were held where the problems and the "Site Management Model and Solution Proposals" were put forward, but there is no information regarding the result.

In case the objectives in the said statement are realized, there will be serious and irreversible negative impacts on Lake Salda.

Physical changes caused by anthropogenic (resulting from human activities) effects on natural areas for social and economic reasons primarily cause deterioration on the natural structure of the area. Today, along with the environmental pollution that occurs due to various reasons, irregular construction, changes in the use of land and improper use of land are rapidly destroying the nature and biological wealth we have.

The construction of the National Garden of Lake Salda Nature Park to serve on 7 days/24 hours basis, which is one of the two places that are rare in the world and has the surface features of the planet Mars, is a project aimed at increasing the number of 500,000 visitors annually. It is inevitable that this situation will increase the "anthropogenic pressure" (the pressure caused by human activities), which the Ministry accepts as negativity on its website.

It is inevitable that the area will be adversely affected by practices that are difficult to control such as increasing the number of visitors for tourism purposes and organizing festivals in protected areas.

Examples of this include wastewater and garbage pollution, natural landscape degradation, noise and light pollution, vehicle wheels and people walking, soil compaction and destruction of vegetation. As a matter of fact, the coasts of Antalya and especially the Lara Kemeragzi Kundu Culture and Tourism Protection and Development Area coastline and roads were occupied by tourism facilities and destroyed by illegal settlements. The same facilities also occupied the sea area, and firstly the piers were built illegally in front of almost every facility, and then these piers were legalized by the Ministry by entering the plans.

Based on current uses and practices, the project, which will be implemented to increase the number of visitors, albeit in good faith, will cause the degradation of the Lake Salda ecosystem, which has developed naturally over thousands of years, and also, due to noise and light pollution, it will cause negative results on other living things, including the bird populations and bird breeding on the shores of the lake.

#### SOLUTION RECOMMENDATIONS:

There are no examples of projects and applications that will add artificiality to natural beauty in developed countries. Tourism is done by marketing the protected natural beauties. This universal principle, which has been proven successful in Lake Salda, should be adopted.

Visitors to the region do not have to stay by the lake. There are ways to meet the accommodation needs of visitors without going to such a practice that would greatly harm the natural balance.

The need for accommodation can be met by organizing caravans or camping areas with tents around Lake Salda. Visitors seeking accommodation alternatives can go to nearby facilities, for example, Yeşilova, which is only 4 km away, and have shower, toilet, electricity, etc. They can be accommodated in bungalow houses, where many needs are met, or in ready-made tents or in tourism-oriented accommodation facilities that can be built by dissolving all kinds of infrastructure in the nearby settlements.

Projects that are prepared and implemented without multi-faceted thinking and without seeking sufficient expert opinion destroy the nature and eco system. In order to prevent these unavoidable negativities, after scientific studies to be carried out with the participation of experts from universities and relevant professional chambers, projects should be prepared for the improvement of the current state of the area, taking into account the balance of protection and use, and the field management plan, which includes inspection mechanisms and heavy sanctions, should be prepared and implemented without compromise.

## CONCLUSION

First of all, the goal of making a National Garden in Lake Salda does not fit the definition and aims of the National Garden.

National Gardens have emerged with the aim of creating breathing spaces by designing breathing spaces, not in areas that are already natural wonders such as Lake Salda, but in dense city centers that are concreted for the sake of unearned income and therefore cannot breathe. Arrangement of the National Garden in Lake Salda will not create a public interest and will cause negative effects on the lake as it will increase the "anthropogenic pressure (resulting from human activities)". In its current state, as there is not enough control, the lake and its surroundings are polluted due to the insensitive attitude of the increasing visitors during summer holidays. It will allow festival arrangements, human-made landscape arrangements and the nation's garden project for construction will increase the instant human density, thus more pollution will occur in the lake and its surroundings. Therefore, the project should be abandoned immediately.

While Lake Salda should be preserved and transferred to future generations; it should not be overlooked that the nation's garden project, where festivals can also be organized, will adversely affect Lake Salda, which is an important natural value, this effect is irreversible, and even this unique natural value of our country will disappear in the process.

It is our responsibility to protect a natural beauty like Lake Salda. In accordance with this social responsibility understanding, projects and applications that will cause the lake to disappear should be abandoned.

Let nature remain "natural".

The opinions and suggestions of the Chamber of Architects Antalya Branch are presented to the public through our valuable press.

## CHAMBER OF ARCHITECTS ANTALYA BRANCH

\*<http://www.antmimod.org.tr/salda-golu-korunarak-gelecek-kusaklara-aktarilmalidir>, Accessed on 16.06.2020

**Press Statement of TMMOB Chamber of Architects Antalya  
Branch, 29 July 2019 \***

**LAKE SALDA RANT CANNOT BE SACRIFICED TO RENT  
WE WARN THE INVESTORS AND RELATED ADMINISTRATIONS TO  
PARTICIPATE IN THE LAKE SALDA TENDER.**

**LAKE SALDA ANNOUNCED AS A SPECIAL ENVIRONMENTAL  
PROTECTION ZONE CANNOT BE SACRIFICED**

On Lake Salda, which is a Site and Special Environmental Area, the Ministry of Environment and Urbanization, TOKI, held a tender for Social Facilities, Infrastructure and Landscaping of the National Garden and National Garden on 31.07.2019, without the implementation of urban design projects and construction projects, without the development plans at any scale becoming finalized, without explaining any reason.

In Lake Salda, the recreation area of the Implementation Plan for Protection Purposed Implementation Plan, which is still not finalized and is suspended, and the precedent for the construction in the areas where the decision of the Special Project area has been made, has been determined as  $E = 0.20$ . Again, in the plan explanation report, it is stated which buildings could be present in the area, namely buildings and facilities such as sealed cesspit toilets, showers, changing cabins, kiosks, sales units, cafes, sitting areas, prayer rooms, administrative units, camping areas, caravan areas, bungalows, kitchens, dishwashers, cafes-bars, patisseries, restaurants, teahouses, access control units, hand Arts products exhibition and sales units, picnic tables with / without roof and parking areas could be present.

Again it is stated in the Plan Report that: “All kinds of constructions to be proposed in these areas will be projected in the necessary details and scales in accordance with the cross-section, appearance perspective and three-dimensional studies, taking into account the character of the region.

The tender was held before the urban design projects and application projects were prepared for the area. The area for the tender is 140.496 m<sup>2</sup>. a closed area of 28100 m<sup>2</sup> can be built on the area with an equivalent of  $E=0.20$ , excluding open space arrangements, which is a very dense construction for this area declared as a Special Environmental Protection Area.

Due to this dense construction and therefore the density of people who will use this place; the ecosystem, flora and fauna around Lake Salda, which has international importance as a Waterfowl Habitat, will be greatly damaged.

On the other hand, in relation to the development plans based on the construction tender;

1-As part of reasons for the declaration of Special Environmental Protection Area by the Ministry under the title of General Features; it is stated that Lake Salda is an area with a unique and impressive appearance with its naturalness, visuality and biodiversity features, the clear and turquoise water makes the area unique in terms of scenery.

Under the title of Environmental Protection Area, it is stated: "Lake Salda has the appropriate living conditions that have been able to preserve the integrity of sociocultural life, and meet the vital needs of the landscapes, endemic and endangered species such as shelter, nutrition and reproduction. Since the area is a wetland, it is an area with high biological diversity. In this context, there are 301 aquatic and terrestrial plant species belonging to 61 families and 20 species in terms of danger class and endemism among these species.

It is an area of international and national importance that hosts critical species under protection by the International Union for Conservation of Nature (IUCN) with geological and chemical features and the endemic species it hosts, meeting the Critical Biodiversity Area and Important Bird Area criteria. Studies conducted in the region show that Lake Salda is one of the two regions in the world, which bear the surface features of the planet Mars (magnesium-loaded white rocks).

There are habitats such as wetland, stream, dune, coniferous forest, woodland, mountain steppe, rocky and agriculture in Lake Salda and its surroundings. The coniferous forest habitats around Lake Salda are all around the lake except for the eastern part and consists of red pine, larch and tall junipers, pure and mixed forests and sparse forests in some places. The lake is the deepest lake in Turkey. It also hosts a significant number of populations of some waterfowl species at certain times.

Lake Salda is a very clean, oligotrophic, low-salt and high alkalinity lake, which is a determining factor in the biological diversity and productivity of the lake, and the ecosystem balance is still intact. The fact that it is a geologically closed *basin* has determined the ecological characteristics of the lake to a great extent. Although this feature limits the species diversity and usage possibilities of the lake; it also shows the feature of a shield that protects the lake from invading and alien species.

When land and lake area are evaluated together; it is a very important area in terms of its natural, historical and cultural values."

Based on the current uses and applications, structures to be built in the area and excessive use load, the Plan for increasing the number of visitors, albeit in good faith, and the infrastructure facilities such as lighting, road, parking lot, etc. will cause environmental pollution, and

in addition, due to noise and light pollution, it will cause negative consequences on bird populations and bird breeding on the shores of the lake and other creatures, will cause irreversible damage to its natural habitat and its natural, historical and cultural values, and an area of this importance will be lost.

