

Aquaparks- Location Requirements and Design Criteria

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**A Dissertation Submitted to the
Graduate School in Partial Fulfillment of the
Requirements for the Degree of**

MASTER OF URBAN DESIGN

**Department: City and Regional Planning
Major: Urban Design**

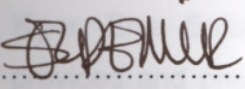
**Izmir Institute of Technology
Izmir, Turkey**

January, 2000

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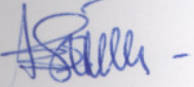


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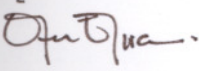
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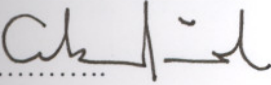
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ACKNOWLEDGEMENTS

I would like to thank to dear Assoc. Prof. Semahat Özdemir for her patient, care and friendly support throughout my life and study.

I thank to Evrim Akay who made the translation of my thesis carefully and encouraged me to study. I thank to Gülay Aşıkoğlu, Ulaş Kılıçkaya, Nilgün Kiper, Enis Saltık, Pervin Şenol, Figen Ünal, Neriman Yörür who always provided and precious contribution. And all my friends support my study and eased my life. Thank you all.

I am very grateful my parents who always being with me and showed great tolerance to me during the preparation of this study

ABSTRACT

Leisure activities and their spatial requirements have represented steady change throughout the history. Particularly with the industrial revolution, the differentiation of the work and life conditions influenced the entertainment approach. As a result of this interaction, new activities and land use types occurred. Today the amusement parks, theme parks and aquaparks are getting widespread among the entertainment areas. It is seen that, first theory and practice of these kind of activities were realized in America in the beginning of 1900s.

The thesis deals with the aquaparks formed by the changes in the evaluation of leisure occupation. In this study developing process, organizations, samples and design criteria of aquaparks that grove in our country were examined. Researches has shown that the existence of establishments dealing with feasibility studies with every phase upto opening and that the security conditions are steadily controlled in aquaparks, especially in America also the number of aquaparks increasing in our country. Furthermore as the construction processes are analyzed; it can be seen that there exist the lack of consideration of demands of the society, physical conditions of construction area, aquapark standards and convience with the security conditions and the lack of control mechanisms. In this framework, the aim of the thesis is that haven't been examined until today, to find out the location requirements, design criteria and land allocation requirements of aquaparks. Throughout the thesis study the followed methodology is making of literature and internet researches and interviews with the municipality officials and aquapark entrepreneurs of the aquaparks and it includes the physical plans and location analysis of aquaparks that were that were realized in Turkey.

At the end of the study location criteria, spatial requirements and design criteria were developed concerning an aquapark which is a new type of use in our country and a new aquapark was tried in İzmir – Bornova.

Boş zamanın değerlendirilmesine yönelik etkinlikler ve mekansal gereksinimleri tarih içinde sürekli bir değişim göstermiştir. Özellikle endüstri devrimi ile iş ve yaşam koşullarındaki farklılaşmaların keskinleşmesi eğlence anlayışını da etkilemiştir. Bu etkileşimin sonucunda yeni aktiviteler ve arazi kullanım türleri ortaya çıkmıştır. Günümüzde ise eğlence alanları arasında amusement parklar, teheme parklar ve aquaparklar hızla yaygınlaşmaktadır. Bu tür aktivitelerin ilk teori ve uygulamalarına 1900'lü yılların başında ABD'de gerçekleştiği görülmektedir.

Tez, boş zamanın değerlendirilmesinin değişiminin sonucu ortaya çıkan aquaparkları ele almaktadır. Bu çalışmada ülkemizde çoğalmakta olan aquaparkların gelişim süreci, organizasyonları, örnekleri ve tasarım kriterleri incelenmektedir. Yapılan araştırmalar, özellikle ABD'de, aquapark kullanımının fizibilite çalışmalarından, açılış tarihine kadar tüm aşamalarla ilgilenen kuruluşlarının bulunduğunu ve güvenlik koşullarının sürekli denetlendiğini göstermiştir. Ülkemizde de aquaparkların sayıları hızla artmaktadır. Buna karşın yapım süreçleri incelendiğinde ise; toplumun talepleri, yapılacak alanın fiziki koşulları, aquaparkların standartları ve güvenlik koşullarına uygunluğu ve denetleme mekanizmalarının oluşturulmadığı görülmektedir. Bu çerçevede tezin amacı, bugüne dek hiç incelenmemiş olan aquaparkların yerseçim ihtiyaçları, tasarım kriterleri ve alan gereksinimlerini saptamak olarak belirlenmiştir. Tez araştırmasında izlenen yöntem; literatür ve internet araştırması, aquaparkların bulunduğu yerlerdeki belediye yetkilileri ve aquapark girişimcileri ile görüşmeleri ve Türkiyede gerçekleştirilmiş olan aquaparkların fiziki planlarının ve yerleşimlerinin analizini kapsamaktadır.

Araştırma sonucunda, ülkemiz için yeni bir kullanım olan aquaparklar ile ilgili yer seçim kriterleri, mekan gereksinimleri ve tasarım ilkeleri geliştirilmiş ve İzmir – Bornova aquapark tasarımı denenmiştir.

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CHAPTER 1

INTRODUCTION

"In ancient times, Englishmen had asked for decreasing the eight day way into eight hours way by making a railway to Chinese. However, the Chinese hadn't accepted. Englishmen were astonished and asked the reason. Chinese had said:"...Well, but what are we going to do during the rest of the time?" (Tezcan, 1993,p.1)

Residential areas are the places where people live all together, receive their social and individual needs. Passing from agricultural societies to industrial societies had caused the differentiation of production process, thus, social and individual activities had begun to change. Therefore, planning and designing studies concerning the space organization of social and individual activities had been directly affected from those changes. Today, the ratio and variation of those landuse types concerning these activities through urban landuse types are increasing and spreading. Particularly, in tourism zones and in greater cities, these landuse types begin to be influential and their space requirements also begin to change.

"Occupation of leisure" concept occurred with the Industrial Revolution. In agricultural societies, there aren't certain differences and ruptures on work, residence and leisure activities. Nevertheless, today, "work" and "leisure" are accepted as opposite concepts and activities to each other. Development of the new production forms with the industrial developments, differentiation of work(business), life(residence), leisure concepts and areas have brought the societies upto today's point. This change in production relations has also changed economic, social and cultural structure. Space has been influenced from those effects and been a concrete indicator of the changes.

Until the first half of the 19th century, leisure time that had been limited by only the supply of necessary requirements before, was increased by the arrangements made for increasing working efficiency. This increase in the time of leisure has developed "leisure occupation" alternatives. As a result of the rapid development in the leisure alternatives, entertainment, resting area and activities have become an economic sector, that is, merchandised. Although today, the term "entertainment industry" is used. Economic crisis occurred in USA through 1930s was solved with "entertainment sector". During that term, entertainment industry provided a decrease in unemployment in USA and vitalized the economy. Entertainment industry began to take important and newer roles for national and local economies. Thus, urban design criteria of the spatial organizations related to those areas began to be accepted more importantly.

In the second half of the 19th century, the opening of Disneyland in USA, has provided a new alternative in the occupation of leisure and using the space. The success of Disneyland caused the occurrence of Aquaparks in 1980. In 1980s, theme parks began to spread on the world. Also in our country, first theme park was opened in 1993, in Antalya.

In our country, the changing economic structure with 1980s has also affected the entertainment sector and different entertainment types were realized. This process has brought out new spatial requirements. Nevertheless, aquapark use does not exist within the landuse types in the Development Act Numbered 3194. There hasn't been an examination made upto today concerning that landuse type which is very new in the planning process of our country according to its planning criteria.

Recent developments in our country necessitate a study about aquaparks. Therefore, in this thesis study, it is aimed to form the criteria during the planning and design process of aquaparks. In this framework; Examination Subject was determined as "Aquaparks - Location Requirements and Design Criteria".

Aquaparks, that are implemented in tourism and metropolitan areas are accepted as a new urban landuse type. This landuse type is aimed to be studied and developed on the points of;

- Location requirements
- Design criteria
- Space requirements

This landuse type, which hasn't been taken up in our country yet, is tried to be defined briefly and related concepts are also explained. This study is conceptual and explanatory, so, it will make a contribution to the formation of the three criteria defined above. Furthermore, aquaparks will be discussed about; in which landuse type they should take part in the Development Act Numbered 3194 and what the landuse criteria of aquaparks should be.

As a thesis method; libraries and Internet web sites were used. Aquapark areas were visited and interviews were made with the entrepreneurs and local governments in Adana, Antalya, Aydın, İstanbul, İzmir and Muğla. The difficulties met during data collection process and landuse studies, are: Sufficient data related to the formation of criteria couldn't be obtained because, there isn't a common criterion concerning what the aquapark activities are, size of the areas of those activities and their service capacities. In addition, during literature researches, data related to the standards of the facilities in an aquapark (length and width of the slides, with which slope they must be constructed, connection height to the tower, etc.) couldn't be acquired. Basic reason of this is; the nonexistence of systematic studies about this subject in our country, direct applications of the foreign aquapark examples in our country and insufficient transmission of data from the related companies.

The methodology of the research is primarily based on the clarification of the concepts as "leisure" and "aquapark". In this respect, the second chapter, explanations concerning the definitions of the concepts; leisure, recreation, play, amusement park, theme park and aquapark. According this definitions, it

was explained that, in which meanings these concepts have been used within the research.

CONCEPTS

The third chapter concentrates on the concept of leisure time and examines development process. Relevantly, leisure service systems and aquapark organizations are examined within the following chapter. The fifth chapter, aquapark examples are considered in the world and Turkey. The sixth chapter, set of locational requirements and design criteria. Consequently, as the thesis topic stresses, İzmir – Bornova will be considered as a case study area where a sample area will be designed.

2.1. The Concept of Leisure

It is very difficult to define leisure and subjective and the definition (Ibrahim, 1996, p.8) While sociology, anthropology, psychology taken into consideration, leisure, racial identity, role of leisure activities (Kraus, 1984, p.10)

The word "leisure" is derived from the Latin word "laxare" which is "to be permitted" or to "let go". In general, leisure is "time-over after work".

Since ancient Greek philosophers, Greek word "leisure" where scientific discussion "school" in English and leisure and education (Kraus, 1984, p.10)

CHAPTER 2

CONCEPTUAL DEFINITIONS AND EXPLANATIONS

While examining "Locational Requirements of Aquaparks and Design Criteria", firstly, the concept "leisure time" was defined briefly. Because Aquapark is one of the uses that come into being, as a result of the reflection of excessive leisure time on entertainment industry. Later, the concept "aquapark" was examined together with the concepts "amusement park" and "theme park".

2.1. The Concept Of Leisure

It is very difficult to define the concept "leisure", because humans' trends are subjective and the definition of leisure differs in different cultures (Cordes, İbrahim, 1996, p.8). While making the definition of leisure, different areas like; sociology, anthropology, economy, psychology and others should certainly be taken into consideration. Furthermore, social status differences, ethnic and racial identity, role of sexuality and generation's trends also affect leisure activities. (Kraus, 1994, p.4)

The word "leisure" comes from the word "licere" in Latin, and its meaning is "to be permitted" or to be free". It is called "loisir" in French and its meaning is "free time". In general, the meaning of leisure is "absence of compulsion" or "time-over after work".

Since ancient Greek times, leisure had always been of interested the philosophers. Greek words "scole" or "skole" means leisure. Scole is the place where scientific discussions had been presented. "Scola" in Latin language, "school" in English and the word "scholar" stresses the relation between leisure and education (Kraus, 1998, p.36).

Many theories related to leisure were developed particularly after Industrial Revolution in 20th century. There are six approaches concerning the definition of leisure:

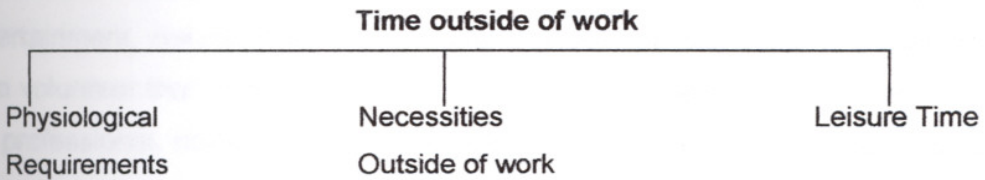
- 1- The Classical View of Leisure,
- 2- Leisure as a Social Class Attribute,
- 3- Leisure as a Free or Discretionary Time,
- 4- Leisure as Activity,
- 5- Leisure as a State of Being,
- 6- Leisure as Spiritual Expression. (Kraus, 1998, p.38)

1- The Classical View of Leisure: According to Aristotle, leisure is, "activity which a person realizes to exist." It is the opposite of working. It includes arts, politics and philosophic discussions. According to the Greeks, the meaning of leisure is "absence of work". According to them leisure is the highest value of life and working is the lowest value. Higher classes do not need to work. They are free to show interest in intellectual, cultural and artistic activities. According to modern philosophers, the sight of Athenians had reduced the value of leisure. (Kraus, 1998, p.38). German philosopher Josef Pieper defines leisure time as a "mental and psychological manner". According to Pieper, leisure time is not the result of external effects. It is the manner of mind, the condition of spirit. (Tezcan, 1997, p.11) According to Grazia, there is no necessity of free time for leisure. Everyone do have a free time but do not have leisure. "It is an ideal, a state of being, a condition of man with few desire and fewer achieve." (Kraus, 1998, p.38) Leisure is a psychological and mental attitude. Leisure provides a moral calmness, contemplation, serenity and freedom. Classical view has given a narrow definition to leisure concept.