2-Opening the area to construction with open-ended construction tender, before the lower-scale conservation and implementation development plans, which are against the upper-scale plan decisions, are suspended and the plans are finalized, the urban design and architectural application projects are prepared for the buildings to be built on the site there is no indispensable and certain necessity for the public benefit and the decision for opening the area for construction and the uncertain use types brought by these decisions will damage the vegetation, forest structure and biological diversity, therefore it is against the law as there is no compliance with planning principles and public interest.

3- Despite the fact that, in Article 6.6 of Antalya-Burdur-Isparta Planning Area 1/ 100.000 Scale Land Use Plan approved by the Ministry of Environment and Urbanization, it is stated: "*No construction decision could be taken that could threaten sensitive areas, forest areas, agricultural areas, wetlands, sand dunes etc.*" Although it said as stated above, the decision of intensive housing against the implementation development plans and the decisions of the Land Use Plan and the decisions to increase the number of users are threatening and intensive. For this reason, lower scale plan decisions regarding the construction are against the upper scale plan.

4-While the Conservation Development Plans should be made in order to protect the natural features and beauties of the planning area, the plan decisions regarding the buildings to be built in the field were made for the purpose of rent, not protection, the tender announcement of the Ministry of Environment and Urbanization, TOKI Presidency related to the nature, type and amount of the work has stated as "Construction of National Garden General Infrastructure Works and Recreation Areas and Social Equipment of the National Garden in an area of 140.496,07 m<sup>2</sup>", and considering the structures that can be done above regarding the area, it is seen that the plans and the tender are clearly oriented towards rent, not protection.

4-First of all, the goal of making a National Garden in Lake Salda does not fit the definition and aims of the National Garden.

National Gardens have emerged with the aim of creating breathing spaces by designing breathing spaces, not in areas that are already natural wonders such as Lake Salda, but in dense city centers that are concreted for the sake of unearned income and therefore cannot breathe.

Arrangement of the National Garden in Lake Salda will not create a public interest and will cause negative effects on the lake as it will increase the "anthropogenic pressure (resulting from human activities)". In its current state, as there is not enough control, the lake and its surroundings are polluted due to the insensitive attitude of the increasing visitors during summer holidays. It will allow festival arrangements, human-made landscape arrangements and the nation's garden project for construction will increase the instant human density, thus more pollution will occur in the lake and its surroundings.

We are making a call to the Ministry of Environment and Urbanization TOKI Presidency through our valuable press;

While Lake Salda should be preserved and transferred to future generations; it should not be overlooked that the nation's garden project, where festivals can also be organized, will adversely affect Lake Salda, which is an important natural value, this effect is irreversible, and even this unique natural value of our country will disappear in the process.

It is our responsibility to protect a natural beauty like Lake Salda. In accordance with this understanding of social responsibility, our call and press statement we made on 11 February 2019 regarding our Determination, Problems and Solution Suggestions were not taken into consideration by the relevant administrations. We repeat our call, such projects and practices that will cause the lake to disappear should be abandoned. It should be abandoned so that nature remains "natural" and can pass on these beauties to future generations. Because these beauties are not inherited from our grandparents, but are entrusted to us by our grandchildren. Trust should not be betrayed by destroying for the sake of rent.

We make a call to the investors who will participate in the tender, as the Chamber of Architects, a lawsuit has been filed with the request for the cancellation of the unearned income project tender that will damage the Lake Salda ecosystem and cause environmental pollution, and we will apply to the judiciary with a request for cancellation after the suspended development plans are suspended. It is our expectation on behalf of our people not to participate in the tender in order not to be victimized in case of cancellation of their plans.

We present it to the information of our people through our valuable press.

### **CHAMBER OF ARCHITECTS ANTALYA BRANCH**

\*<http://www.antmimod.org.tr/salda-golu-ranta-kurban-edilemez-29-07-2019>,  
Accessed on 16.06.2020

**Press Statement of TMMOB Chamber of Architects  
Headquarters, 30 July 2019 \***

**CALL FOR THE PROTECTION OF LAKE SALDA!**

After the Parliament was deactivated and the Decree Laws were published in 2011, the Law on the Protection of Cultural and Natural Property numbered 2863 was amended and the guarantees existing in protection policies were removed. The Presidency of the Special Environmental Protection (SEPA) Institution was closed and its powers were transferred to the General Directorate of Protection of Natural Assets established under the Ministry of Environment and Urbanization.

Subsequently, the Ministry initiated studies on natural protected areas at the country level, protected areas whose Natural Protected Area status does not allow construction has been opened to daily use with its Nature Park status, and tourism-oriented investments with its SEPA status. The boundaries of some protected areas have been narrowed or site decisions have been lifted.

About Lake Salda, one of the unique natural assets of our country, following the instruction of President Recep Tayyip Erdogan on February 18, 2019 stating, "We are declaring Lake Salda as an environmental protection zone, we are creating a 300 thousand square meter National Garden on its shore", steps have been taken to open the region to construction and gradually destroy it.

For this purpose, Lake Salda, which is located in Yeşilova District of Burdur Province and previously had the protection status of a natural protected area and a nature park, a Special Environmental Protection Area was declared with the President's Decree No. 824 dated 14 March 2019.

With the statement in the annex of the decision, "the construction of the buildings that have been licensed in accordance with the approved plans or legislation before the date of the publication of this decision and whose construction is completed at the sub-basement level will continue in accordance with the license and its annexes", the buildings built in the past in the area are legitimized and the construction pressure in the region has been increased.

On 30 May 2019; 1/25000 and 1/5000 Scaled Conservation Master Plan prepared for Salda Special Environmental Protection Area, Burdur Province, Yeşilova District, Lake Salda and its surroundings and 1/1000 Scale Implementation Development Plan for Conservation have been approved by the Ministry of Environment and Urbanization.

In the provisions of Antalya–Burdur–Isparta Planning Region 1/100.000 scaled Land Use Plan prepared by the same Plan Author, it is stated as follows: "a decision could not be given for construction that could threaten sensitive areas, forest areas, agricultural areas, wetlands, sand dunes etc."

Despite that; in the development plans approved by the Ministry, decisions were taken to increase the number of users and intensive construction; in areas designated as recreation area and Special Project area; the way for construction has been opened for toilet, buffet, cafe, sitting area, prayer room, camping area, bungalow, restaurant, sales units and similar facilities and parking areas.

With the tender for the Construction of Social Equipment, Infrastructure and Landscaping Work of the Lake Salda National Garden and the National Garden in Yeşilova District of Burdur Province, a construction of 28.100 square meters has been planned, excluding open space arrangements around Lake Salda, which was announced by the Housing Development Administration (TOKI) without waiting for the finalization of the development plans and to be held on 31 July 2019.

Lake Salda is one of the two regions in the world that bears the characteristics of surface of Mars planet (white rocks loaded with magnesium) which is a shelter, feeding and breeding area of endemic and endangered species with habitats such as wetland, creek, dune, coniferous forest, woodland, mountain steppe, where biological diversity is high. Home to critical species protected by the International Union for Conservation of Nature (IUCN), it is Turkey's deepest lake.

Construction decisions taken in and around the lake will, by increasing anthropogenic (resulting from human activities) pressure, user density and structuring, lead to the deterioration of the ecosystem, environmental pollution, and the noise and light pollution it will create will cause negative consequences on the bird population that breed on the shores of the lake, their offspring and other creatures. Its natural, historical and cultural values will be irreversibly damaged.

Pursuant to international conventions which Turkey is a party and its constitution; the state is responsible from ensuring the protection of natural assets and values and taking the necessary measures for this; and respecting the public interest in benefiting from the sea, lake and river shores and coastlines.

In order to protect Lake Salda and its environment, which is the common heritage of humanity, together with all the values it carries; Development Plans should be changed in line with the opinions and suggestions of relevant experts, scientists and professional organizations, and projects and applications should be stopped by canceling the National Garden Tender.

As the Chamber of Architects; we have filed a lawsuit for the cancellation of the Lake Salda National Garden and Social Equipment Constructions of the National Garden and Infrastructure and Landscaping Work Tender, which was declared in violation of the conservation legislation and opened Lake Salda to construction.

We strongly emphasize that we will follow the legal process and take all kinds of legal and democratic initiatives to protect this unique natural beauty.

In this context, with policies and investment decisions that are not based on a modern, scientific planning; with the idea that they should not take part in the process of destroying the natural environment by systematically transforming it into an income area; we call on our colleagues not to participate in the tender to be held, and all sensitive segments and those responsible to take action to protect Lake Salda and its surroundings.

### **TMMOB CHAMBER OF ARCHITECTS**

\*<http://www.bursamimar.org.tr/2019/08/07/salda-golunun-korunmasi-icin-cagri/>,

**Press Statement, TMMOB Chamber of Landscape  
Architects, 31 July 2019 \***

**LAKE SALDA IS NOT A NATIONAL GARDEN!**

Lake Salda is a slightly salty karstic lake surrounded by hills covered with forests and small alluvial plains, 4 kilometers away from Burdur's Yeşilova district. It is located in the region of lakes. This lake, which has a surface area of approximately 44 kilometers, reaches a depth of 184 meters. It is known as the second deepest lake in our country. It is among the wetlands of international importance due to the ferruginous duck, spoonbill and steep-tail ducks it contains during the winter months. There are black pine forests around. The lake was given the status of a Natural Site in 1989.

Lake Salda, which is also known as the cleanest lake in our country, contains magnesium and sodium elements. The magnesium in the lake ensures that the beach of the lake is also white. This beach is unique in that it resembles the earth on Mars.

The beaches in the southwest and southeast are under pressure due to the intensive use of the lake and its surroundings for reactive purposes. It has also been observed that there are 7 small islands in it, as the water started to recede from the lake. For the last 20 years, the water of the lake has been drawn 3-4 meters. Withdrawal still continues.

The construction of a "National Garden" in Lake Salda, which is an important nature reserve of international importance with its endemic species and which has preserved its characteristics for 2 million years, has come to the fore once again.

**Stop the tender! Protect Lake Salda!**

As TMMOB Chamber of Landscape Architects, we have filed a lawsuit for the suspension and cancellation of the tender for the "Social Equipment Construction Work for National Garden General Infrastructure Works and Recreation Areas and the National Garden" opened by TOKI, which will cause Lake Salda to open to construction, which is not in favor and even against public and society benefit and will cause the lake to be damaged and severely destroyed.

We repeat once again that we will strive decisively to make all natural and historical areas in our country sustainable and transfer them to future generations.

Lake Salda is not a tourist center.

Lake Salda is not a place to be entrusted to TOKI.

Lake Salda is not a place for vegetation or construction. Lake Salda is a place that must be protected!

Lake Salda is a 1<sup>st</sup> Degree Natural Protected Area and one of the rare places in the world. Any construction or planting work to be carried out in the region with the aim of developing tourism will damage 2 million years of natural history, endemic species, wetlands and vast habitat.

**Violations of the law and nature slaughter should be abandoned as soon as possible.**

While the surroundings of Lake Salda are sufficiently occupied, the tender opened by the Ministry of Environment and Urbanization Housing Administration Directorate means that the lake will be destroyed. While the Ayder and Uzungöl samples are indicative of how high the record of TOKI is in the special environmental areas, the tender opened for Lake Salda in violation of the regulations, upper-scale plans and the law shows us how great the danger is.

As TMMOB Chamber of Landscape Architects, we call out and warn the authorities once again. This tender, which means the opening of Lake Salda to construction under the name of "National Garden", should be abandoned immediately. Let Lake Salda be protected as necessary by working together with the relevant Ministry, scientists and trade associations.

**TMMOB Chamber of Landscape Architects  
13<sup>th</sup> Term Board of Directors**

**Press Statement, TMMOB Chamber of City Planners, 6 August 2019 \*****WE WILL CONTINUE TO FIGHT AGAINST INTENSIVE ATTACKS OF THE CAPITAL ON NATURAL AREAS!**

Since capitalism first emerged on the stage of history, its main goal has been the accumulation of capital and ambition for profit, and there have been two areas it exploited to achieve this goal: Nature and Labor.

While capitalism has organized production and consumption processes and enlarged its scale in the historical process, the severity and rate of exploitation has increased in both areas. The exploitation experienced in these two areas during the AKP period, which was the most absolute practitioner of neoliberal policies in our country, has now reached the point of destruction. While desperate for profit, the capital segment has ruthlessly deepened its exploitation of labor and accelerated its attack on natural areas, which it sees as a simple raw material and resource field in the production process.

This situation shows itself most clearly and clearly through the examples reflected to the public. Developments in Lake Salda, Kaz Mountains and Munzur are the most recent examples of this. These rare natural areas of our country are rapidly disappearing under a brutal attack.

**Lake Salda cannot be opened to construction!**

The world famous Lake Salda is a very fragile ecosystem structure due to its being a closed lake basin, and it is a special area with natural protected areas along with the status of Nature Park. Our private dune structures with Turkey's hosting of this area as having the distinction of being the deepest lake in the country is one of the most unique wetlands. Despite all these features and the fragility of this area, which has become popular in recent years and where the visits are concentrated, the desire to open up to construction in order to increase tourism in the area does not mean anything other than providing profit to tourism and construction capital. At this point, it should be clearly stated that the development of tourism is of course a desired situation. However, in an area such as Lake Salda, where the ecosystem structure and landscape are highly fragile, the moves to develop tourism should in no way be oriented towards construction and increase the density of people and buildings. The primary priority should be to protect the natural structure of the area for many years and to resort to any restrictions for this purpose.

However, the news reflected in the public is in the opposite direction. The area has been declared a Special Environmental Protection Area by the Ministry of Environment and Urbanization, and it was announced that a prayer room, parking lot, toilet, shower, buffet, cafe, etc. would be constructed. The justification is that it cannot be preserved as it is.

With its practices over the years, AKP has emptied the content of their protection status and turned them into insidious weapons that will pave the way for structuring. Special Environmental Protection Zones are at the top of these. In the past, Special Environmental Protection Zones were areas managed by the Special Environmental Protection Regional Directorate, which has partial autonomy and operates under the Prime Ministry, today this institution has been closed and Special Environmental Protection Areas have only become a display area in the plans.

The dire consequences achieved today in many regions declared as SEPA are obvious. The long lake was declared as SEPA and today its natural structure has been completely destroyed. Gölbaşı is yet another Special Environmental Protection Area, and today it is an area whose natural feature is degraded, with intense use and construction and environmental arrangements that are not suitable for nature. The painful end that awaits Lake Salda will unfortunately be similar to these examples. The question of how to protect the area, which cannot be protected by the Ministry, in its natural and virgin state, is unanswered.

### **No to mining colonialism in Kazdağları!**

We are experiencing the dire consequences of the destructive policies implemented by the AKP government in another geography to enrich the rich class, including another sector, in Kaz Mountains. Kaz Mountains, which is a region with high archaeological, mythological, cultural and ecological importance, has become an area where certain circles apply mass slaughter for gold mining. A foreign company and its local collaborators did not hesitate to pillage one of the most beautiful geographies of this country just for the sake of mining gold, plunder and destroy its forests. The Justice and Development Party, which does not hesitate to sell our underground wealth as well as aboveground, has allowed the mining industry to plunder every part of our country with the effect of special laws and lobbies.

Kazdağları is a singular example of this attitude reflected in the public. This destructive process has been continuing violently and wildly for many years in our country. Almost all of the regions of Isparta and Burdur Antalya are brutally plundered and riddled with marble mines. Artvin region has been doomed to lose all its natural features and beauties as a result of the improper activities of copper mining.

### **Munzur Mountains cannot be sacrificed to the mine!**

Today, the mining sector in our country does not refrain from attacking any area on our geography with the power provided by the government.

Munzur Mountains, which host one of the most special national parks of our country together with the Kaz Mountains, are under the threat of the mining industry today. The ecological structure, natural landscape and biodiversity hosted by the Munzur Mountains will be irreversibly damaged at the end of this activity.

These attacks, which are carried out recklessly throughout our country, show that the AKP government is unquestionably on the side of the capital, not with the mountain, stone, lake, tree, animal and people of this country. And with the effect of the crisis environment, it does not shy away from all of our underground and aboveground values in order to gain profit to the dire capital segment. The only way to stop this process is to expand the axis of struggle. Because those who exploit our labor are also those who exploit our nature. The process we live in within this framework is not a series of serial murders with an unknown perpetrator.

Those who committed these massacres against our country are known. Those who carried out this massacre were the capital segment that did not hesitate to plunder any value and beauty for the sake of rent, and the AKP government that supported this segment. Defending all the values of our country against these massacres is our only way of salvation, our responsibility to our future, our country and our world. In today's world, where our country and the world are moving rapidly towards an ecological destruction, the only solution is to unite the struggle areas based on labor, city and ecology.

For this purpose, TMMOB Chamber of Urban Planners has been striving to protect all the natural and cultural assets of the country from Kaz Mountains to Munzur, Lake Salda to Hasankeyf, from Eskişehir to Sinop, from Şirince to Amanos. and will continue with determination. It is respectfully announced to the public.

### **TMMOB Chamber of City Planners**

\*<http://www.tmmob.org.tr/icerik/spo-sermayenin-dogal-alanlara-yonelik-yogunlasan-saldirilarina-karsi-mucadeleye-devam>, Accessed on 19.06.2020

**TMMOB Chamber of Architects and Chamber of Landscape Architects  
Antalya Branches Joint Press Statement, 8 October 2019 \*****BURDUR, YEŞİLOVA, LAKE SALDA CONSTRUCTION PLAN FOR  
PROTECTION IS THE DEATH ORDER OF LAKE SALDA.**

Known as Turkey's Maldives with turquoise and white sand, LAKE SALDA, located in Burdur province, Yesilova township, which has a habitat unique natural beauty, was announced as "Lake Salda Nature Park" in 2011 due to its ecosystem and unique beauties. With a depth of 184 m, Lake Salda, Turkey's deepest lake, became a major focus of attention in recent years and has suffered with these features and the influx of visitors.