2- Leisure as a Symbol of Social Class: The relation between leisure and social class was evaluated by an American sociologist and economy philosopher Thorstein Veblen. Veblen was the first sociologist interested in leisure in America and in 1899, his study "The Theory of Leisure Class" was published. In that study, he had examined different types of idles in bourgeois classes and he found out that, bourgeois classes had existed in ostentatious consumption through social status. Veblen had considered

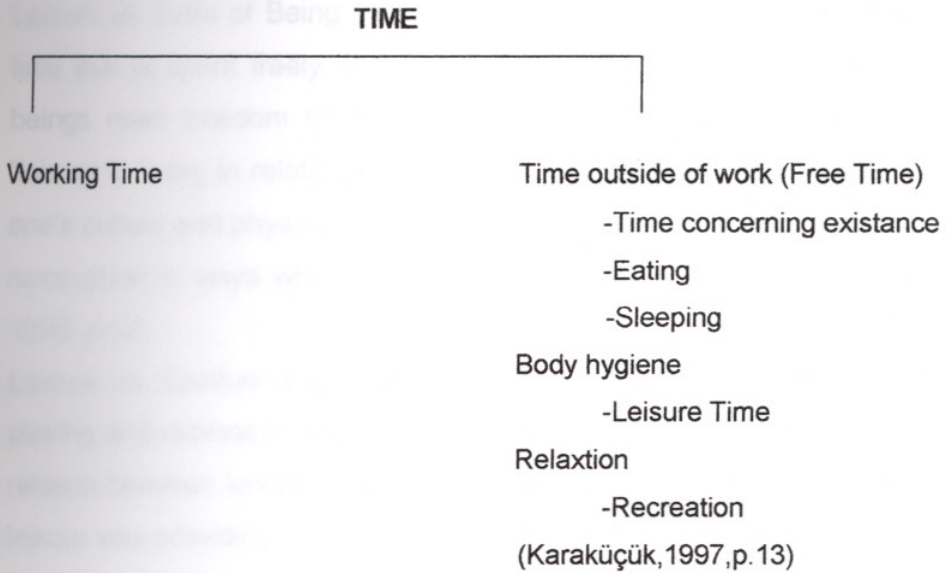
leisure occupation activity as a consumption element and he had discovered the functional relation between consumption and social classification. He had noticed that consumption had not been existed in order to satisfy the biological requirements. He had only stated that there was a consumption for ostentation for determining social status and he had called this as "ostentatious consumption". (Tezcan, 1997, p.15) Currency of Veblen's analysis also continues in today's modern societies.

- 3- Leisure as Unobligated/Discretionary Time: Leisure is defined as unobligated or discretionary time by many philosophers. According to Brightbill, "Leisure is the time beyond, which is required for existence, the things we must do biologically, to stay alive...and subsistence, the things we must do make a living... It is discretionary time, the time to be used according to our own judgement or choice". (<http://www.leisurestudies.uiuc.edu/resources/definitions/time.html>) On the other hand, Kraus has made a classification about "the use of time outside of work".



- A. Physiological Requirements: This time spent for eating, sleeping and body hygiene. If there is a time spent more than required for these activities, it can be transformed into leisure time.
- B. Necessities outside of work: French philosopher Jofree Dumazadier defines these activities as "semi-leisure time". Like houseworks, shopping, tasks in a family, etc. It is very difficult to separate the time we carry out the responsibilities caused by our work, which seems as leisure time, from working time. Like journeys, books concerning the work, meetings, etc.
- C. Leisure Time: This the time that a person gets free from the responsibilities of the others and spends his time for an activity that he would choose (Tezcan, 1993, p.9,10)

Meyer has defined the time outside of work as "free time" in the classification of the "using parts of time." This is expressed as "serbest zaman(free time)" in Turkish.



4- Leisure as Activity: According to the definition of International Leisure Time Examination Group: "Leisure activity is a series of occupation like relaxation, entertainment, development of personal abilities, participation in social life as a volunteer that he takes part in with his free will, after the completion of his professional, domestic and social tasks." (Abadan, 1961, p.3) According to Nash, leisure time consists of four specific activity; passive, emotional, active and creative involvement. (Torkildsen, 1992, p.27). Nash's classification can be seen in detail in fig.1. Reading, visiting museums,

Creative Participation	Model creative (inventor, painter, composer...)
Active participation	Role playing
Emotional participation	Person that admires
Entertainment	To find a means for annoyance, boredom
Hurting or giving harm	Exceeding the limits
Activities towards the society	Guilt, guiltiness

Figure 2.1. Nash's classification (Tezcan, 1993, p.26)

watching a film are passive activities. In Dumazadier's "semi-leisure" definition; activities, that we have to do about our house, family and ourselves, can be realized more amusing.

5- Leisure as State of Being: According to many theories, leisure means; the time that is spent freely without an existence of any compulsion. Human beings need freedom to exist. According to Godbey's leisure definition; "leisure is living in relative freedom from the external compulsive forces of one's culture and physical environment, so as to be able to act from internal compulsion in ways which are pleasing and intuitively worthwhile" (Kraus, 1998, p.42).

6- Leisure as Spiritual Expression: In the beginning of the 20th century, playing and recreation were important. In the studies during that term, the relation between leisure and religion was examined and it was stated that, leisure was providing the connection between an individual and his spiritual emotions. Leisure expresses a different meaning to the ones who believes in Confucianism, Hinduism, Zen Buddhism and Taoism. For them, life is free and harmonious, simple and natural (Kraus, 1998, p.43)

Those six approaches concerning leisure provides different perspectives for a general definition. To conclude, leisure is a piece of time that a person spends according to his own preferences after the completion of his responsibilities. Age, sexuality, education level, interests, environment plays an important role in leisure activities. Leisure provides; relaxation, entertainment, recreation, self-realization, increase in knowledge, development of skills and participation in community life.

2.2. Play, Leisure and Recreation

Play, leisure and recreation concepts are, generally, confused with each other and used in the meaning of one another. English sociologist Parker and Giddens, who are interested in leisure studies, state that the minority in the interest for this subject depends on several reasons. One of them is the conceptual confusion and uncertainty in this subject. For instance; "play", "leisure", "occupation of leisure times" concepts are usually used in the meaning

of one another. Thus, at first, play and recreation concepts should be briefly defined, later relations between play, leisure and recreation should be examined.

2.2.1. Play

It is very difficult to make only one definition for play, because it has many forms and contents. According to Kraus; "Play is a form of attitude. It is motivated with itself and reflected to reality. The basic elements of play are competition, humor, creativity, exploration, problem-solving and mimicry." (Kraus, 1998, p.37) According to German historian Huizinga, play has spread all over the life and play creates a culture. Furthermore, according to the most of the psychologists and anthropologists, play is very important for a healthy development of a person.

Play is very effective for a qualified childhood. It develops spontaneously and it has no objective. It is a free choice and it provides satisfaction. It presents the characteristics of a childhood. Play is an abstraction through the real life. The child organizes a play to understand the people around. He acts as a mother, a father, a soldier, a doctor. He plays these roles in the place, time and scenario which he has determined. Play is a trial, a preparation of the real life (Kiper, 1999, p.12).

The concept of play will be explained better after examining the characteristics that form a play. The first characteristic of a play is willingness. Every play is a willingness activity. It depends on pleasure. Play can be postponed or cancelled at any time. It does not have a haste and a moral base. It is not a task. It is definitely separated from material profit. It has the feature of as simulating the player. Every play has its own rules. These rules are absolute and undiscussible (Kiper, 1999, p.11)

2.2.2. Recreation

The concept of Recreation has started to develop during 19th and 20th centuries in England and U.S.A recreation comes from the Latin word "recreatio" and its meaning is "restoration" or "refresh". The Turkish equivalent of recreation is "relaxation". Historically, recreation has been defined as; "recreation is the group of activities that are done willingly to rest and recreate oneself after a necessary work and activity." (Kraus, 1998, p.46). Classical definition of recreation includes socially positive and creative activities. It expresses physiological and spiritual recreation of an individual. However, today, the amount of time spent of its forms (like gambling) should be reconsidered. It can be physically and economically harmful (Kraus, 1998, p.3).

In modern meaning recreation is a social institution and it is a professional study area. Recreation is the group of activities that are done willingly, where the person is individually satisfied. Recreation has many functions. It provides relaxation. It encourages social, cultural, intellectual and creative developments individually or in groups (Williams, 1995, p.4).

2.2.3. Relation Between Play, Leisure and Recreation

Leisure gives an opportunity to a play and recreation. Play and recreation are done willingly during leisure times. Play and recreation shows a trend of being over one another, however, they are not identical. The relation between those three concepts are mentioned below:

- Play occurs during working or leisure times. Recreation only occurs during leisure (Kraus, 1998, p.54).
- Freedom: Play is the way of free expression, recreation is an independent choice and leisure is the preference of freedom (Torkildsen, 1992, p.118).
- Self-expression: Three of them are the way of individual expression (Torkildsen, 1992, p.118).
- Self-initiated: Play, generally accepts self-initiation. On contrary, recreation can be directed by another. (Torkildsen, 1992, p.118).

- Absence of necessity: External pressure is prevented in a play. There is no necessity in leisure and recreation, nevertheless, there can be certain responsibilities to the institution where the connection has been supplied during recreation (Torkildsen, 1992, p.118).
- Playfulness: Play is a serious and intensive playfulness. Recreation is also a playfulness, but most of its elements depend on production and it is competitive. Recreation mostly seems like working. Leisure is more free and comfortable. Thus, it presents a playfulness (Torkildsen, 1992, p.118).
- Recreation includes several forms of a play, but it also includes the activities like travelling, reading, visiting museums and other cultural and intellectual activities (Kraus, 1998, p.54).
- Recreation is generally a creative activity when supported by society and it is accepted as goal-oriented. On the other hand, play can either be goal-oriented or not. Play has a rich creativity (Kraus, 1998, p.54)
- Recreation is a greater social responsibility than leisure. It concerns social affluence and "therapeutic recreation" can be given as an example for that (Torkildsen, 1992, p.118)

2.3. The Concept of Amusement Park, Theme Park and Aquapark

In leisure times, people want to get rid of the environmental pressure, to rest and enjoy to themselves. The examination subject aquapark is an entertainment alternative preferred implementation process of aquapark approach in the cities, because of their easy accessibility and they provide individual or group entertainment possibilities.

Amusement park, theme park and aquapark are interrelated concepts. Historical process helps us to make this relation. The origin of amusement park depends on the pleasure gardens in Middle Ages. These gardens forerunner of today's amusement parks. Amusement park had its golden term in 1898 Chicago fair. In 1950, television, urban decay, desegregation and suburban growth negatively affected the amusement park. Amusement parks were needed new concept and this was concept Disneyland. The success of

Disneyland is also a beginning of theme park ages. In 1989, two aquaparks were located in Disneyland.

2.3.1. Amusement Park

Amusement term is related to leisure and recreation. For this reason, firstly, amusement term is explained. The meaning of the term amusement in dictionaries is: "the process of getting pleasure and enjoyment from being entertained or from spending time doing something interesting" (Collins 1997, p.46). Aristotle, one of the leading philosophers of ancient Greece, suggested that leisure can be classified into three overlapping categories: contemplation, recreation and amusement. (fig. 2.2) According to Aristotle, contemplation is core of the philosophical thinking. "Contemplation is the act of considering something with attention. Recreation is the active, participatory aspect of leisure. Amusement is passive reception on the part of audience or spectators" (Cordes, Ibrahim,1996,p.11).

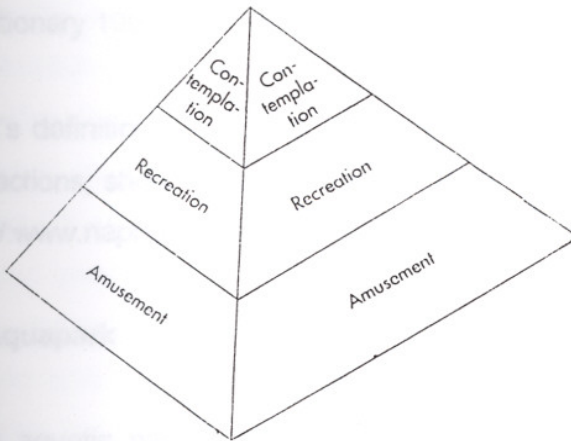


Figure 2.2. Three levels of leisure (Cordes, Ibrahim,1996,p.12)

Amusement park can be expressed as "wonderland", "dreamland" or in Turkish "lunapark". According to the Wilson, amusement park is; "the park provided an artificial distraction from an artificial life, placing the mechanical qualities of everyday life in a more exciting context" (Wilson, 1994, p.9). According to the NAPHA (National Amusement Park Historical Association)

amusement is “an entertainment facility featuring rides, games and sometimes shows” (<http://www.napha.org/history.html>)

2.3.2. Theme park

Theme parks provide the entertainment of people during their leisure times, and, moreover, to develop their culture. Theme parks are isolated from their natural environment and they need an original landscape. Wylson touches on the following characteristics in his theme park definition: “Theme parks are based on scientific, cultural and historical subjects move toward the role of a museum, but animate the subjects by stimulating original artefact. This is achieved by the use of audio-visual presentations and interactive devices.” (Wylson, 1994, p.38)

The meaning of theme park in dictionaries is: “a type of park where you can have fun riding on big machines such as roller coaster and big wheel, but where the whole park is based on one subject such as water or space travel” (Longman Dictionary 1995, p.1494) .

NAPHA’s definition about theme park is: “an amusement park in which the rides, attractions, shows and buildings revolve a central theme or group of themes” (<http://www.napha.org/history.html>).

2.3.3. Aquapark

Today’s aquatic parks can be seen in the great public baths of the mediterranean civilizations. Historically, many houses did not have private bathrooms, so bathing facilities became important community centres. In the Roman World, hot baths were also important architecturally. The simple rectangular pool typical in ancient times has transfigured into swimming pools of various sizes and shapes, with slides, diving boards jets, wave and bubble-producing machines, walkways, play areas, and even small islands. (Cerver 1997, p.141) Aquapark facilities are equipped with the fullest range of leisure-pool amenities, and are designed to attract families and visitors all ages. (Foster

1999, p.63) Aquaparks are covered constructions in the countries having cold climate, like Northern Europe. Open-air aquaparks are used according to the climate conditions in Northern Europe and America.

In recent years, amusement parks have become an investment market in America. These areas should be attractive and should cover the running-cost of the establishment. The existence of the establishment depends on the commercial viability. Amusement park, theme park and aquapark uses can also be supported by a hotel use. These landuses can be clean, organized, within protected and controlled zones, where non-competitive activities exist with the assurance of security. They also include food and merchandising facilities. The use of saunas as a healthy activity has spread with aquaparks.