While Lake Salda is a 1<sup>st</sup> Degree Natural Site Area, due to its popularity in recent years, with the decision of 1/1000 scale Conservation Implementation Development Plan approved on the same date with the 1/25.000 scale and 1/5000 scale Conservation Plan and with the aim of generating more income by attracting a lot of tourists, the area was opened for construction and a tender was held by TOKI on 31.07.2019 for the "Social Facilities and Infrastructure and Landscaping of the National Garden and for the National Garden".

It is indicated by the Antalya Branch of the Chamber of Architects and the Antalya Branch of the Chamber of Landscape Architects;

1- Due to the fact that it is illegal to open the area for construction by open-ended construction tender before the lower-scale conservation and implementation development plans, which are against the upper-scale planning decisions, are suspended and the plans are finalized, before the urban design and architectural application projects are prepared for the buildings to be built on the site,

2- on the web site of the Ministry of Environment and Urbanization that gives information on Lake Salda Natural Site, it is stated that

- Lake Salda is one of the lakes located within the boundaries of Burdur Lakes Basin and where the integrity of the ecosystem is best represented,
- the area has a rich biological diversity in terms of flora and fauna,
  - of 20 plant species identified in the area, only 5 are endemic in the flora of Turkey and 5 of them are in danger of extinction,

- as a result of the studies in the field at different times; a total of 114 vertebrate species including 8 inland fish, 5 amphibians, 27 reptiles, 69 birds, 5 mammals were determined;
- 69 bird species were observed in the area and 54 of them were native and/or summer migratory and 15 were winter migrants.

It is specified on the same web page: "The intense flow of visitors to which the area has recently been exposed has increased anthropogenic pressure (resulting from human activities), and, in this context, in order to minimize this pressure in the area and to ensure a controlled use for both planning and use of the area, it is stated that on 12.09.2018 under the leadership of the General Directorate a series of visits and meetings were held where the problems and the "Site Management Model and Solution Proposals" were put forward, however, contrary to all these determinations, a unearned income plan has been made for the purpose of housing and increasing the number of visitors.

Physical changes caused by anthropogenic (resulting from human activities) effects on natural areas for social and economic reasons primarily cause deterioration on the natural structure of the area. Today, along with the environmental pollution that occurs due to various reasons, irregular construction, changes in the use of land and improper use of land are rapidly destroying the nature and biological wealth we have.

The construction of the National Garden of Lake Salda Nature Park to operate on 7 days/24 hours, which is one of the two places that is rare in the world and has the surface characteristics of the planet Mars, is a project that will increase the number of visitors annually to 500 000 people and increase the number of visitors. Since it was inevitable that the project would increase the "anthropogenic pressure" (the pressure caused by human activities), which is considered as negativity on its website of the Ministry on its own web site,

3- the area has been declared a Special Environmental Protection Area by the Ministry. As part of reasons for the declaration of Special Environmental Protection Area by the Ministry under the title of General Features; it is stated that Lake Salda is an area with a unique and impressive appearance with its naturalness, visuality and biodiversity features, the clear and turquoise water makes the area unique in terms of scenery.

Under the title of Environmental Protection Area, it is stated: "Lake Salda has the appropriate living conditions that have been able to preserve the integrity of sociocultural life, and meet the vital needs of the landscapes, endemic and endangered species such as shelter, nutrition and reproduction. Since the area is a wetland, it is an area with high biological diversity.

In this context, there are 301 aquatic and terrestrial plant species belonging to 61 families and 20 species in terms of danger class and endemism among these species. It is an area of international and national importance that hosts critical species under protection by the International Union for Conservation of Nature (IUCN) with geological and chemical features and the endemic species it hosts, meeting the Critical Biodiversity Area and Important Bird Area criteria. Studies conducted in the region show that Lake Salda is one of the two regions in the world, which bear the surface features of the planet Mars (magnesium-loaded white rocks). There are habitats such as wetland, stream, dune, coniferous forest, woodland, mountain steppe, rocky and agriculture in Lake Salda and its surroundings. The coniferous forest habitats around Lake Salda are all around the lake except for the eastern part and consists of red pine, larch and tall junipers, pure and mixed forests and sparse forests in some places. The lake is the deepest lake in Turkey. It also hosts a significant number of populations of some waterfowl species at certain times. ... Lake Salda is a very clean, oligotrophic, low-salt and high alkalinity lake, which is a determining factor in the biological diversity and productivity of the lake, and the ecosystem balance is still intact. The fact that it is a geologically closed basin has determined the ecological characteristics of the lake to a great extent. Although this feature limits the species diversity and usage possibilities of the lake; it also shows the feature of a shield that protects the lake from invading and alien species. When land and lake area are evaluated together; it is a very important area in terms of its natural, historical and cultural values."

National Gardens have emerged with the aim of creating breathing spaces by designing breathing spaces, not in areas that are already natural wonders such as Lake Salda, but in dense city centers that are concreted for the sake of unearned income and therefore cannot breathe. Arrangement of the National Garden in Lake Salda will not create a public interest and will cause negative effects on the lake as it will increase the "anthropogenic pressure (resulting from human activities)". For this reason, due to the fact that the construction decisions for the National Garden and tourism purposes and the tender decision for the construction of the National Garden are also against the BENEFIT OF THE PUBLIC,

4-Lake Salda is a slightly salty tectonic lake surrounded by forest-covered hills, rocky lands and small alluvial plains within the Lakes Region. Its surface area is approximately 44 km<sup>2</sup>. With up to 184 meters depth, it is the deepest lake in Turkey. It is surrounded by limestone and serpentine slopes covered by diluted larch and oak forests. There are small alluvial plains on its shore. The area is partially composed of the salt lake and the narrow coastline around it. There are beaches around the lake. There are small salty wetlands on the southern shores of the lake.

The presence of magnesium, soda and clay in the composition of the lake water causes beneficial results in the treatment of some skin diseases. The forest cover at the back of the lake hosts partridge, rabbit, fox and wild boar and Lake Salda is one of the Important Nature Areas (KBA) and is also an Important Freshwater Area (ELV). With these features, Lake Salda and its surroundings are one of the special areas that must be protected within the scope of International Conventions. On the grounds that it is against the relevant provisions of Bern Convention, Biological Diversity Convention and European Convention on Human Rights, to which we are a party, since the construction decisions will cause damage and destruction of the area, a lawsuit was filed for the annulment of the tender decision dated 31st07.2019 for the "National Garden and the National Garden and the Infrastructure and Landscaping" of Lake Salda, with the request for a suspension of execution first and foremost.

Also;

Again, in relation to the Environment Plan for Burdur-Lake Salda approved by the Ministry of Environment and Urbanization on 30.05.2019, the 1/25 000 Scale Land Use Plan, the 1/5000 Scale Conservation Master Plan and the 1/1000 Scale Conservation Implementation Development Plan and its basis Regarding the Lake Salda and its Vicinity part of the decision of Antalya-Burdur-Isparta Land Use Plan Amendment approved on 08.03.2019;

1- the planned area is 140.496 m<sup>2</sup>. a closed area of 28100 m<sup>2</sup> can be built on the area with an equivalent of E=0.20, excluding open space arrangements, which is a very dense construction for this area declared as a Special Environmental Protection Area. Due to the fact that there are too many structuring decisions against the legislation regarding the plan decisions,

2- Physical changes caused by anthropogenic (resulting from human activities) effects on natural areas for social and economic reasons primarily cause deterioration on the natural structure of the area. Today, along with the environmental pollution that occurs due to various reasons, irregular construction, changes in the use of land and improper use of land are rapidly destroying the nature and biological wealth we have. The construction of the National Garden of Lake Salda Nature Park to serve on 7 days/24 hours basis, which is one of the two places that are rare in the world and has the surface features of the planet Mars, is a project aimed at increasing the number of 500,000 visitors annually. It was inevitable that the project would increase the "anthropogenic pressure" (the pressure caused by human activities), which is considered as negativity on its website of the Ministry on its own web site. Examples of this include wastewater and garbage pollution, natural landscape degradation, noise and light pollution, vehicle wheels and people walking, soil compaction and destruction of vegetation.

Based on current uses and practices, the project, which will be implemented to increase the number of visitors, albeit in good faith, will cause the degradation of the Lake Salda ecosystem, which has developed naturally over thousands of years, and also, due to noise and light pollution, it will cause negative results on other living things, including the bird populations and bird breeding on the shores of the lake.

The purpose that is thought to be realized with the plans means the destruction of natural beauty. Due to the reasons explained, the plan decisions are not of public interest,

3- Environmental Impact Assessment (EIA) is a process that develops with the decision-making phase, in which the significant impacts of an investment or project are identified. The main task of the EIA is to make the decision makers make the right decisions by showing the environmental impacts of the investment or the project. For this reason, an EIA decision should be taken before planning, if the EIA positive decision is made, plans should be made and the area should be tendered after the plans are finalized.