2.4. Evaluation

In this chapter, firstly, the concept "leisure time" was defined. Because aquapark is one of the uses that come into being is a result of reflection of excessive leisure time on entertainment industry. Leisure is piece of time that a person spends according to his own preferences after the completion of his responsibilities. Play, leisure and recreation concepts are confused, for that reason these terms concepts are defined. Play creates a culture. Play is abstraction of real life and it is very important for a healthy development of a person. Recreation meaning is "restoration" or "refresh". Person is individually satisfied and recreation provides relaxation. Amusement park, theme park and aquapark are interrelated concepts. Historical process helps us to make this relation. Amusement park is an entertainment facility featuring rides, games and sometimes shows. Theme parks are based on scientific, cultural and historical subjects. People can have fun riding on big machines such as roller coaster and big wheel. Aquapark facilities are swimming pools of various sizes and shapes, with slides, diving boards jets, wave and bubble-producing machines, walkways, play areas. Its designed to attract families and visitors all ages. Amusement parks, theme parks and aquaparks are rapidly getting widespread among the entertainment areas.

CHAPTER 3

DEVELOPMENT PROCESS OF LEISURE

As an examination subject, "aquapark" is an entertainment alternative occurred in the end of 20th century. Examination of the variation stages of leisure through the historical process is necessary for the evaluation of entertainment alternatives in modern societies. Thus, the effects of government, religion, education and economic structures of different societies on leisure, is studied in this chapter.

Variation process of Leisure from primitive societies until today can be explained in three stages:

- Early History of Leisure
- Industrial Revolution and Early Twentieth Century
- Modern Era

Therefore, situations, that brought out "aquapark" use, are tried to be defined more clearly.

3.1. Early History Of Leisure

Early history includes the term from the innovation of writing upto Industrial Revolution. In this part, the role of leisure in a society is tried to be studied in primitive societies of Middle Age and Renaissance terms. Religion and social classes are the most important factors that affect leisure activities during that term. Through Middle Age, Catholic Church had exalted working and declared that idleness was a sin. On the other hand, through Renaissance term the effects of Protestant Church had continued till the Revolution. However, in that term, studies were made concerning the role of play in children's education.

3.1.1. Leisure Of Early Societies

In primitive (primitive refer to tribal, pretechnological) societies, work and leisure had not been separated definitely. Work has a ceremonious characteristic during reaping, building, hunting and husbandry. (Tezcan, 1997, p.47) Resting time was a respectful tradition during working. Religious festivals had come into existence with work and play. Recreation and leisure activities were available for every member of the society. Shamans and doctors were free from ordinary works and they had undertaken society's incantation or religious ceremonies. (Encyclopedia of Social Sciences, p.248. Vol.9-10)

In agricultural societies working hours were depending on the seasons. Working was a kind of natural rhythm. Resting times were ending with songs, plays and ceremonies. During a year, holidays were depending on the religion. Thus, ceremonies through the celebrations were very important, because their basis were religion. (Encyclopedia of Social Science, 1934, p.249. Vol.9-10)

Leisure had been belonged to privileged classes since the first civilizations. According to the history, the most important information about the first civilizations has belonged to Assyrian, Babylonian and Egyptian civilizations founded in Middle East. Social classification were done according to the hierarchy of wealth power.(Kraus, 1994, p.25). Egyptian, Assyrian and Babylonian civilizations had included many leisure activities, but those activities had belonged to the upper classes like aristocrats, soldiers and the leaders of the religion. Their entertainment activities were; horse-races, wrestling, boxing, dancing, music, dramas, hunting. In the properties and gardens of the ancient Assyria and Babylon kings, there are geometrically desinged animal and plant gardens. For instance, Hanging Gardens in Babylon is the 7. Wonder of the World. (Torkildsen, 1992, p.16)

Leisure and Ancient Greeks : Discussions about working and after working times had firstly occurred in Ancient Greek civilization. In that term, upper classes had spent their whole time for thinking and discussing. According to them, intellectual discussion was the only thing to do. That had reflected on urban space as "forum" . (Demirkan, 1978, p.10) Generally, soldiers, athletes, philosophers and statesmen were interested in pleasing and comfortable parts of life. There were limited rights and prestiges of artisans, farmers and trade people. Worker class had consisted of slaves and foreigners. 70 days of a year were being passed with education and religious festivals. In the Ancient Greek Cities gardens, open theatres, sports areas, baths and stadiums were the widespread urban uses. Thoughts of Athenian philosophers about leisure and play were also effective in the following terms. According to them, play was very important for the healthy, physical and social growth of children starting the education of a child with sports was a right method. Music and dancing were important for the growth of youngmen. (Kraus, 1998, p.166). According to Aristotle, leisure is the basis of happiness. "Both working and entertainment are necessary, but entertainment is better than working."

Leisure in Ancient Rome : The Rome Empire had been founded in B.C. 27 and had continued until its division in A.D.395. (Torkildsen, 1992, p.19) Economy of Roma had depended on export food, slave workers and salaried soldiers. (Kraus, 1994, p.26) In Ancient Rome, success of the soldiers and conquests were the factors that increased the abundance. Romans were always ready for defense and war. They were joining in sports and gymnastics activities to protect their physical power and psychological bravery. (Kraus, 1998, p.168)

During Emperor Claudius term, 159 days in a year were public holiday and 93 days of this period were being passed with plays and festivals. (Kraus, 1998, p.168) Baths, amphitheatres and arenas were built for public use. There were 800 public baths in Rome and would be use free or with a little fee. (Torkildsen, p.18,1992)

Corruption of Entertainment : Continuous demand to inexpensive grain and the poor class created by slave workers, had caused working class to live weakly. (Kraus, 1994, p.26) Emperors and senate had organised great performances, circuses and feasts in order to continue their political popularity and to calm the annoyance of those classes. Collesium was constructed in A.D. 80 with a capacity of 60.000 audience. In Ancient Rome, recreaiton activities and services had provided great revenues. In this term, leisure consumption was greater than leisure participation. (Torkildsen, 1992, p.19) Leisure had taken a different form in Rome. Leisure had become a political instrument that provided the continuity of the Rome Empire with entertaining and calming the people. There were no philosophical ideals of Romans like Greeks. The chracteristic of Roman plays was the fights of the gladiators ending with death. Furthermore, there were water battles in the artificial lakes built in arenas. Fights of wild animals, like lions and elephants, were being presented. Animals and people were being injured and relentlessly killed. The audiences were talking lewdly and obscenely. Thus, the meaning of "Roman holidays" was used in the meaning of "wild and corrupting celebrations". (Kraus, 1998, p.169-170) The Rome Empire, that had conquered Europe, Middle East and North Africa, had started to disintegrate during 3. And 4. centuries. According to many historians, the most important reason of that was, badly applied and decadent leisure approach. The citizens were physically weak and psychologically depressed.

3.1.2. Middle Ages

The Middle Ages is accepted as the period between the division of the Rome Empire (A.D.395) and the year 1453. Rome had been the central authority of western world for more than 400 years. By the disintegration of the Rome Empire (A.D.476) feudal system had prevailed. Life was very boring for the citizens except the fairs and sacred days. (Cordes, İbrahim, 1996, p.27) "During the feudal term, there was no freedom and laziness ights of agricultural slaves. Agricultural slaves

could be purchased and sold with the land as a commercial activity". (Önder, 1997, p.75)

The term between the years 400 – 1000 is named as "Dark Ages" because of the sovereignty of the Catholic Church. Working, except workship and religious ceremonies, were commended and unemployment was accepted as a sin. Theatre, secular music, arts, dancing, gambling and sports activities were forbidden. (Kraus, 1994, p.27) Chess, checkers, backgammon and dic were the first forms of the plays that played inside chateaus and castles. The most important entertainments of the citizens between two wars were hunting and hawking. Pleasure gardens were begun to occur on the outskirts of European cities. Those gardens are the vanguards of amusement parks, featuring live entertainment, fireworks, dancing, games and even primitive amusement rides. (www.napha.org/history.htm/). The artist Pieter Breughel had created, painting the illustrations of famous children plays. Thus, he had provided the spreading of popular recreation during the Middle Ages. (Cordes, İbrahim, 1996, p.172)

3.1.3. Renaissance

The Renaissance had spread in A.D. 1350 through Italy, in 1450 through France and in 1500 through England. It is the transition term between Middle Ages and New Ages. (Kraus, 1998, p.172) The awakening in science, philosophy and art had ended the Middle Ages. The meaning of renaissance is reborn, awakening. Socio – economically, it reflects the foundation of bourgeois society with the disintegration of feudal society in Europe. Strengthened bourgeois class had provided the acceptance of Protestantism instead of Roman Church which was support of feudalism. Thus, bourgeois capitalism had begun. (Hançerlioğlu, 1993, Vol.5, p.342) There was an improvement in science, medicine, mathematics, astronomy and philosophy areas during Renaissance. The power of the church had reached the maximum level during Renaissance. Churches had been reconstructed like the cathedrals. As a result of the pressure of the protestantism,

businessmen and the government had reduced the holidays. (Kraus, 1994, p.27) Concerning the protestantism ethic, Weber States; "Waste of time is thus the first and in principle the deadliest of sins. The span of human life is infinitely short and precious to make sure of one's own election. Loss of time through sociability, idle talk, luxury, even more sleep than is necessary to health... is worthy of absolute moral condemnation." (Urry, 1995, p.5)

English Puritans* had waged against the limitation of sports activities and other entertainment forms during the 16. and 18. centuries. (Kraus, 1998, p.174) The society had also wanted to increase the period of leisure. Guilds of merchants and artisans, had become the recreation centre of their members. The fairs were apparently commercial, but they were holding entertainment activities in these fairs. There was a great participation in wrestling, stage shows and acrobatics displays. Pleasure gardens, that had occurred in Middle Ages, had continued their popularity until 1700s. Political confusion that had appeared after that term had caused the closing of many of those parks.

Different forms of plays had become a part of education during Renaissance. Thoughts of Athenian philosophers, about the importance of play as well as education, had affected the educators like; Francois Rabelais, John Locke and Jean Jacques Rousseau. (Kraus, 1998, p.173 – 174).

3.2. Industrial Revolution And Early Twentieth Century

Industrial revolution has begun in England at the end of 18th century, and particularly, it has realized in the 19th century. It is the product of mechanisation. (Hançerlioğlu, 1993, volume:3, p.88) Integration of science and capital has

*Puritan: A member of the religious sect occurred in England during Queen Elizabeth term, particularly, which was a partisan simplicity in worship.

increased the production and new machines have been innovated with the investments. Throughout the 19th century, important social changes have been realized in Europe and America.

In this term, growth of democratization, advance in scientific informations and migration from Europe to the New World are very important. Furthermore, the most important effect in human life is the accessibility of leisure and recreation by everone in the beginning of the 20th century and the expansion of recreation trend through America and Canada (Kraus, 1998, p.186).

3.2.1. Effect Of Industrial Revolution

By the effects of industrial revolution, millions of immigrants have come to America from Europe. The population became 23 million in 1850, though it was 12.5 million in 1829. In 1850, 85 % of the population was formed by the people migrated from rural areas (Kraus, 1998, p.186). The immigrants that consist of large families have lived in single-room residences with insufficient conditions.

In the beginning and middle term of the industrial revolution, working was accepted as the basic source of the moral and social values and the theologians have made preaches about that subject. In the Protestant nations of Northern Europe, particularly, in Great Britain business establishments and other influential groups had made effort to control leisure in lower classes. Protestant churches have blamed commercial amusement; "the door all the sinks of iniquity" (Kraus, 1994, p.40).

In the 19th century, factory system had developed. Working hours had been determined by the central authority of the factory (Kraus, 1994, p.19). Working hours in France and England were 12 hours a day in 1700s and 14-18 hours in 1800s (Kraus, 1998, p.187). Working hours had reached the maximum level in the first half of 19th century. Most of the workers were affected by those long working

hours and working programme. However, this caused chronic fatigues, illnesses, separations in families and instable social structures in the societies (Kraus, 1998, p.38-39). According to the acts concerning the limitation of working hours; it was decreased to 10 hours in 1847, 9 hours in 1869-1873 and 8 hours since 1919 in European cities. (Kraus, 1998, p.187). In the first half of 19th century, industrial revolution has spread to the other cities. Realization of free public education and giving importance to health in many cities have increased life expectations. Industrial revolution had provided the development of middle class and their life standards have increased. Between the years 1880 and 1890, leaders of the church have realized that they could not reproach the plays for a long time. Thus, commercial amusement began to spread.

3.2.1.1. Growth Of Commercial Amusement

Throughout the 19th century, particularly in greater cities, new forms of commercial amusement have begun to develop. Theatres have reached to whole people. Museums, dancing halls, bowling alleys, beer gardens and saloons were the entertainments provided to the new world. Amusement parks began to develop in the cities and on the skirts of the towns. Through the following days of American civil war (1861-1865) electric trolley companies had come into being. Trolley-ways were constructed. At the beginning, amusement parks were made up of picnic facility, dance-hall, restaurant and slides located nearby rivers or lakes.

Amusement park had entered its golden term in Chicago with the participation of Ferris wheel to world's Colombian Exposition in 1893. The Ferris wheel was designed by George Washington Gale Ferris. "Ferris contracted the construction of the Ferris wheel to a dozen steel companies, since it was so large that no steel company could produce. The first Ferris wheel stood 264 feet high, had 36 pendulum cars which carried 60 passengers each, weighted 1200 tons and was operated by two 1000 horsepaser engines". (<http://www.funguide.com>).

In 1898, a picnic ground began to transform into one of the greatest amusement park grew on the New Jersey Palisades overlooking the Hudson River. (It was closed in 1971 and 300 million people had visited the place until this time.)

Amusement park industry has been rapidly growing. Coney Island that was opened in New York, in 1895, is the center of this industry. (www.napha.org/history.html)

Amusement park includes various activities; parachute jumps, open-air theatres, band concessionaire bicycle races, freak shows and shooting galleries. Furthermore, roller-coaster, fun houses and midget-car tracks are very popular (Kraus, 1998, p.192). In this term, pressure on the decrease of working hours have increased. Most of the Americans were living in cities, traditional social activities were left in the past and they could not have chance for plays. There was a requirement for recreation organizations that every social class could benefit. According to Benjamin Hunnicutt, decreasing the working hours was the most critical subject of the political reform that had continued till the Great Depression: "It was an issue for the idealistic antebellum (pre-Civil War) reforms. It had a prominent place in the populists' Omaha platform and appeared in both the Democratic and Republican platforms as late as 1932." (Kraus, 1998,p.192).

3.2.1.2. Beginning Of The Recreational Movement

The meaning of recreational movement defines the various activities organized by the social agencies, government and voluntary, organizations. There exist four different trends in the development of recreation approach:

1-Adult Education Movement: In the 19th century, adult education movement has appeared in order to educate the adults continuously and intellectually. Working days were shortened for the workers in France. There were courses and municipal

libraries were established in America. Exhibitions were presented and art trainings were held in the schools (Kraus, 1998, p.194-195).

2-Development Of National, State And Municipal Parks: The term concerning the conservation of cultural inheritance in America has started with the increase of industrialization in 19th century and the plundering of natural resources. The first aim of the Natural Park is to conserve the national natural inheritance and wild life. State Park deals with the conservation of forests and wild life. Municipal Park; North America municipal parks have left behind Europe, because there is not any aristocrat class in America. Central Park, established in 1850 in New York, (designer Frederick Low Olmsted) has influenced the other great cities by its design and philosophy (Kraus, 1998, p.195). County Park provides regional possibilities and resources for the utilisation of leisure times (Tezcan, 1993, p.189)

3- Voluntary Organizations: Throughout the 19th century, voluntary organizations have played an important role in the provision of recreation services. In 1851 Young Men's Christian Association and 15 years later Young Women's Association has been founded. Many nonprofit youth organizations have been founded in national and local levels. This is very important for the adaptation process of immigrants' children to American values, traditions and life style (Kraus, 1998, p.197).

4- Playground Movement: Migration to the New World has caused a rapid increase in population and people began to live in insufficient conditions. There were not enough places for the children of poor worker class to play in security. The term between the years 1880-1890 is very important for the development of recreation and park programmes and for the provision of playground requirements.

3.2.1.3. The Theories About Leisure In Nineteenth Century

In 1883, a brochure of Paul Lafargue named "Laziness Rights" was published. During this term employees were being worked too much. Lafargue has argued against these hard working conditions and advocated leisure. Rousseau also mentioned about leisure rights. He states in one of his writings that: "It is deplorable, if a person does not have another time except the one he spends to earn his bread: He should also have time to eat his bread" (Tezcan, 1993, p.14).

According to Karl Marx working, religion and the power of the state is under pressure in capitalist systems. Leisure has been produced by the privileged classes. According to Marx's theory, people should utilize their valuable times when they are free, with education and culture, thus, they could escape from the limitative control of capitalist system (Kraus, 1998, p.193). In addition, Lefebvre has stated that spare time did not form a danger for class struggle and it was a positive reality of modern life.

Thorstein Veblen is the first sociologist interested in leisure, in USA. In 1899, his work "The theory of Leisure Class" was published. In this study, he has examined different kinds of idles among the bourgeois classes and he found out that bourgeois had been in ostentation consumption.

3.2.2. Early Twentieth Century

At the beginning of the 20th century, recreation and park approaches have accelerated. In that term, leaders of recreation and park approaches; Joseph Lee, Jane Adams and Halsey Gulick have determined the importance of recreation and parks in social life. Between the years 1920 and 1930 two different opinions have appeared concerning leisure:

1. Leisure is accepted as a social danger. Use of free time enables bad habits, inebriation and negative forms of play.
2. Leisure is a person's expression form of himself. It provides a cultural and artistic development (Kraus, 1998, p.378)

At the same time, demands of workers about the decrease of weekly working hours and the increase of free times, still continues. In this framework, International Worker Organization held the first conference where about the leisure of workers in 1924. In this conference where 300 delegates from 18 countries have participated, opinions of; gradually decreasing working times and existence of more organized leisure, have mostly been discussed.

Through the term, following the 1st World War, public participation in recreation activities have increased. Camping, sightseeing, and various outdoor plays have become popular for families. In 1920, popular culture has accelerated with "Jazz Age" term, professional sports, cinema films, radio, dancing and music have aroused people's interest.

Great Depression in 1930 had affected the whole world. In U.S.A., 15 million people had been unemployed in 1932. Federal Government had prepared many study programs about recreation in order to deal with Depression problem. Civil Works Administration Agency had provided job opportunities for 4 million people in 30 days. Federal government had spent \$1.5 billion for camps, buildings, picnic grounds, trails, swimming pools and other facilities between in years 1932 – 1937. (Kraus, 1998, p.212-213) This depression had a positive compulsive effect for the recreation movement. In the beginning of 1940s, organized recreation services had entered the Americans' life.

3.3. Leisure in Modern Era

New entertainment alternatives had occurred by the effect of technological developments. In this term, recreation, park and leisure services of nonprofit

3.3.2. The theories of Leisure in Modern Era

David Reisman published his study named as "The Lonely Crowd". He urged that people were in mass production in the state of mass production and mass consumption therefore they were administrated by the others. (Tezcan, 1993, p.17)

In the 1950s, Situationist International Movement had started an attack against the ideology, values, institutions of capitalist populations. In Situationist's uniter city working would be removed and the city would be transformed into a amusement park area. (Turhanlı, 1999, p.45-47)

Bernard Russell examined the meaning of the concept idleness in modern term in this book "Praise to Idleness" published in 1965. He emphasized that the happies time of worker is the time out of work. According to the Russell working is being unless it develops the skill. (Aydoğan, 1998, p.38-39)

3.4. Evaluation

Leisure historical process is examination from primitive societies until today. It is explained three stages; early history of leisure, industrial revolution and modern era. The role of leisure in a society is tried to be studied in primitive societies of Middle Age and Renaissance terms. The origin of amusement park depends on the pleasure gardens in Middle Ages. These gardens forrunner of today's amusement parks. Particularly with the industrial revolution, sharpenning the differentiation of the work and life conditions influenced the entertainment comprehension. In 19th century, new forms of amusement have begun to develop in the cities and on the skirts of the towns. In 1950, television, urban decay, desegration negatively affected the amusement parks. In 1955, Disneyland was opened and Disneyland is also beginning theme park ages. After 1980, the increase in the number workers in a house has decreased the time of holidays that a family has. For that reason, the examination subject aquapark is an

entertainment alternative preferred implementation process of aquapark approach in the cities, because of their easy accessibility and they provide individual or group entertainment possibilities.

After the 1970s, the importance of leisure activities has been seen in the history of the world. During this period, people began to develop, particularly in the social life had private agencies.

In this context, the USA and Turkey were. Moreover, USA aquaparks exist and obtained.

In our country, is not enough studies in the planning system, in

4.1. Government

The government the basic leisure services of organizations. The government in fe

CHAPTER 4

LEISURE SERVICE SYSTEM AND ORGANIZATION

After the World War II, the time of Leisure had increased and this can be seen in the historical development of leisure studied in the previous chapter. During this term, Leisure Service Systems and Organizations had begun to develop, particularly in USA. Towards the end of 20th century, dynamic structure of social life had provided more flexible and client-oriented development of service agencies.

In this chapter, leisure service systems and organizations in USA, Canada and Turkey were examined. USA is the leader in the entertainment sector. Moreover, USA and Canada are the countries where, organizations concerning aquaparks exist and necessary information about these organizations can be obtained.

In our country, necessary importance is not given to leisure services. There is not enough studies concerning the "occupation of leisure" in the context of planning system, in our country.

4.1. Government's Role

The government, recreation and park agencies are responsible for providing the basic leisure services. Recreation opportunities developed with the other types of organizations. There are programs and facilities of leisure – service agency of the government in federal, state and local levels.

4.1.1. Federal Government

It is responsible for the management of outdoor-recreation resources. Institutions like; National Park Service, U.S. Forest Service, Bureau of Land Management, Fish and Wildlife Service and Tennessee Valley Authority provide outdoor recreation activities that the local political units are supported in financial way. They make technical assistance to the programs related to the children, youngmen; disable, elder and similar groups. Because of the budget limitation in recent years, there became a decrease in land-management operations and also conservation pressure related to this. (Kraus, 1998,p.276)

4.1.2. State Government

They are responsible for managing Major Park Systems, providing the conservation of environment and providing outdoor recreation opportunities. State government puts some standards, laws and defines the roles of the local government in recreation and park areas.

Many states developed standards concerning healthy and safety recreation and park area.. State departments regularly control the resort camps to provide security, facility standards, recreation resource for disabled persons, and to bring obligations to commercial amusement.(inspections,1998,p.259, Kraus)

4.1.3. Local Government

Most of the sponsors, in the recreation and park programs of the government are at local level. There are government's agencies in cities, towns, countries and private regions. Local government is open for public use. They hold meetings in order to learn the recreational requirements of public.(Tezcan, 1993,p.263)

Municipal Recreation and Park Management: Municipalities are the local politic units of the government. They are responsible for providing the social services in villages, towns and cities, like; street maintenance, police, fire protection and education. They are authorized to provide community services. Municipal recreation and park agencies had developed rapidly in the following term of World War II. Municipal recreation and park departments manage the activity programs in different categories. Games and sports, aquatics, outdoor and nature oriented programs, arts and crafts, special services, special programs, hobby groups and other playground and community center activities.

As a result of the increasing interest to fitness programs, municipalities organize programs concerning healty, fitness and sports. Related to that program, aquatic facilities were built in many cities and regional recreation parts. In the other cities, park agencys built water-play parks.(Kraus,1998,p.268)

4.2. Voluntary, Nonprofit, Commercial and Private Membership Organizations

The development of U.S. recreation opportunities, has also developed the other type of organizations. In this part, three types of leisure-service sponsors are defined:

1. Voluntary nonprofit organizations
2. Commercial recreation business
3. Private membership organizations.

4.2.1. Voluntary Nonprofit Organizations

Voluntary agencies play an important role in leisure activities. They don't persue a profit aim and don't have official relation with the state. Financial resources are supplied with the helps of members and official institutions. They can

also have religious aims. They are not controlled by the government.(Tezcan, 1993, p.188)

In the recent years, many voluntary organizations have accepted financial support of the government for special project. Part of the leaders of voluntary organizations are professional and part of them are volunteers.(Kraus,1998,p.260)

Participation of nonprofit agencies in recreation and leisure programs generally happen in U.S. and Canada. Nonprofit organizations are different than governmental organizations. In addition to the recreational goals of voluntary and special-interest organizations, there are social goals. At the same time, they also service to different group members that were categorized as age, religion or demographic character. If we examine the subject in organization way, we can see that, their goals and objectives are more flexible and changeable. According to finance, they are less reliable than the state. Voluntary agency are dependent on the fees and the dues of the members. Voluntary agencies are generally responsible for local requirements.(Kraus,1998, p.292)

4.2.2. Commercial Recreational Business

Canadian and U.S. commercial recreation provides and extensive recreation service to the community, like; travel, tourism, outdoor recreations, sports, popular entertainment, mass media communication, hobbies, crafts and toys. Their initial aim is to gain profit and includes different operations. Here, we can give Walt Disney organizations as an example with its theme parks, resorts, TV, movie and popular music components. Commercial organizations present qualified programs in entertainment industry. In recent years, the number of these kind of organizations are rapidly increasing. These organizations include health and fitness clubs, theme park, hotel and casino businesses, manufacturers of games, toys, hobby equipment and various entertainment ventures.(Kraus,1998,p.293)

Theme parks and Entertainment Complexes: Growth in tourism is related with the development of theme parks. Theme park is a form of recreation like Disneyland Park in California. The investment cost of this big entertainment complex is over 50 million \$ and it covers an area of 65 acre. Many entertainment entrepreneurs follow that Disney sample and in the end of 1976, three dozen parks were built around U.S. in the same scale. Adventure Island Waterpark is another unusual facility opened in 1980, in Florida-Tampa.(Kraus,1998,p.298)

4.2.3. Private Membership Organizations

Private Membership Association include the groups that the members of county clubs, yacht clubs and other social organization business members form. Today, U.S. example is a rapidly growing trend. The difference of private membership organization from commercial recreation business is; the use of their programs and facilities are limited by their members. (Kraus,1998,p.310) Many private membership clubs depend on outdoor recreation like; hunting, fishing, skiing and family camping.(Kraus,1994,p343) They don't pursue profit aim.

4.3. Aquapark Organizations

In this part, organizations that make studies concerning aquaparks, their foundation objectives and their service provisions are examined. These are examined in three parts: governmental, voluntary and commercial organizations. All of those data were obtained through Internet researches.

4.3.1. Government Organization

CPSC (Consumer Product Safety Commission): U.S. Consumer Product Safety Commission is an independent institution from the Federal Regulatory Agency. It was founded in 1972 at Consumer Product Safety Act Congress. Its

mission is to protect the consumers against the unreasonable injuries and danger of death in consumer products.

The CPSC staff engages in the following activities to foster amusement ride safety:

Commission investigators, state and local ride officials work in order to form the necessary safety informations by classifying ride incidents.

They work on voluntary safety standards for mobile amusement rides through the Council for Amusement & Recreational Equipment Safety (CARES), the National Association of Amusement Ride Safety Officials (NAARSO), the Outdoor Amusement Business Association (OABA), and Amusement Industry Manufacturers & Suppliers International, Ltd. (AIMS International, Ltd.).

They develop technical expertise for mobile amusement rides.

Most commission investigations are in response to mobile ride incidents. Complaints of the consumers are sent to the state officials. Technical staff evaluates them and take appropriate follow-up action.

They help the individual states to form their own acts.

They provide information to their amusement ride members with the help of the media, state and local officials. CPSC consumer complaints can also be sent by telephone, fax and internet..