It is stated in the 6<sup>th</sup> paragraph of Article 5 of the Public Procurement Law of the law numbered 4734;

"It is mandatory to have the EIA positive certificate for the works that require an Environmental Impact Assessment (EIA) report in accordance with the relevant legislation." and thus that it is mandatory to take an EIA decision before the tender. Whereas; first, plan decisions were taken and before the plans were finalized, the tender decision was taken at the suspension stage and the tender was made, and after the tender, the decision was made on "EIA is not required".

It is against the planning principles to open the area to construction by open-ended construction tender before the development plans are suspended, before the plans are finalized, before the urban design and architectural application projects are prepared for the buildings to be built on the site,

Although damaging and threatening constructions are prohibited in the Upper Scale Plan, of the 295 square kilometer area, which has been declared a Special Environmental Protection Area, 140.496 m<sup>2</sup> has been designated as a Special Project Area and E=0.20 precedent has been set in this area. Whereas, in violation of the law, maximum 0.05 equivalent was a necessity, 28.100 m<sup>2</sup> closed area arrangement was planned with 0.20 equivalent. Apart from that, taking into account the arrangements such as recreation area etc. due to the fact that a very intense settlement decision was made against the upper scale plans for such a valuable area as a habitat

4- it is in violation of the provisions of the Regulation on the Protection of Wetlands, the International Bern Convention, the Convention on

Biological Equality, the Convention on the Protection of Europe's Wildlife and Natural Habitats, the UN Framework Convention on Climate Change, the European Landscape Convention of the Council of Europe, the Convention on the Protection of the World Cultural and Natural Heritage, Convention on Wetlands of International Importance as Waterfowl Habitat, European Convention on Human Rights, Ramsar Convention

Again, a case was opened for the suspension of execution as a matter of urgency for the cancellation of the Environment Plan for Burdur-Lake Salda which is located within the borders of Burdur Province and Yesilova District approved by the Ministry of Environment and Urbanization on 30.05.2019, the 1/25.000 Scale Land Use Plan, the 1/5000 Scale Conservation Master Plan and the 1/1000 Scale Conservation Implementation Development Plan and its basis Regarding the Lake Salda and its Vicinity part of the decision of Antalya-Burdur-Isparta Land Use Plan Amendment approved on 08.03.2019;

It is presented to our public through our valuable press. 08.10.2019

**CHAMBER OF ARCHITECTS ANTALYA BRANCH**  
**CHAMBER OF LANDSCAPE ARCHITECTS ANTALYA BRANCH**

\*<http://www.antmimod.org.tr/burdur-yesilova-salda-golu-koruma-amacli-imar-plani-salda-golunun-olum-fermanidir>, Accessed on 19.06.2020

**Press Statement of TMMOB Chamber of Architects Antalya  
Branch, 16 March 2020\***

**WE ARE AGAINST ALL KINDS OF PLANS AND APPLICATIONS IN  
SITE AREAS AGAINST THE PUBLIC INTEREST**

As the Antalya Branch of the Chamber of Architects, we are against and follower of all kinds of plans and practices that are against the public interest.

An amendment was made to the “Regulation on the Procedures and Principles Regarding the Determination, Registration and Approval of Protected Areas”, which entered into force by being published in the Official Gazette dated 19.07.2012 and numbered 28358.

With the amendment made in the regulation, the authority for the natural assets that need to be protected and their conservation areas and the works and transactions to be carried out in the natural site areas were transferred from the Ministry to the Regional Commissions to be determined by the Central Commission. The quality and quantity of this commission, which will be the sole decision-maker in these areas, raises doubts.

Before the change, apart from only greenhouse agriculture and aquaculture, tent camping areas, bungalows and daily activities compatible with agriculture, fishing and the area could be carried out in the Natural Protection Areas. With the change made to these activities; by adding medical and aromatic plant applications, livestock breeding, fishing shelters, piers, applications for the use of natural spring water, dams and ponds for drinking water, aquaculture activities excluding natural lakes and seas, the construction in the areas has been increased by adding mandatory technical infrastructure. In particular, applications such as animal husbandry, fishermen shelters and piers are practices that can cause the destruction of natural protected areas.

The provision of building compatible and low-density tourism and residential areas, which will contribute to conservation in the protected areas, which are the sensitive ones to be protected, has been changed and the way to make tourism structures in the nature of INTEGRATED FACILITY in the protected areas has been opened, and natural, historical, urban and archaeological protected areas have been put under threat.

In the relevant regulation, with the amendment made with the statement: "the exploration of the mines in the areas of sustainable protection and controlled use in accordance with the national interests, the conditions and to the extent they will be operated, their closure and the rehabilitation of the area are carried out in accordance with the decisions of the

Regional Commissions to be taken in accordance with the principle decisions." mining activities in these areas were allowed. It is understood that mining can be done in areas that need to be strictly protected, as in the example of Lake Salda, which means the end of natural protected areas.

We are against the destruction of the areas that need to be preserved above ground, underground or under water, which belong to geological periods and have extraordinary features due to their rarity, by wrong planning and human pressure, and construction, regardless of the intensity of construction. In this critical and difficult process where we, as a country, are struggling with the global epidemic, we declare that this decision, which is one of our greatest sensitivities, which we have not inherited from our ancestors, we have taken from our grandchildren, is against the public interest.

We present it to the information of our people through our valuable press. Regards,

**CHAMBER OF ARCHITECTS ANTALYA BRANCH**

**18. Term Board of Directors**

\*[http://www.antmimod.org.tr/sit-alanlarında-kamu-yararına--aykiri-olarak-yapılan-her-turlu-plan-ve-uygulamanın-karsısındayız-](http://www.antmimod.org.tr/sit-alanlarinda-kamu-yararına--aykiri-olarak-yapılan-her-turlu-plan-ve-uygulamanın-karsısındayız-), Accessed on 06.06.2020

**TMMOB Chamber of Landscape Architects, Press Release, 14 April 2020\* SALDA'MA DOKUNMA! STOP WORKS IMMEDIATELY!**

The government turned the crisis into an opportunity in its favor and brought construction equipment to Lake Salda, which must be absolutely protected. While the whole world is struggling with the COVID-19 pandemic, the budget that can provide the citizens with their livelihood cannot be allocated, the budget can always be found, just as it is possible to plunder nature and establish facilities in protected areas.

As the chamber, with the press release we made on 13 April 2020, we strongly rejected the change in the regulation on Protected Areas. The result of the regulation change is obvious. Lake Salda, which obtained the status of a Natural Site in 1989, is being destroyed by construction equipment to build the National Garden.

Lake Salda is a slightly salty karstic lake surrounded by hills covered with forests and small alluvial plains, 4 kilometers away from Burdur's Yeşilova district. It is located in the region of lakes. This lake, which has a surface area of approximately 44 kilometers, reaches a depth of 184 meters. It is known as the second deepest lake in our country. It is among the wetlands of international importance due to the pasbaş, patka and steep-tail ducks it contains during the winter months. There are black pine forests around. Lake Salda, which is also known as the cleanest lake in our country, contains magnesium and sodium elements. The magnesium in the lake ensures that the beach of the lake is also white. This beach is unique in that it resembles the earth on Mars.

The beaches in the southwest and southeast are under pressure due to the intensive use of the lake and its surroundings for reactive purposes. It has also been observed that there are 7 small islands in it, as the water started to recede from the lake. For the last 20 years, the water of the lake has been drawn 3-4 meters. Withdrawal still continues.

The construction of a "National Garden" in Lake Salda, which is an important nature reserve of international importance with its endemic species and which has preserved its characteristics for 2 million years, has come to the fore once again.

As TMMOB Chamber of Landscape Architects, we have filed a lawsuit for the suspension and cancellation of the tender for the "Social Equipment Construction Work for Natonal Garden General Infrastructure Works and Recreation Areas and the National Garden" opened by TOKI, which will cause Lake Salda to open to construction, which is not in favor and even against public and society benefit and will cause the lake to be damaged and severely destroyed.

While the surroundings of Lake Salda are sufficiently occupied, the tender, which was opened and started to be implemented by the Ministry of Environment and Urbanization, Mass Housing Administration in violation of the regulations, upper scale plans and the law, is irregular and means the destruction of the lake.

As TMMOB Chamber of Landscape Architects, we repeat once again that we will strive decisively to make all natural and historical areas in our country sustainable and transfer them to future generations.

- Lake Salda is not a tourist center.
- Lake Salda is not a place to be entrusted to TOKI.
- Lake Salda is not a place for vegetation or construction.
- Lake Salda is a place that must be protected!

Lake Salda is a 1st Degree Natural Protected Area and one of the rare places in the world. Any construction or planting work to be carried out in the region with the aim of developing tourism will damage 2 million years of natural history, endemic species, wetlands and vast habitat.

Violations of the law and nature slaughter should be abandoned as soon as possible.