<http://www.cpsc.gov>

4.3.2. Voluntary Organization

EWA (European Waterpark Association)

EWA members must meet high quality standards with regards to equipment, facilities and decoration. Quality standard is an important criterion in EWA membership. Safety standards and safety system being developed in cooperation with the German TUV association. Members ensure that their facilities are the latest scientific findings on safety and corresponded safety rules. EWA delivers recommendations and sets up standard types of contracts, so as to prevent their

members from committing any infringement to legal or statutory regulations. In each waterpark, there is a special communication system to interfere the accidents caused by construction or maintenance activities.

In order to follow people's habits, EWA continues its connections with other investigation institutions, thus, it defines business policies concerning leisure and waterparks. EWA informs its customers about new attractions. It holds conferences for this aim and sends publications to the members, regularly. EWA and WWA (World Waterpark Association) work together, update and share their knowledges and spread around the world. Thus, workshops, training seminars, national exhibitions and international training trips are organized for this purpose.

(<http://www.waterpark.de/info/mitgiled-objectives.html>)

IAAPA (International Association of Amusement Parks and Attractions)

IAAPA is a voluntary organization and works together with many voluntary institutions. They have 5000 members in 8 countries over the world. They work for providing their members' interests and goals with the highest level.

The responsibilities of the IAAPA members are:

1. To provide safety, healthy recreation for everyone.
2. To provide joyful time for children and young people during their recreation times.
3. To behave the customers like their guests and to be courteous.
4. To give an ideal service is the fundamental mission of the association.

Exhibitions, Conventions and Meeting Services : IAAPA conferences, trade shows and meetings are the places where amusement and work can be realized together. In every November, IAAPA members, participate in the widest exhibition on the world. Successful, well-educated and experienced professionals educate the visitors about the trends that affect theme parks, amusement parks, waterparks,

family entertainment centers. This activity is the only opportunity for the members holding IAAPA's exhibitions, for showing the current trends to thousands of consumers about new equipments, food, technology and entertainment. IAAPA provides dozens of workshops, personnel training, legal issues, financial management and food services to the members. The annual trade show and educational conference is held especially for the Asian market. The 2000 Show will be held at the Hong Kong Convention and Exhibition Centre in Hong Kong from July 12 to 14, in 2000.

Government Relations : IAAPA pays attention for giving safeguard to the members by the government. To protect their members' interests, IAAPA sends representatives to visit with government officials around the globe to promote the industry and assist in influencing laws and regulations affecting the amusement industry. IAAPA representatives meet regularly with members of the U.S. Congress and federal agency officials to communicate their concerns regarding such issues as the American with Disabilities Act, minimum wage and other labor issues, safety issues and standards. (<http://www.iaapa.org>)

4.3.3. Commercial Organizations

Whitewater West Company

Whitewater West expertise includes: architecture, design, engineering, manufacturing, installation and operation support. The company offers the industry's largest selection of waterpark products including; body slides, inner-tube rides, thrill rides, wave equipment, Flowrider, Family interactive waterplay and Kid's play elements. Whitewater is based in Richmond, BC Canada with regional offices in the United States, Europe, Asia and South America. Kelowna, British Columbia is home for 8400 sqm production facility. The firm has been in business since 1981 and employs over 200 people. Whitewater is long-standing member and multiple award winner with the Waterpark Association and International Association of

Amusement Parks & Attractions (IAAPA). Whitewater is a recipient of the Canada Export Award.

Design and Master Planning: Whitewater designers work with costumers on concept development, theme and master planning. This team has a collective experience level of over 30 years in water and leisure park industry.
(<http://www.whitewaterwest.com>)

ITPS (International Theme Park Services)

ITPS is located in Cicinati, Ohio (USA), and it is a consultation and management company around the world. It was established in 1983. The areas that ITPS gives consultation and management service are : Theme parks, resorts, waterparks, speciality attractions, family entertainment services, malls, aquariums and zoos. While they are working, they pay attention to the current trends, economic effects, state of art advances and particularly requirements of visiters. Flexible Modular Training Program (FMTP) is the basic training program that ITPS has devoloped and it is applied on every specific project.

The missions of ITPS are :

- To create successful, well-planned and well-managed leisure environment to their customers.
- To know industrial trends and to understand its effects to every item of leisure industry.
- To guarantee the highest standart and qualification and to provide the whole project to be planned by the professionals.

The Services of ITPS are:

- To make a comprehensive feasibility analysis and to determine the finance and design parameters of the project according to the results of the analysis.

- To prepare Comprehensive Land Use Plans and Master Plans according to the results of feasibility analysis.
- ITPS has started the Pre- opening Operational Plannign stage. ITPS provides a successful completion of the whole requirements of the service till the day that project will be presented.

These services may include:

Defining staffing requirements for all departments

Establishment of product plans for all retail establishments

Development of budgets

Staffing timelines

Writing job descriptions

Manual development for all operational areas

Creation of orientation programs

Execution of completed training programs, either at an established park or on-site at the project

- The last stage is On-Site Management Services: ITPS guides day to day operations, insuring efficient safe and profitable operation of the facility.

ITPS Tranning: Well-trained personnel is the key of a successfull operation.

ITPS has provided on-site training Brazil, Mexico, Korea, U.S. and Philippines.

Flexible Modular Program has brought success to attractions all over the world.

(<http://www.interthemepark.com>)

Amusement Leisure Worldwide

Amusement Leisure Worldwide is an international company. The company provided to their customers with the finest theme park products and professional services available in the world. The founders of Amusement Leisure Worldwide were Canada's first waterpark suppliers. Their mission is to possess themselves as the premier designer and supplier of wet and dry theme parks around the world.

The company was recognized by the World Waterpark Association by winning the 1997, 1998 "Industry Leadership" award.

Architectural Design: Project budget and clients developments goals are careful consideration. Site marketability, visibility, demographics, potential market penetration, attendance projections, climate, culture, capacity and entertainment mix are carefully synthesized into project.

Water Rides: Amusement Leisure Worldwide waterslide design team utilizes specialized CAD techniques. 3D slide path modelling creates safe and exciting waterslides.

Product and Services: Successful waterpark projects start with the right products and services. Amusement Leisure Worldwide Professionals required to guide the clients through initial feasibility planning, conceptual and master plan stages right through to construction completion. The company products include; body slides, tube slides, wet/dry rides. And "Black Lash", a totally new and exciting ride concept for the new millenium. It will be used in the spring of 2000 at the Big Sky Waterslides in Colombia Fall, Montana.

Manufacturing: Amusement Leisure Worldwide use the highest quality raw materials for all products. Manufacture products can withstand extreme climate conditions and provide level of safety.

Water Play Grounds: Amusement Leisure Worldwide Play structure allow guests to interact with one another in an exciting and safe environment. Amusement Leisure Worldwide offer an extensive range of kids slides, waterplay systems, fiber glass characters and speciality items designed.
(<http://www.amusementleisure.com>)

Pro Slide Technology Inc.

ProSlide Technology Inc. Established in 1986. Their mission is to be leader in the entertainment markets, serves finest entertainment equipment to deliver ride experience. ProSlideTechnology Inc. objectives are; innovative ride design, continued research, development supported by the highest quality manufacturing standards and engineering interity to ensure rider safety. ProSlide Organizational Breakedown; Sales & Marketing, Research & Development, Construction &Field Operations, Finance & Administration, Design & Enginerring, Manufacturing & Quality Control Assurance, Mant Cascades Operations Division.

ProSlide Technology water rides supplied worldwide to some of the entertainment giants Walt Disney World Company, Paramount Parks, Bush Entertainment and Wet'n Wild.

4.4. Leisure Service System and Organization in Turkey

In Turkey, development plans are being prepared according to the Development Act brought into forcing in 1985. In this act nothing was mentioned about Aquapark uses. In Turkey the first aquapark was opened in Antalya, 1993. If aquapark samples in our country are examined, it can be seen that, aquaparks were built on the areas that were proposed as park, tourism facility, recreation area in the Development Plan. Parks' are active green area uses. Park are open for public use without fee and building aquapark on those areas decreases the amount of green area per capita. For instance, aquapark in Alanya and Kemer were built on the areas that were considered as green area in the Development Plan. On the areas that were decided as tourism facility, the area necessary for aquapark use should be added to the open area necessary for the tourism use. Aquapark is a daily, touristic use and it is included under the touristic facility. It should be developed a new definition of the Development Act numbered 3194. In our country,

aquapark projects are approved by the Ministry of Tourism and then its appropriation is made depending on the Act numbered 3194 by the municipalities. The projects, that are approved by the municipal commission, are applied. Entrepreneurs are private companies that aim to gain profit. Aquaparks which are built on public lands realised with built-manage-transfer system (yap-işlet-devret).

However, there isn't any institutions that controls the appropriation of the aquapark projects with the standards. There are two companies that work for aquapark subject, in Turkey. They are Polin and Polkar.

POLİN: Polin firm was founded in 1976. They produce GSP (Glass-fiber strengthened Plastic). Polin was firstly interested in water rides and aquaparks in 1989. The firm makes supervisions with its greatest market Germany. Thus, Polin firm makes scientific studies about the standards. (Başar Pakiç, Authoritative of Polin Firm) The water rides existed in Antalya-Dedeman Aquapark, Alanya-Aquapark and Kuşadası-Port-Aquafan were produced by Polin.

POLKAR: It was founded twenty years ago. It produces rowboats, speed crafts, platformed parachute crafts, cabined crafts, construction materials and sea accessories. Furthermore, they give service about aquaparks. Polkar firm gives continuous maintenance and reparation guarantee. The water rides existed in Aqualand, Aquatlantis in Antalya and Adaland in Adana were produced by Polkar firm. The factory of the firm exists in the Industrial Estate of Antalya.

4.5. Evaluation

Leisure service systems and organizations in USA, Canada and Turkey were examined. The government, recreation and park agencies are responsible for providing the basic leisure services. There are programs and facilities of leisure – service agency of the government in federal, state and local levels. Federal government is responsible for the management of outdoor-recreation resources. State government is providing the outdoor recreation opportunities and providing

conservation of environment. State government put some standards and laws. Most of the recreation and programs sponsors are at local level. Local level hold meetings in order to learn the recreational requirements of public. The other leisure service sponsors are; voluntary nonprofit organization, commercial recreation business and private membership organizations. Voluntary organizations have social goals and don't pursue a profit aim. Financial resources are supplied with the helps of members. Commercial organizations present qualified programs in entertainment industry, such as travel, tourism, outdoor recreations, sports, crafts and toys. Private Membership Organization include the groups that the members of clubs and other social organizations. Aquapark organizations are examined in three parts; governmental, voluntary and commercial organizations. Organizations dealing with feasibility studies with every phase upto opening and that the safety conditions are steadily controlled in aquaparks. The number of aquaparks are increasing in our country, but necessary importance is not given to services.

CHAPTER 5

EXAMPLES OF AQUAPARKS

In the previous chapter, leisure service systems and aquapark organizations were examined. Foreign aquapark samples studied in this chapter belong to the member associations of aquapark organizations. Commercial aquapark organizations that make studies about aquaparks, present their feasibility studies and the services until the opening day of aquaparks. Furthermore, aquaparks' safety and appropriation to the standards are also controlled by those organizations. However, in this examination, data related to the two largest water slide projects; Toshimaen in Tokyo-Japan and Rokko Island in Kobe, couldn't be obtained. Both of these examples are the implementations of White Water West commercial organization. In those aquaparks, there are approximately 100 white water slides. In addition, most of the aquaparks existed in Turkey were examined, necessary information was tried to be obtained insofar as it's possible. Seven of the aquaparks studied in this chapter are the implementations existed in other countries and thirteen of them are existed in Turkey.

5.1. Examples of Aquaparks in USA

The aquaparks in USA are open-air and their basic activity bases on water fun. There are three samples selected from USA. These samples are the first three aquaparks that were published in Amusement Business trade paper in 1997; Wet'n and Wild (Orlando), Blizzard Beach and Typhoon Lagoon. Blizzard Beach and Typhoon Lagoon aquaparks are in Disneyland.

5.1.1. Wet'n Wild – Orlando

Wet 'n Wild offer more rides that family & friends can enjoy together than any other water park around. Wet 'n Wild offers two value-added special events

featuring exciting beach games, specialty rides, prizes and music at the park 's free-standing beach club. The beach club contains a fully-covered stage, state-of-the-art sound system and colorful light effects that extend onto the beach highlighting dancers and beach game activities. Wet 'n Wild is fully staffed with certified lifeguards. All pools are heated seasonally. All-day lockers and shower facilities are available, as well as rental tubes and towels. Life Vests are available in a variety of sizes at no charge. Personal flotation devices are subject to lifeguard approval. There are no facilities for pets. Alcoholic beverages and glass containers are prohibited in the park. Appropriate bathing suits required (no shorts, cutoffs or items with metal fasteners, rivets, zippers or buckles).

Rides: Wet'n Wild-Orlando, described by Amusement Business Magazine as the nation's best-attended water park. Experience the water park that offers the best variety of water rides in the Orlando area. There are four types of slides; thrill rides, rides for kids' and easy rides.

Thrill Rides

Blue Niagra: This slide is turn and splash through 300-feet of intertwined looping tubes that twist from six stories above the park and conclude with a splash landing.

Bomb Bay: After climbing into a snug compartment shaped to resemble a large bomb with fins, the rider is slowly maneuvered onto a ledge hanging over a six-story water slide. As the spring-loaded Bomb Bay door falls open, the rider plunges into a bomb-like free fall at speeds close to 30 miles per hour through an angled chute.

Derstuka: Der Stuka is a six-story speed slide which lets you "free fall" down a 250-foot slide, then coast to a stop along a 115-foot long water runway.

Kneeski: Found only at Wet 'n Wild - the Knee Ski offers guests a chance to test their kneeboarding skills on a challenging course around Wet 'n Wild's

lake. This cable operated, half-mile long course offers the perfect way to enjoy the warm Florida sunshine while participating in one of the area's popular water sports.

Mach5: Choose from three different flumes totaling 1,700 feet that twist and turn over different thrill courses ending in an exhilarating splash below.



Figure 5.1. The slide, Mach5

Raging Rapids: A white water tubing adventure rushes you and your friends through whirlpools and wave pools on the way to a waterfall plunge.

Hydra Fighter: The Hydra Fighter is the first ride in the Orlando area. Guests are seated in back-to-back swings equipped with water cannons. By regulating the water pressure, guests control how high and fast the swing goes.

Wild One: Up to two people are seated on big, bouncy inner tubes as a Yamaha waverunner carries the riders on a five minute course through turns and splashes on the Wet 'n Wild lake. Nominal Fee. (seasonal)

Multi Person Rides

Black Hole: A two-person raft propelled by a 1,000 gallon-a-minute blast of water will send you and a friend on a 30-second, run-away journey through 500 feet of twisting, turning darkness.

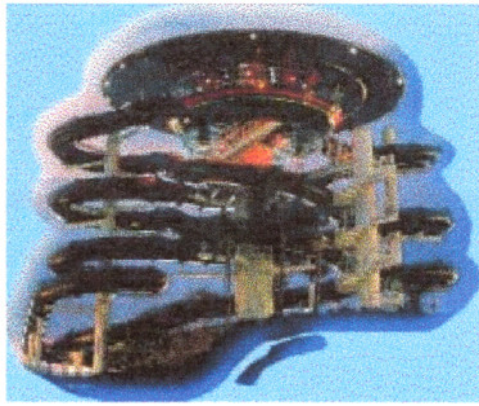


Figure 5.2. The slide, Black Hole

Bubba Tub: Family togetherness is the theme of the Bubba Tub where groups of five people will splash, laugh and scream with delight as they plunge down a six-story, triple-dip slide in a tube big enough for the entire family.

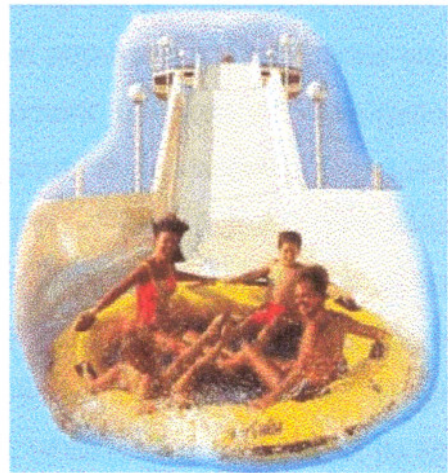


Figure 5.3. The slide, Bubba Tub

Fuji Flyer: Fuji Film company to construct an innovative two-run, four-passenger, in-line toboggan ride. Seated in eight-foot long toboggans, thrill-seekers begin their exciting descent from an awe-inspiring vantage point located 40 feet above the park. This exhilarating journey sends passengers racing through over 450 feet of banked curves and speed-enhancing straightaways until they catch their breath and glide to a stop in the final run-out lanes below.

The Surge: Up to four passengers begin their incredible journey from a six-story tower topped by a 50-foot high geodesic dome and go twisting and

turning through almost 600 feet of exciting, banked curves- almost two football fields in length.

Just For Kids

Wet 'n Wild's Kid's Park stands apart from other water parks because it features miniature versions of the park's most popular adult attractions along with interactive water-oriented playground equipment.

Bubble Up: A large, multi-colored air-filled balloon, was created especially for kids. It is crowned with a mushroom-shaped fountain that sprays water over the Bubble Up's slippery surface. Children can climb to the top with the aid of a rope and then bounce down the side into the three-foot-deep landing pool while their friends squirt them with water guns.

Kid's Park: Wet 'n Wild's Kid's Park is designed for children under 48" in height with miniature versions of the park's most popular adult attractions along with interactive water-oriented playground equipment. Children will have gallons of kid-size fun. To ensure the highest safety standards, the entire playground is fully-staffed with certified lifeguards. The playground also features child-sized beach chairs, tables and lounges, as well as a mini-food kiosk with a sunken floor so children are at eye level with the food servers. This elaborate playground contains miniature versions of the Wave Pool, Lazy River, Raging Rapids and Mach V. The Children's Wave Pool, which is the only one of its kind in the world, features a 60-foot-long pool, with a deep end of only 30 inches, generating child-sized 12-inch waves. Adults may accompany their children in this area.

Easy Rides

Wet 'n Wild offers a full-day of fun for groups of all ages. Guests can enjoy the Arcade, Lazy River, Wave Pool, Volleyball, or spend time under the sun on the Wet 'n Wild beach.

Arcade: Pulsing strobe lights, billowing fog and multi-colored rotating lights create an ambiance of excitement in a token operated video arcade designed with a unique outer space theme.

Lazy River: This mile-long, winding river will take guests on a relaxing journey as their drift slowly past the swaying palms and waterfalls that surround this peaceful attraction.

Wave Pool: Four-foot high waves roll across this 17,000 square foot pool turning it into an ocean of fun for swimmers.
(<http://www.wetwild.com/orlando>)

5.1.2. Blizzard Beach – Orlando

Blizzard beach is third aquapark at the Disney World entertainment complex in Orlando. "Blizzard Beach , Florida's first "snow-capped" aquapark; it is patterned after an Alpine ski resort , with mountain slopes covered with toboggan rides, ski jumps, and slalom runs"(Kraus, 1998, p.299). It was created by a freak winter storm , which dropped snow over the western side of Walt Disney World. There are a lot of attractions in Blizzard Beach.

Summit Plummet: Get set for a breathtaking 60 mph plunge straight down to a splash landing at the base of the mountain. Accessibility Restrictions: This attraction is not recommended for people with the following conditions: expectant mothers should not ride, back or neck problems. Summit Plummet stands an exhilarating 120 feet. Ladies may wish to opt for a one-piece bathing suit at the Water Parks especially if you plan to battle Summit Plummet.

Figure 5.4. The slide,
Summit Plummet



Teamboat: The world's longest family white-water raft ride takes three- to five-passenger rafts down a twisting, 1,200-foot series of rushing waterfalls.

Toboggon Racer: An eight-lane water slide that sends you racing over exhilarating dips as they descend the "snowy" slopes. The world's only side-by-side racing slides let. Guests swoosh down twin tube runs at speeds of up to 25mph.



Figure 5.5. The Slide, Toboggon
Racer.

Downhill Double Dipper: It is the world's only side-by-side racing slides. Guests swoosh down twin tube runs at speeds of upto 25mph. **Accessibility Restrictions:** This attraction is not recommended for people with the following conditions; expectant mothers should not ride, back or neck problems

Snow Stormes: Zip downhill on a toboggan. Three flumes descend from the top of the mountain and follow a switchback course through slalom gates.

Runoff Rapids: Hop on to an inner-tube run and careen down twisting, turning flumes. Challenge two open slides and one enclosed "black hole."

Chair Lift: Wooden-bench chair lifts sporting colorful overhead umbrellas and snow skis on their underside, converted from ski-resort to beach-resort use. But no infants or lap-riding might be dangerous. This attraction is not recommended for people with the following conditions: expectant mothers should not ride, back or neck problems.

Tike's Peak: Big fun for little tikes. This kid-size version of Mt. Gushmore includes short water slides, rideable critters, a snow-castle, fountain play area, and a squirting ice pond. Take smaller children to Tike's Peak, a kid-size version of Mt. Gushmore with scaled-down attractions. If guests are under 18 years of age, they must have their parent or guardian's permission to dial number.

Melt Away Bay: Splash around in a one-acre bobbing wave pool. It's nestled against the base of Mt. Gushmore, and is constantly fed by "melting snow" waterfalls. If guests are under 18 years of age, they must have their parent or guardian's permission to dial number.

Cross Country Creek: Chill out on a tube as you bob along a lazy creek circling the entire Park. On the way, you'll float through a bone-chilling ice cave. Look out. Once inside the mysterious cave, you'll be splashed with the "melting" ice from overhead. This attraction is not recommended for guests with the following conditions: adult supervision required. If guests are under 18 years of age, they must have their parent or guardian's permission to dial number.

Ski Patrol Training Camp: Designed for pre-teens with inner-tube slides, a T-bar, culvert slide, and a challenging ice-flow walk along floating icebergs. If guests are under 18 years of age, they must have their parent or guardian's permission to dial number.

Slush Gusher: Speed slide through this snow-banked gully. If guests are under 18 years of age, they must have their parent or guardian's permission to dial number.



Figure 5.6. The Slide, Slush Gusher.

Rock Climbing On Mt. Gushmore: Climbers receive some quick mountaineer training, then "Face the Slush and Climb Mt. Gush." All climbing gear is provided. Ages 9 years and over additional fee required. If guests are under 18 years of age, they must have their parent or guardian's permission to dial number.

(http://asp.disney.go.com/disneyworld/db/seetheworld/popups/fun_fact)

5.1.3. Typhoon Lagoon

Typhoon Lagoon is another aquapark at Disney World. Dive into an exotic, tropical paradise where families can escape to high waves of excitement and cool, relaxing fun. The fun takes place at the foot of Mt. Mayday. Body surf in a 2.75-million-gallon wave pool. Zip down awesome body slides.

Ketchakiddie Creek: The tropical fun doesn't stop for the little ones. Treat them to slides, geysers, and fountains especially for children ages two to five and their parents.

Castaway Creek: Grab a tube for a relaxing trip around the Park. This attraction is not recommended for people with the following conditions: adult supervision required.

Typhoon Lagoon Surf Pool: Make a splash at one of the world's largest inland wave pools. Relax by a true blue lagoon and a white sandy beach.

Humunga Kowabunga: Three enclosed speed slides shoot you through rocky caverns at 30 mph.



Figure 5.7. The Slide, Humunga Kowabunga

Shark Reef: Snorkel through a coral reef teeming with colorful tropical fish and real, live sharks.

Surfing: For an additional fee, guest can enjoy high-performance surfing in our 2.75-million-gallon wave pool. Two- to two-and-a-half hour sessions are available before and after regular operating hours.

Storm Slides: Swish and swirl through caves and tunnels as you rage down one of three different body slides.



Figure 5.8. The Slide, Storm Slides

Gang Plank Falls: Families can ride together on this incredible white-water rafting adventure.

Keelhaul Falls: Zip through caves and water falls on this white-water rafting adventure.

May Day Falls: Get set for a slippery trip down rocky falls on this white-water rafting adventure.

(http://asp.disney.go.com/disneyworld/db/seetheworld/popups/fun_fact)

5.2. Examples of Aquaparks in Europe

European aquapark examples were selected from the member associations of European Waterpark Association (EWA). The member countries of EWA are; Austria, Germany, Sweden and Cyprus. The aquapark in Norway will be opened in 2001, therefore, it wasn't examined in this study. The examples in the other countries are active aquaparks which have the most facilities.

5.2.1. Sweden - Fyrishov Uppsala

People will experience one of Scandinavia's Biggest Adventure Playgrounds, whilst enjoying the history of one of Sweden's oldest university towns. Sweden's biggest adventure baths are really worthy of their name. There are two warm bubble-pools, waterfalls, whirlpools and hair-raising water-slides. Exercise, bathe or take up the challenge of our jumping tower. In the summer

guest can reach the outdoor baths through the sluice in the swimming hall. Outside there are several pools with sun terraces, lawns and a paddling pool for little ones. There are generous lawns and courts for beachvolleyball, streetbasket and minigolf. There are good facilities for trade fairs, conferences and concerts. Food and drinks are served whenever guest feel more like eating than playing. The shop is open for anyone who wants to renew their bathing or sporting wardrobe.



Figure 5.9. The view, Fhyrisov

5.2.2. Austria, Bad Schallerbach

Numerous attractions are offered on an area of 3.100 m². The outstanding 12 m high Monte Aquapulco with its waterslides: the breathtaking "Kamikaze slide"; the "blue hole", a tubeslide, leading into the outside, on the "Crazy River". The ride down the mountain on an inner tube for 109 meters and the "Yellow River" also offers long sliding fun. In addition there will be enthusiastic about the Aquapulco-Canyon, a wildwater canal which leads over a grotto inside the Monte Aquapulco.

In the small children's area there are mini-slides; the water is a pleasant 30 degrees.

The "Cafe de la Playa" is on the beach of the wavepool and guests will find the self-service restaurant "Buena Vista".

5.2.3. Cyprus, Ayia Napa

The Waterworld Waterpark is the biggest theme-waterpark in Europe and is rightly famous for its great variety of slides. The park's theme is "Ancient Greece". Along the "Odyssee River" guest might meet Cyclops or guest can just relax in "Aphrodite's Bath". There are also three "Snakeslides," two excitingly fast "Kamikaze" slides, the "Chariot Race" and "Apollo's swimming pool". The slides are "Poseidon's Wavepool," the thrilling "Trojan Adventure" for kids, the world's biggest chess game and the "Atlantis adventure pool". The Waterworld Waterpark offers a wide range of attractions like "Dionysos' Temple Restaurant", "Homer's Fast-Food Restaurant", the "Poolbar of the Sirens" and an Icecream parlor. Souvenirs at the Waterworld Waterpark can be purchased in "Midas' Souvenir Shop" or personal photos from a in house photographer (costs are included in the admissions).



Figure 5.10. The view, Ayia Napa

5.2.4. Germany, Atlantis Erlebnisbad, Neu-Ulm

Atlantis is the biggest waterparks in Germany. Waterpark is a 3000 sqm water area and a 2000 sqm sauna landscape and additional attractions:

Fantastic wavepools with bay and brakers, two tubes and a wildwater slide with over 300 meters of slidung fun and various relaxing thermal areas. Sauna guests can be spoiled with infusions, various massages and healing mud. Atlantis does not only mean experience and fun, it means pure relaxation.

There are swimming courses and water gymnastics. This facility is offer Aqua-Aerobics in coperation with the Olympia-Fitnessstudio. People participation at entertainment programs is included in the admission price. If guests are under 16 they have free admission to the water landscape (proof required).