## **TMMOB Chamber of Landscape Architects**

### **13. Term Board of Directors**

\*[http://peyzajmimoda.org.tr/genel/bizden\\_detay.php?kod=8644&tipi=3&sube=0](http://peyzajmimoda.org.tr/genel/bizden_detay.php?kod=8644&tipi=3&sube=0),  
Accessed on 19.06.2020

**Press Statement of TMMOB Chamber of Architects Antalya  
Branch, 15 April 2020\***

**DO NOT DIG MY SALDA'S TOMB! STOP THE WORKS!**

In these days when we, as humanity, are struggling against the global epidemic, the importance of nature and natural beings has come out once again; practices devoid of common sense, science and conscience have been the greatest threat to natural protected areas.

Lake Salda, one of the most important natural assets of our country, has gained the status of Natural Site since 1989 and Natural Park in 2011; was opened for development by the Ministry of Environment and Urbanization, despite all the objections of the public, after the construction tender was made by TOKI as the National Garden! . While the lawsuits we filed as the Chamber of Architects Antalya Branch continued, the tender process and the development plans were continuing, while the Turkish people were in a desperate need of fire, construction works started in the field.

Lake Salda is geographically located on the Burdur-Denizli highway within the borders of Burdur province, Yeşilova district in the Mediterranean Region. Its surface area is approximately 44 km<sup>2</sup>. With up to 184 meters depth, it is the deepest lake in Turkey. Lake Salda is a unique and impressive area with its naturalness, visuality and biological diversity. In this context, there are 301 aquatic and terrestrial plant species belonging to 61 families and 20 species in terms of danger class and endemism among these species. Four fish (carp, grass fish, Salda algae, mud fish), dice snake and marsh frog live in the lake. Salda seaweed fish is endemic to Lake Salda. There are magnesium and sodium elements in Lake Salda. The magnesium in the lake ensures that the beach of the lake is also white. Lake Salda is one of the two regions in the world, which bear the surface features of the planet Mars (magnesium-loaded white rocks).

60% of Turkey's lakes have dried up due to climate change and human oriented reasons. The 2815 m<sup>2</sup> facility planned to be built in Lake Salda is the greatest danger for the destruction of the lake ecosystem. As the Chamber of Architects Antalya Branch, in the press release we made on 23 March 2020, we opposed the regulation change made in Protected Areas and stated that the Lake Salda ecosystem is in danger of extinction as a result of the regulation change. Unfortunately, it was seen on 13 April 2020 that the construction equipment of the construction company, which is closed to the visitor entrance, has dug the white dunes under protection, which is one of the most important characteristic structures of the lake and is harmful to step on and carried these to other

places. To carry out excavation and leveling work with construction equipment in this area where even footing will damage the white dunes, IS TO DIG THE GRAVE OF SALDA. This situation gives an idea about the environmental impact of the planned National Garden construction.

With the statement made by the Ministry of Environment and Urbanization: “Although the contractor firm was given an order not to let the machine vehicles into the construction area, the obligations were not followed in this regard. Necessary financial and other penalty provisions have been applied by the relevant ministry regarding the contractor firm due to its misconduct”, it has been accepted that there is an illegal practice around the lake. However, the Ministry dismisses the incident as a negligence in the construction site and parking lot arrangement and stating that the necessary punishment was given.

The practice is not a matter of entering a vehicle in a simple area. The sandy area of approximately 5 decares around the lake was excavated by construction equipment and these sands were moved to other areas. These sands are a living formation called bio-mineralization that makes Lake Salda unique and provides its beauty and takes thousands of years to form. Taking these sands from their natural areas and moving them to another area will destroy the formation of living things and will lose its characteristic white color. For this reason, the lake and its surroundings will lose their characteristics that give them the qualification of Natural Site, Nature Park and Special Environmental Protection Area.

Lake Salda, which has been protected by the International Union for Conservation of Nature (IUCN), has had a retreat reaching 3-4 meters at the lake level for the last 20 years. The withdrawal is still ongoing. There are nearly 10 touristic facilities by the lake. The treatment plants of some of these facilities cause pollution in the lake. While Lake Salda is currently under threat as a result of daily tourism activities, the biggest betrayal of our nation in leaving the natural protected areas to our future generations is to try to destroy it by opening it to construction in order to build the National Garden.

In this context; as the Antalya Branch of the Chamber of Architects, regarding the construction work, we hereby declare that we are hereby making a denunciation to the Office of the Chief Public Prosecutor on 15 April 2020, in order to detect and initiate an investigation against public officials and contractor company officials who give orders and approvals for the illegal action and do not fulfill their inspection duty properly. We are also a follower of the lawsuits we filed at the Isparta Administrative Court with the request for a stay of execution for the National Garden project planned to be held in Lake Salda.

We hereby declare to public that we will use our orgnaizational power for protecting the natural, historical, archeological and urban protection areas, including the Lake Salda which is known as the "Maldives of Turkey",

that we will be against all kinds of practices that are against the public interest in these areas,

we present these to the information of our people through

our valuable press. Regards,

**CHAMBER OF ARCHITECTS ANTALYA BRANCH**

**18. Term Board of Directors**

\*<http://www.antmimod.org.tr/basin-aciklamasi-saldamin-mezarini-kazma-calismalari-durdur>, Accessed on 19.06.2020

**TMMOB Chamber of Landscape Architects Press Release, 17 April 2020\***

**WE MADE A DENUNCIATION FOR THE DESTRUCTION IN LAKE SALDA**

All our people, chambers and non-governmental organizations reacted to the excavation work carried out on 12-14 April 2020 in Lake Salda and the issue was kept on the agenda on social media. As a result of all the objections and reactions, the Ministry of Environment and Urbanization had to make a statement, saying that "we did not know" and the entire invoice was cut to the Consultant firm and the responsible personnel and an investigation was initiated against them, and the responsible personnel were dismissed from their duties. It was even stated that a camera system would be installed in the area and it would be kept under constant control.

As TMMOB Chamber of Landscape Architects, we would like to express that the wrong practice is not a massacre that could be escaped only by saying "sorry". We declare that we have filed a criminal complaint to the relevant institutions and persons for the offense of "violating Article 65 of the Law on the Protection of Cultural and Natural Assets numbered 2863" on 14.04.2020.

We respectfully announce to you, our dear members and the public, that we have carefully examined all the steps to be taken regarding Lake Salda, which is unique in the world, and that we will follow the process.

**TMMOB Chamber of Landscape Architects**

**13. Term Board of Directors**

\*[http://peyzajmimoda.org.tr/genel/bizden\\_detay.php?kod=8652&tipi=3&sube=0](http://peyzajmimoda.org.tr/genel/bizden_detay.php?kod=8652&tipi=3&sube=0),  
Accessed on 19.06.2020

## **TMMOB Chamber of Landscape Architects Press Release, 7 May 2020\* EXPLANATION ABOUT SALDA LAKE NATIONAL GARDEN PROJECT**

During a live broadcast on social media on 05.05.2020, it was stated that the 'Lake Salda National Garden' project was shared with the President of the Chamber of Landscape Architects, and yet the perception emerged that the project in question was approved by the Chamber of Landscape Architects.

First of all, it should be noted that the Lake Salda National Garden project has not been submitted to the inspection of our Chamber in accordance with the legal procedure, and therefore it is not possible to give 'approval' or 'favorable opinion' to a project that has not been submitted to the inspection of our Chamber.

Since the first news in the press about the construction of a "National Garden" in Lake Salda, we, as the Chamber of Landscape Architects of TMMOB, have acted with the awareness of the responsibility imposed on us by our duties, and we have been determined to continue our legal struggle before the judicial bodies by writing articles to the relevant authorities. This is our determination will continue in the same way from now on in line with our responsibilities towards science, society and nature as well as our responsibility to our profession, colleagues and our rights.

We respectfully pr The provision of building compatible and low-density tourism and residential areas, which will contribute to conservation in the protected areas, which are the sensitive ones to be protected, has been changed and the way to make tourism structures in the nature of INTEGRATED FACILITY in the protected areas has been opened, and natural, historical, urban and archaeological protected areas have been put under threat.

esent the information of the public and members of our Chamber.