Figure 5.11. The view is out of Atlantis



Figure 5.12. The Slide, Atlantis

5.3. Aquaparks In Turkey

In the concept of the study, thirteen of the aquapark uses in Turkey have been examined. These uses are located in Antalya, Aydın, İstanbul, Muğla and İzmir. (Figure 5.13) However, construction of the aquapark in İzmir-Bornova was cancelled in November,1999. 50 % of these uses are located in Antalya. Antalya-Dedeman Aquapark was established in 1993 and it has the characteristic of being the first aquapark in Turkey. On the other hand, Adaland

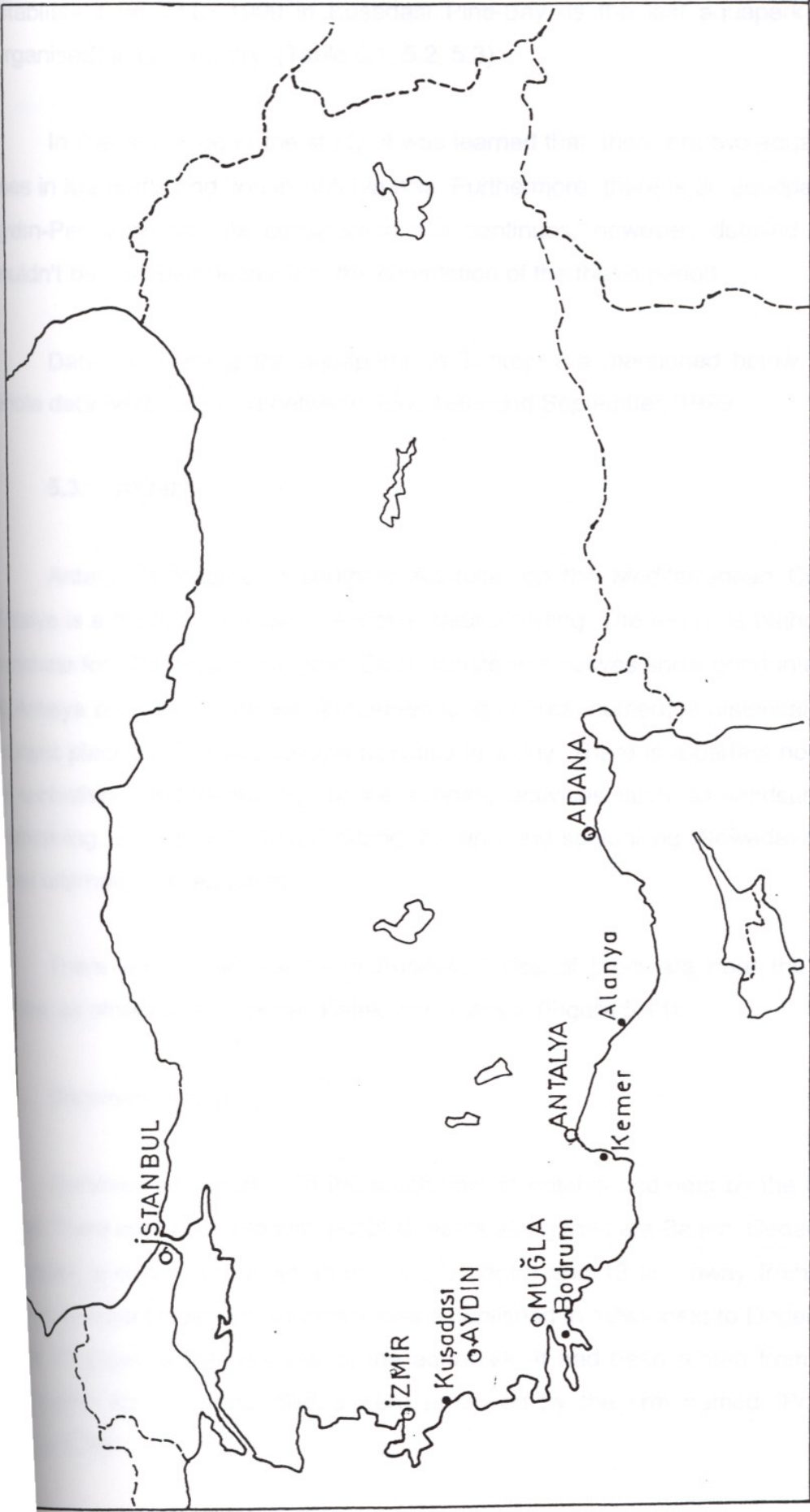


Figure 5.13. Map of Aquaparks in Turkey

established on 24.07.1999 in Kuşadası Pine-Bay, is the last aquapark built (organised) in our country. (Table 5.1, 5.2, 5.3)

In the last stage of the study, it was learned that, there are two aquapark uses in Marmaris and one in Antalya-Kaş. Furthermore, there is an aquapark in Aydın-Pamucak and its construction still continues, however, detailed data couldn't be obtained because of the completion of the thesis period.

Data, concerning the aquaparks in Turkey, are mentioned below. The whole data were collected between July, 1999 and September, 1999.

5.3.1. Antalya

Antalya is located in southern Anatolia, on the Mediterranean Coast. Antalya is a holiday paradise in a lonely natural setting. The region is bathed in sunshine for 300 days of the year. Both tourists and natives show great interest to Antalya because of the well-preserved long shores, numerous historical and touristic places giving you several activities in a day. There is a perfect holiday of sunbathing and swimming, or for sporting activities such as windsurfing, waterskiing, sailing, mountain climbing, hunting and spelunking. Nowadays the other alternative is "aquapark".

There are six aquaparks in Antalya. Three of them are near the city centre, as others are in Kemer, Belek, and Alanya. (Figure 5.14)

Dedeman-Aquapark

Dedeman Aquapark is in the south-east of Antalya and near by the Lara Road. There are various tourist establishments along the Lara Beach. Dedeman Aquapark is only 3 km. away from the city centre and 13 km. away from the airport. Antalya Dedeman Aquapark was established in 1993, next to Dedeman Hotel. Ali Çiçek is the designer of the aquapark. It had been rented from the municipality for 49 years. Slides were produced by the firm named "Polin". (Figure 5.15)

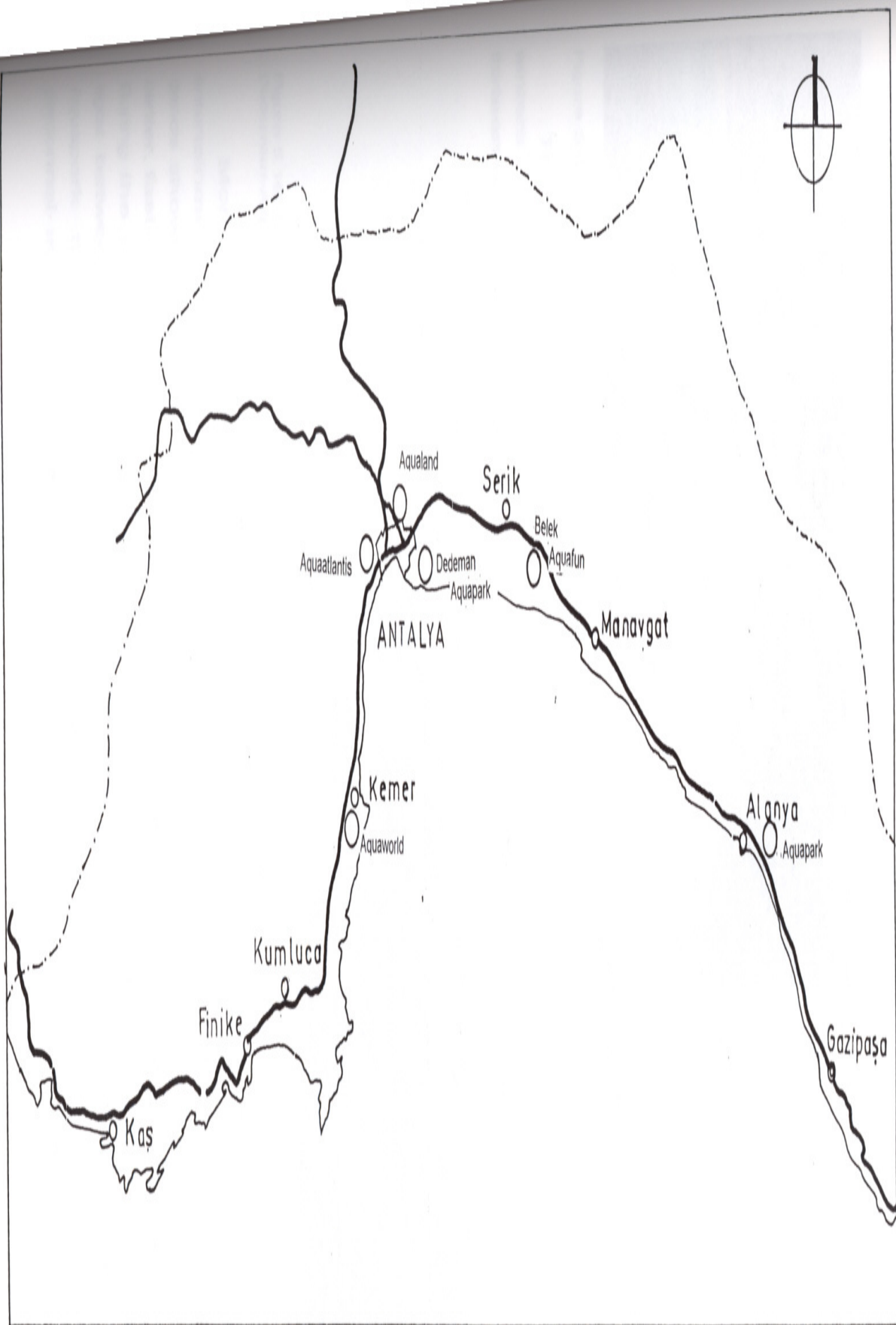


Figure 5.14. Map of Aquaparks in Antalya



Figure 5.15. The view, Dedeman-Aquapark

The aquapark operates during the term May-October and it is closed in winters. Service capacity of the aquapark is 1000 person per day. There are thirteen waterslides where one of them exists in the kids' pool. (Figure 5.16)



Figure 5.16. Kid's pool, Dedeman-Aquapark

Moreover, Turkish Nights are organized on certain days of a week. As an entertainment service, the aquapark presents daytime animations, step and dance shows. It aims to provide the visitors enjoy their times with its shopping center, fast-food restaurant, a la carte restaurant, pool bar and its photographer. During the summer season in 1999, entrance fees were fixed as: free for the ages between 0-12 and 5.500.000 TL. for the ages over 12. In Dedeman-Aquapark there are approximately fifty personnel working (management personnel is not included). In Dedeman-Aquapark, it can be said that, two

problems are observed. During the days when the number of visitors are few, aquapark does not work with full capacity, some of the slides are closed and the number of personnel is decreased, therefore, injuries can be occurred.

Aqualand

Aqualand is located in Antalya-Konyaaltı region, close to Antalya cultural centre and Hotels Sheraton and Falez. Konyaaltı coasts are only 3 km. far from the city centre and 14 km. from the city airport. Aqualand was opened in 1995. Its location criterion is to be close to the city centre and to the hotels. Its application was realized according to Spain-Actionpark sample. Entrepreneur company was "Alke Tourism Ltd. Com." Aqualand has an area of 26.000 sqm. And it was rented from the municipality for 49 years. Slides were constructed by the firm "Polkar". Aqualand had gone into operation during May-October term and it has a capacity of 1000 person per day. As a sliding activity 10 waterslides had been constructed where 3 of them exist in Kids' pool.(Figure 5.17) In



Figure 5.17. The view, Aqualand-Antalya

addition to the activities in Aqualand, there are Düden Bar, pool bar, open and close fast food restaurants. Moreover, it services with its photographer, silver market and various animations. Entrance fees were determined as; free for the ages between 0-6, 3.000.000 TL. for the ages between 7-12 and 4.000.000 TL.

for the others. The number of personnel was 85 in 1999 summer season and the aquapark is closed in winters (management personnel is not included). Common complaints of the guests in summer season generally caused because of the inexistence of sufficient maintenance of the slides (e.g.damages on the swimming suits). (Figure 5.18)

Aquaatlantis

Aquaatlantis is located in the north-west of Antalya. Its distance from the city centre is 13 km. and the distance from the airport is 23 km. Aquaatlantis was established in 1996. Landscape design of the park was prepared by landscape architect Zübeyda Özkan Özsu. Ownership of Aquaatlantis having an area of 4000 sqm belongs to private property. Entrepreneur company was "Gürsoy Otelcilik Ltd. Com." Slides were constructed by "Polkar". (Figure 5.19)



Figure 5.19. The view, Aquaatlantis - Antalya

Its season is between May-September and its guest capacity is 1500 person per day. The park have served with a personnel capacity of 65 person in 1999. In the last summer season its entrance fee was free for the ages upto 12 and 2.500.000 TL. for the ages 12 and over. The most important problem that the managers comeup against, is the diffuculty in accessibility. (Figure 5.20)