**TMMOB Chamber of Landscape Architects**

\*[http://peyzajmimoda.org.tr/genel/bizden\\_detay.php?kod=8688&tipi=3&sube=0](http://peyzajmimoda.org.tr/genel/bizden_detay.php?kod=8688&tipi=3&sube=0), Accessed on 19.06.2020

**PARLIAMENTARY QUESTION NO. 7/9436 AND ITS RESPONSE****R.T. ENVIRONMENT AND URBAN MINISTRY****QUESTIONS AND ANSWERS OF BURDUR DEPUTY MEHMET GÖKER REGARDING THE PROPOSITION OF THE WRITTEN QUESTION, BASIC No. 7/9436****QUESTIONS:**

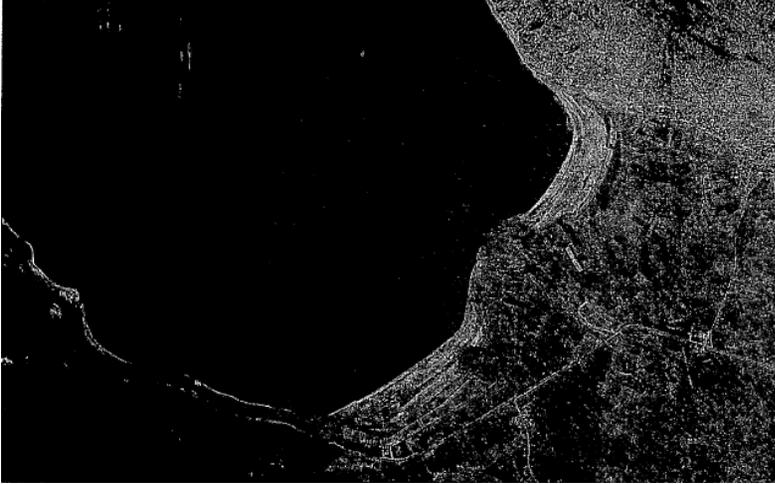
The means of obtaining information and supervision of the Turkish Grand National Assembly are regulated in Article 98 of the Constitution. According to Grand National Assembly of Turkey; it exercises its power to obtain and supervise information through the Parliamentary investigation, general debate, Parliament investigation and written questions. The written question consists of the questions of the deputies, vice presidents and ministers in writing, to be answered in writing within fifteen days at the latest. However, as it is legally impossible to ask questions to the President in the new system, questions can be asked through Vice President, Mr. Fuat Oktay. Speaking at the rally held in Burdur Cumhuriyet Square yesterday, President Recep Tayyip Erdoğan said, "We are declaring Salda Lake as an environmental protection zone, and we are creating a 300 thousand square meter national garden on the shore".

In the light of this information;

- 1) What is the border of the National Garden to be built on the shore of Salda Lake, which will be declared an Environmental Protection Area?
- 2) What is the area meant by environmental protection?
- 3) Was it thought that the bacterial biomineralisation that gives the color of the lake will be affected by all kinds of structuring and its naturalness will deteriorate?

**ANSWERS:**

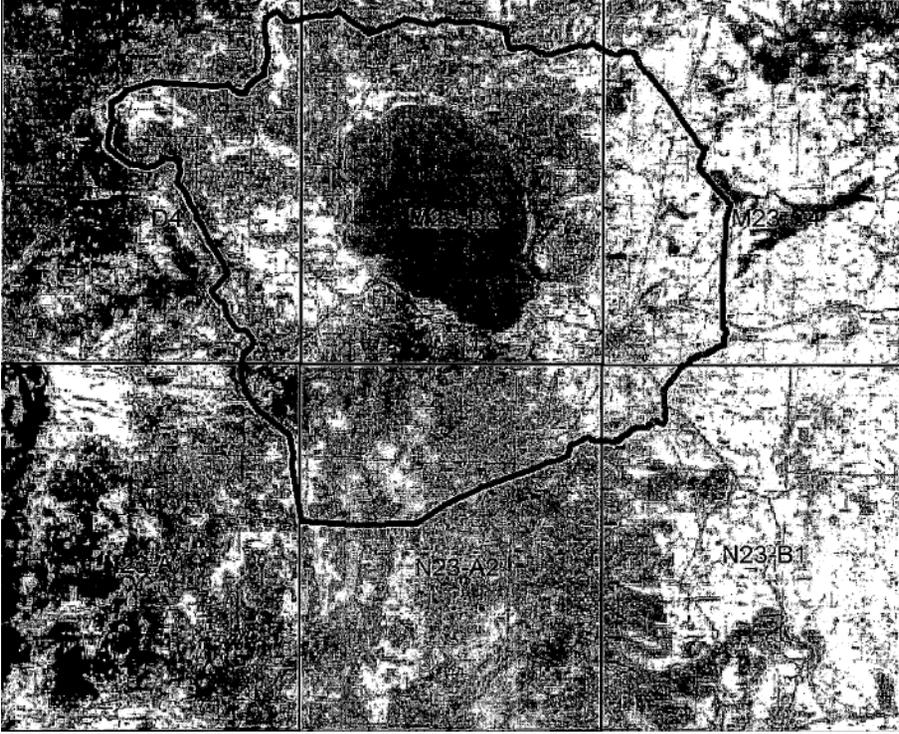
1- The Salda Lake National Garden project is carried out by our Ministry, and our Ministry contributes to the project since the area is a SEPA.



**NATIONAL GARDEN WORKING AREA BORDER**

2- In line with the objective of "increasing land and sea coastal protected areas" within the scope of the Presidency's second hundred-day action plan, in accordance with the 109th article of the Presidential Decree No. Considering scientific sensitivities, for the purposes of transmitting to generations, using natural resources and ensuring planned development, Salda Lake and its vicinity, located in the borders of Burdur province Yesilova district, was declared as "Salda Lake Special Environmental Protection Area" with the Presidential Decree No 824 dated 14.03.2019 and it was published in the official gazette dated 15.03.2019 No. 30715

In addition, in the aforementioned decision, the coordinate list regarding the borders of the region was put into effect by being published in the Official Gazette dated 19.03.2019 and numbered 30719.



3- It is essential that the necessary precautions are taken by our Ministry in order not to expose the Salda Lake Special Environmental Protection Area to threats that cannot be compensated in the future. In this direction, with the announcement of an area as a special environmental protection zone, scientific researches such as biological diversity, water resources management, determination of socio-economic structure are carried out to determine the principles and procedures of conservation use of the region and to constitute a basis for environmental plans and in line with the reports obtained, areas which need to be absolutely protected and used by protection are determined. In addition, with the regional announcement, it is aimed to re-evaluate projects and investments of all types and scales, to direct the sales, leasing and operating transactions of public lands in line with the protection purposes and to balance the individual development expectations of the property owners in these areas and the public benefit of the conservation activity.

Therefore, Due to the intensive use of the White Islands region on the shore of Lake Salda, which will be carried out by taking into account the construction conditions in the area and biodiversity research studies in a way that does not put pressure on natural resources within the scope of the environmental plans for the whole region, especially during the summer season, it is known that the part, which is reserved as the existing parking lot behind the area, is restricted by wooden barriers, and the local people are set up as a makeshift (tent, caravan, etc.) accommodation next to the parking lot. It is aimed to make an arrangement in harmony with the unique natural texture and character of Salda Lake by preventing uncontrolled and destructive use of the area and considering the protection-use balance. Within the scope of Salda Lake National Garden Project; there will be no construction on the shore that will affect the bacterial biomineralization that gives the lake its color, and there will be units such as wc, buffet, dressing cabin, cafeteria for daily use in order to regulate the current uncontrolled use.

## PARLIAMENTARY QUESTION NO. 7/26923 AND ITS RESPONSE

### QUESTIONS AND ANSWERS OF ISTANBUL DEPUTY MR M.SEZGİN TANRIKULU REGARDING THE PROPOSITION OF THE WRITTEN QUESTION, BASIC 7/26923 OF THE TBMM

#### QUESTIONS

The news about the allegations that construction has begun in order to build the National Garden in Salda Lake was reflected in the press.

In this context;

- 1) Are the claims that construction started in Salda Lake to build a Public Garden true?
- 2) If the allegations are true, what is the reason for the construction in question to be started during the Corona Virus Outbreak?
- 3) Which company won the tender for the National Garden?
- 4) What is the amount to be paid to the company in question for the construction of the National Garden?
- 5) In the written statement made by TOKI for the region, "We started our project to protect Salda Lake and preserve its natural beauty." What are the operations to be made within the scope of the project expressed as such?
- 6) How much will TOKI be paid for the relevant project?
- 7) What is the reason for the project to be launched during the Corona Virus Outbreak?

#### ANSWERS

**1,2,7)** The tender for the Salda Lake Landscaping work was made by the Housing Development Administration (TOKI) on 31.07.2019 before the corona virus outbreak. The contract was signed with the relevant contractor on 15.11.2019, and the landscaping work was started by the site delivery on 25.11.2019.

**3)** TOKI is subject to the Public Procurement Law No. 4734. It carries out all its tenders within the framework of the procedures and principles specified in the Law No.4734 and the secondary legislation, and the 5th article of the same Law titled "Basic Principles", namely "to ensure transparency, competition, equal treatment, reliability, confidentiality, public inspection, meeting the needs in appropriate conditions and on time and efficient use of resources. is responsible. " .

A contract was signed with Gungor Tarim Insaat Sanayi ve Ticaret AS on 15.11.2019 with the contractor company for the work titled "Construction and Infrastructure and Environmental Arrangement for the National Garden and the Social Outfits for the National Garden Located in Burdur Province Yesilova District Salda Lake" which was tendered out through Open Tender Procedure by TOKI Presidency with registry No. 2019/456121 dated 31.07.2019

- 4) The contract price of the work in question is 21.770.000 TL and VAT will be paid to the contractor firm in addition to the contract price.
- 5) In order to make Salda Lake more useful and to reduce the damage caused by the heavy visitor pressure on the area, the needs of the daily visitors will be met without damaging the natural area and the structure of the lake. In this context, kiosks, dressing and dressing rooms, cafes, prayer rooms and washbasins will be built. These do not contain any reinforced concrete manufacturing. In addition, all these facilities are located approximately 500 meters from the beach of Salda Lake.
- 6) Settlement will be made between TOKI and our Ministry according to the tender price of the work in question.

**PARLIAMENT RESEARCH PROPOSAL NO. 10/1304****REASON:**

Located in the Yeşilova district of our Burdur province, Salda Lake is 4 km from the district center, and is a lightly salty karstic lake surrounded with forest covered hills, rocky areas and small planes. With 184 meters depth, Salda Lake is the second deepest lake of Turkey after Van Lake and hosts a significant number of duck and bird species during winter months. In addition, the white beaches of Salda Lake, which have similar characteristics with the soil structure on the surface of Mars, create a unique visual feast and are likened to the Maldives Islands. Salda Lake and its surroundings, one of the rare wetlands of the world due to its aforementioned features, was taken under protection as a 1st Degree Natural Protected Area in 1989.

Salda Lake takes its turquoise color from the stromatolite white rocks of bacterial origin, which started to form 3.7 billion years ago, and still continue to form. (A living formation called Biomineralizyon) One of the most important features of Salda Lake water is that it contains magnesium. Colonies that contain hydromagnetsite come together to form stromatolites. Stromatolites precipitate and form different looking shapes in the lake. At the same time, they decompose with the effect of the waves and make the dune ecosystem on the lake shore white. This situation allows the lake to host different endemic and globally endangered plant species on its shores.

The announcement that the National Garden will be built by the Minister of Environment and Urbanization, Murat Kurum, in an area that was taken under protection as a 1st Degree Natural Site in 1989, caused indignation in the whole society and caused reactions. A number of plans were shared with the public that there will be a parking garage, a pond, walking and bicycle paths, fragrance gardens and playgrounds in the National Garden. While Salda Lake, which has been under threat due to increasing human pressure and misuse around the lake in recent years, should be kept alive with extra protection measures, the decision of the Ministry to make the National Garden has been a cause of concern in the whole society.

The Presidential Decree No. 824, dated March 14, 2019, was published regarding Salda Lake. Accordingly, no implementation will be made until the evaluation to be made in accordance with the provisions of the aforementioned Decree Law on plans, plan decisions and projects of all scales is finalized. In addition, the procedures and principles to be determined regarding the use and management of the area within the framework of research, protection and monitoring of the environment in the Salda Lake Special Environmental Protection Area in accordance with the provisions of the relevant legislation and the plans reflecting them will be prepared and approved by the Ministry of Environment and Urbanization. In the 4th article, it is stated that the construction of the buildings, whose construction was completed in the basement level, in accordance with the approved plans or legislation before the date of the publication of this decision in the Salda Lake Special Environmental Protection Area, will continue according to the license and its annexes.

As a result, Salda Lake, which has the title of a natural nature park, needs protection, not construction. It is of vital importance for the lake that the arrangements to be made are made outside of the white beaches with absolutely vibrant texture. Any construction or structuring from the mountain to the lake will seriously damage the biology of the lake and the surrounding ecology. In other words, the ecological system will be completely destroyed and the coastal ecosystem will be damaged.

In this context, we respectfully offer and propose the opening of a Parliamentary Survey in accordance with Articles 98 of the Constitution and Articles 104 and 105 of the Assembly's Rules of Procedure in order to determine the policies and measures to be taken in order to prevent pollution to be experienced in the event of the establishment of a National Garden in Salda Lake.

**PARLIAMENTARY QUESTION NO. 7/17094 AND ITS RESPONSE (1/2)****QUESTIONS AND ANSWERS OF DENIZLI DEPUTY DEPARTMENT GÜLİZAR BIÇER  
KARACA'S PROPOSAL TO THE WRITTEN QUESTION WITH THE MAIN NUMBER  
7/17094 OF THE TURKISH GRAND NATIONAL ASSEMBLY****QUESTIONS:**

1/25000 scale Environmental Plan, 1/5000 and 1/1000 scale Conservation Master and Implementation Zoning, Plans of Salda Lake Special Environmental Protection Area located in the borders of Burdur Province (Plan Process No: ABÇDP- 38039) are approved by the Ministry of Environment and Urbanization on 30.05.2019, with the approval No. 130605 and under Article 109 of the Presidential Decree No. 1 The said plans have been suspended for thirty days starting from 10.07.2019. In line with this information;

1- Before Salda Lake Special Environmental Protection Area 1/25000 scale Environmental Plan, 1/5000 and 1/1000 scale Conservation Master and Implementation Plan are finalized, Salda Lake National Garden and Social Outfits Constructions and Infrastructure and Landscaping Works are tendered out on 31 July 2019. What are the legal grounds for this?

2-Has the EIA process been initiated since it is within the scope of Article 35 of the Annex 2 List of the EIA Regulation related to the Construction of the National Garden and Social Equipment of the National Garden and the Infrastructure and Landscaping Work that you will build in the Special Protection Area? If it is out of the scope of the EIA regulation, has a decision been taken on this issue?

3- What is the purpose of submitting a project that requires the EIA process to be operated in accordance with Article 35 of the Annex 2 List of the EIA Regulation, contrary to the Environmental Law Article 10 and the EIA Regulation Article 6/3?

4- Do you foresee an increase in the number of tourists and the number of vehicles in the region in case of realization of the public garden project?

5- How do you plan to manage the increase in the number of tourists and vehicles coming to the region? Are you going to expand the roads leading to Salda Lake?

**ANSWERS:**

Within the scope of the Salda Lake Special Environmental Protection Area, Salda Lake and its surroundings, Burdur Province, Yeşilova District 1/25000 scale Environmental Plan, 1/5000 scale Conservation Master Plan and 1/1000 scale Conservation Implementation Plan have been approved by the Presidential Decree No. 109. The objections made to the plan during the suspension process were evaluated by our Ministry and the parts that were not changed were finalized, and the parts that were changed were approved with the same consent.

TOKİ is subject to the Public Procurement Law No. 4734 and all tenders are carried out within the framework of the principles and procedures specified in Law No. 4734 and secondary legislation. Again, all transactions are carried out under the responsibility for "transparency, competition, equal treatment, reliability, confidentiality, public scrutiny, meeting needs under appropriate conditions and on time, and efficient use of resources" in Article 5 of the same Law titled "Basic Principles".

**PARLIAMENTARY QUESTION NO. 7/17094 AND ITS RESPONSE (2/2)**

In the Environmental Impact Assessment Regulation, it is clearly defined how and for which projects the EIA process will be operated. It is not subject to the EIA regulation as it is not included in the relevant lists of the EIA regulation in terms of the scope, size and use of the "Social Equipment Constructions and Infrastructure and Landscaping work of Burdur province, Yeşilova district, Salda Lake National Garden and National Garden".

Salda Lake and its surroundings have been able to preserve their socio-cultural integrity, have geological, chemical and landscape features and appropriate living conditions to meet the vital needs of endemic and endangered species such as shelter, nutrition and reproduction, with high biological diversity, and are an area of international and national importance that hosts critical species that are protected by the International Union for Conservation of Nature (IUCN) meeting Important Nature Area and Important Bird Area criteria; in addition; considering the possibility of being under intense human pressure, especially tourism, on the grounds of protecting it with a holistic approach and targeting sustainable uses compatible with the ecosystem; taking the scientific sensitivities into account, the area was declared as "Lake Salda Special Environmental Protection Area" by taking the opinions of relevant institutions and organizations in accordance with the Decree No. 383 and Article-5 / 1- (n) of the Regulation on Procedures and Principles Regarding the Determination, Registration and Approval of Protected Areas and its border coordinates are published in the Official Gazette.

Following the promulgation of the Special Environmental Protection Area, studies were initiated in coordination with the Burdur Governorship and local participants to prevent uncontrolled and illegal coastal developments.

In addition to the negative pressure on the environment caused by the random tents and bungalows used for accommodation against the legislation in the Yeşilova Public Beach section of Salda Lake and all these daily activities, since the number of 500,000 visitors in the summer and the traffic of 2000 vehicles on some days damage the tissue in the region, it has emerged as a necessity to realize this project in two separate areas named as Salda Lake, Yeşilova Public Beach and White Islands.

The units within the scope of the project will be made of single-storey, wooden and removable materials, and there is no concrete production in the units to be built without foundation. All of these productions that meet the daily needs can be made in the protected areas.

There will be no tents, bungalows or accommodation in the area. Accommodations will be shifted to villages within a special environmental protection zone. There will be only cafes, buffets, sales points of local products, masjid, shower, wc, and all wooden and detachable uses. The projects planned to be carried out aimed to meet the food-drink, shower-toilet and rest needs of the visitors. For these reasons, with the implementation of the Salda Lake National Garden project, no increase in the number of tourists and vehicles is foreseen in the region.

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# LAKE SALDA REPORT

When the issue of establishing a "Nation Garden" on the shore by opening the shore of Salda Lake in Burdur came to the agenda in 2019, TMMOB prepared this report by carrying out a sensitive study in the light of on-site technical examinations at the request of the local people.

We hope that this report would be a step towards protecting Salda Lake from human ambitions and self-seeking development plans while being passed on to future generations and for the Lake to be included in UNESCO World Heritage Status as soon as possible.