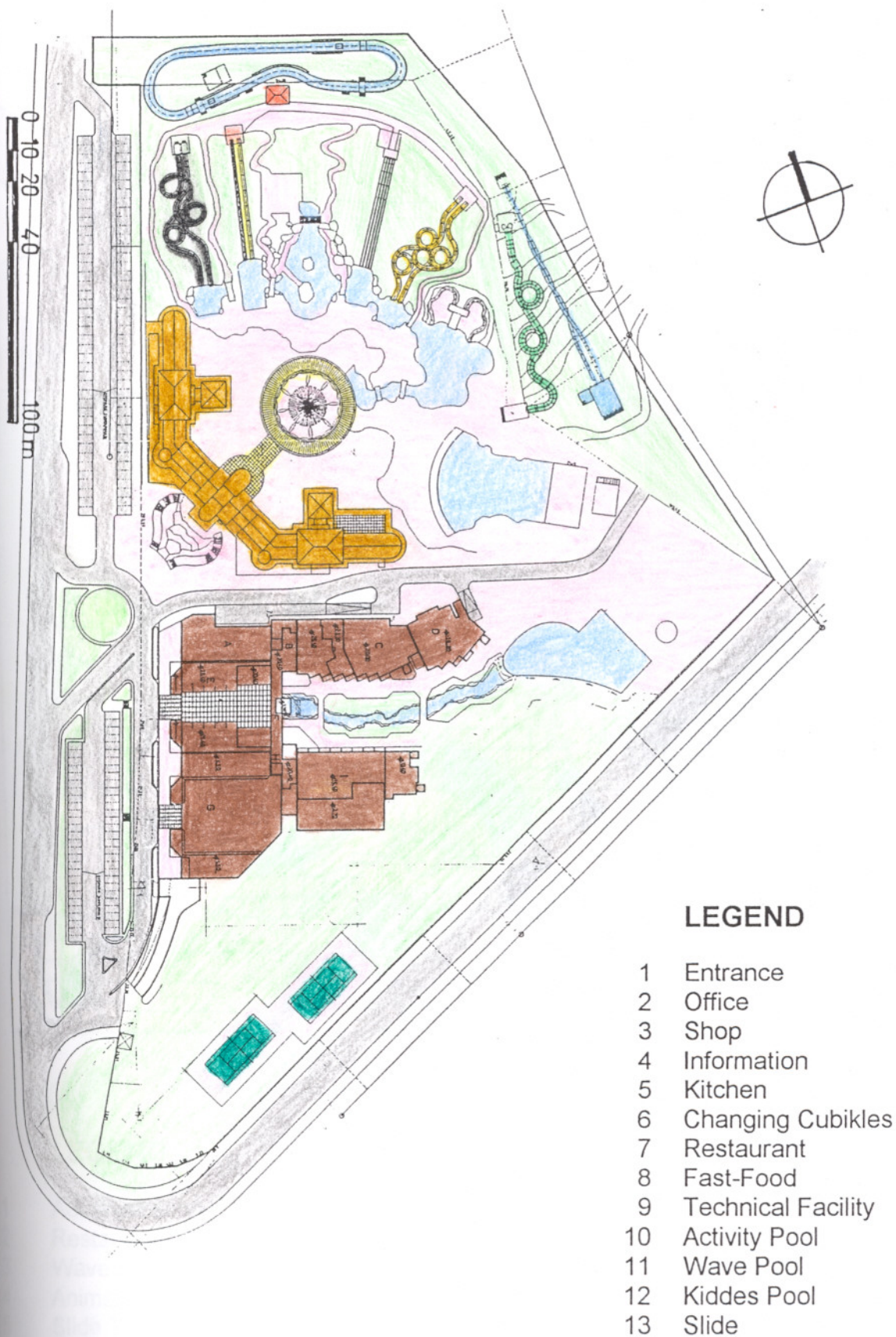
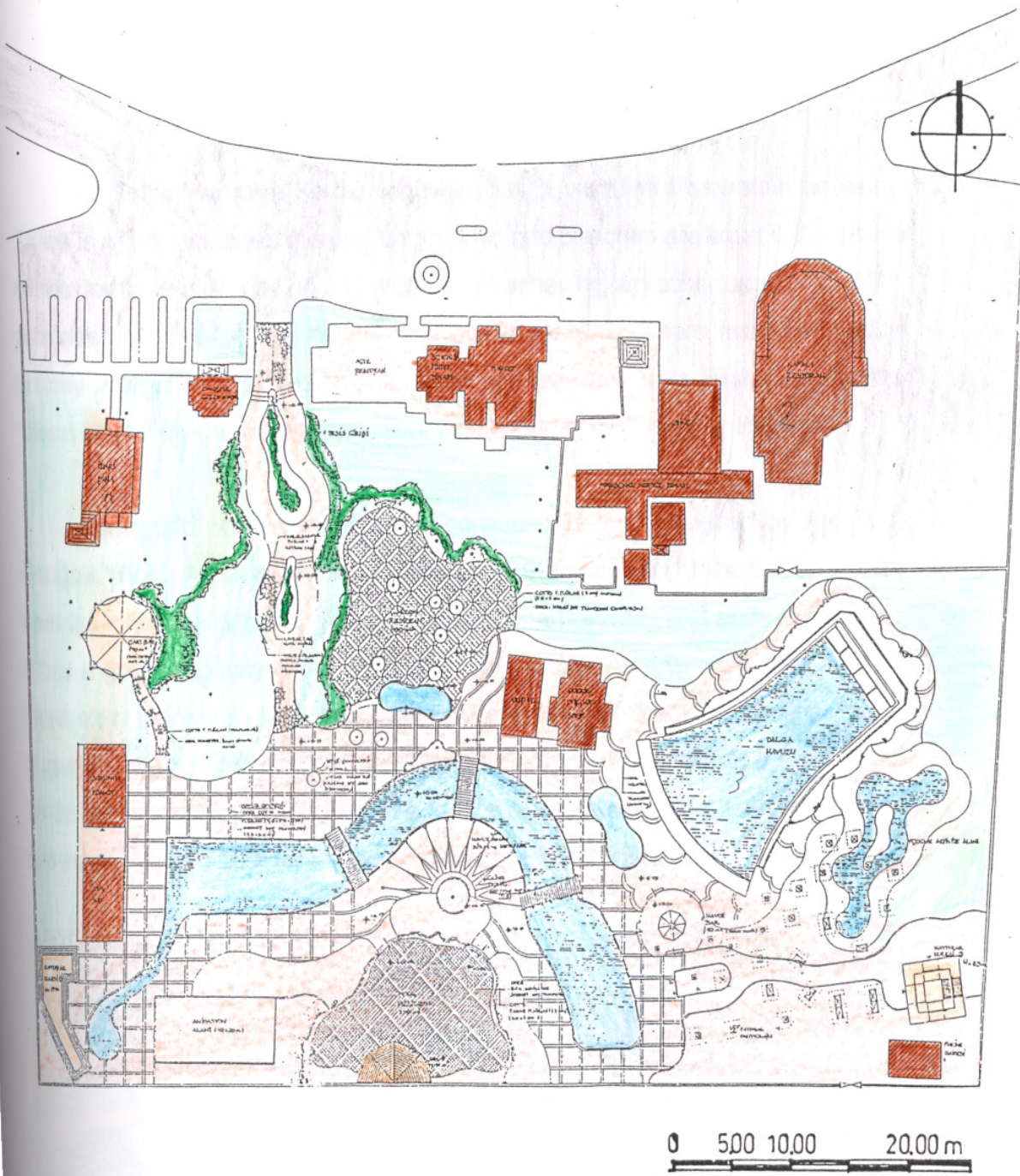


Figure 5.18. Site Plan of Aqualand in Antalya



LEGEND

- | | | | |
|---|------------------|----|--------------------------------|
| 1 | Administration | 9 | Cafe – Bar |
| 2 | Restaurant | 10 | Shop |
| 3 | Wave Pool | 11 | Personnel Facility |
| 4 | Animation Area | 12 | Pool Bar |
| 5 | Slide Tower | 13 | Engine Room |
| 6 | Shower – W.C. | 14 | Kitchen |
| 7 | Information | 15 | Doctor |
| 8 | Kiddies Activity | 16 | Changing Cubicles-Safety Boxes |

Figure 5.20. Site Plan of Aqualantis in Antalya

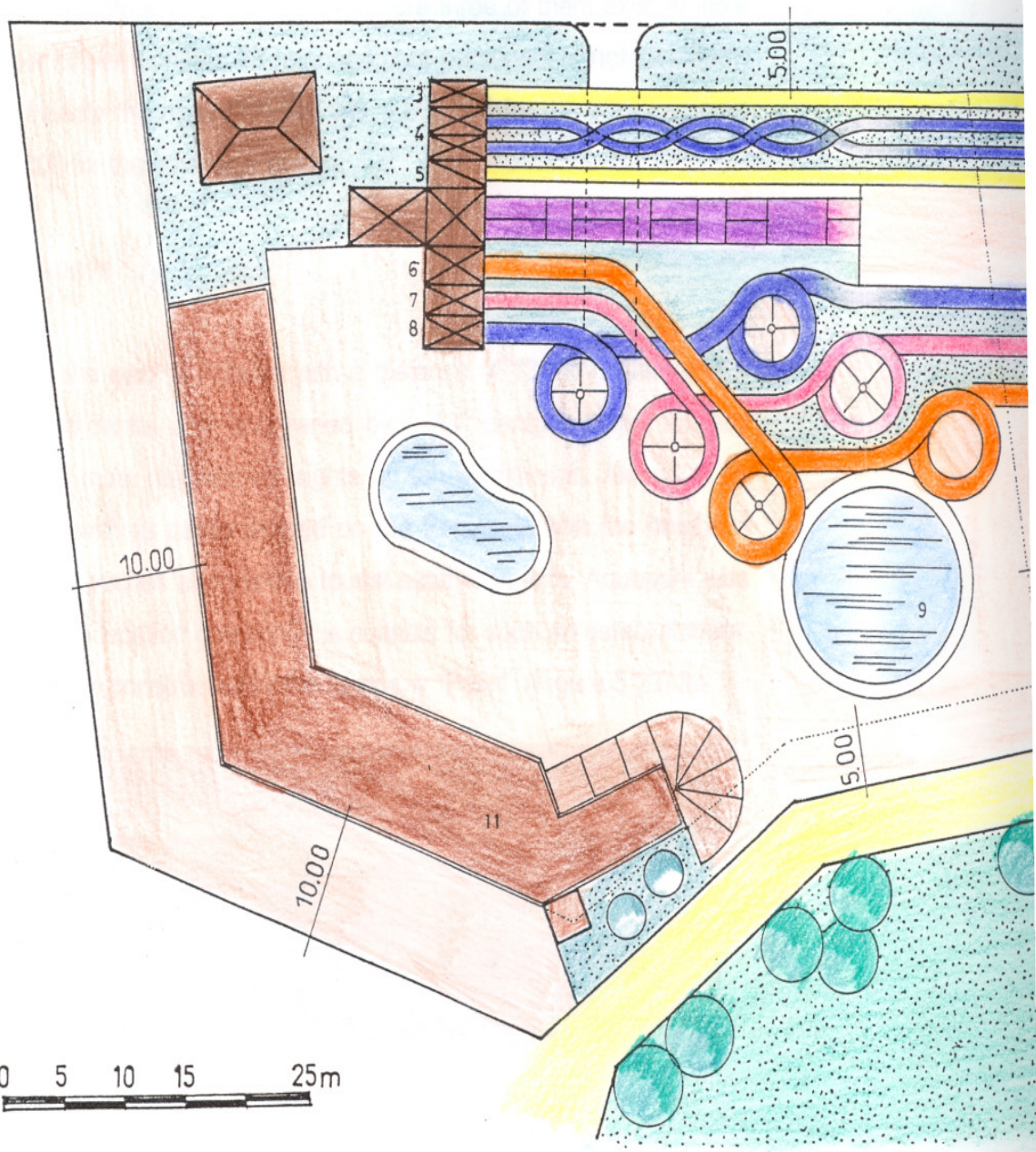
Aquaworld-Kemer

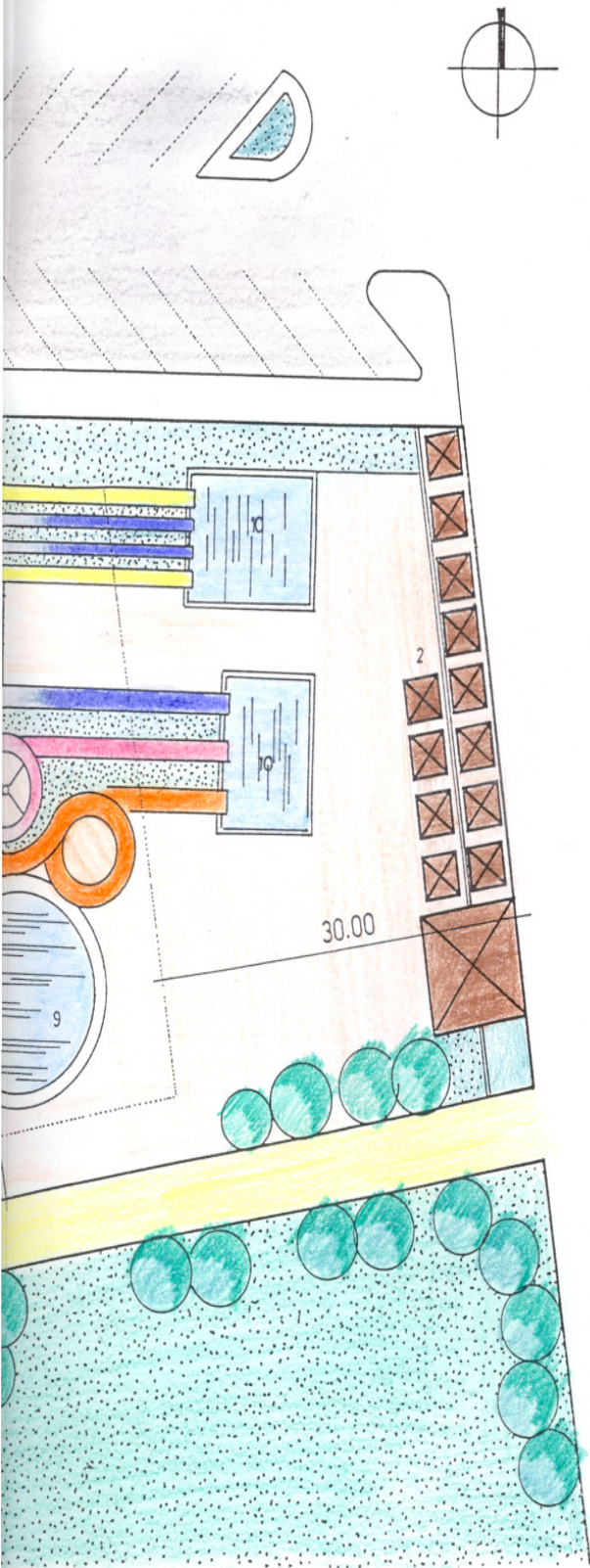
42 km. of Antalya-Kemer highway has a wonderful mountain scenery. There is a fully equipped marina. Virgin bays and beaches are exist in the south of the town. Beside car riding, yacht marina having a yacht capacity of 600, provides services for the tourists who prefer yachting. There are high quality holiday villages and hotels. Kemer beaches are rated with Blue Flag means "clean beach" by the European Union. Aquaworld is located near the bay.

Aquaworld was opened 1997. The aquapark was designed by Architect Ertuğrul Yücel. Aquaworld has an area of 10.000 sqm. And it had been rented from the municipality for 15 years. Its season starts in May and ends in October. It has a guest capacity of 750-1000 person per day. As a water sliding activity, there exist ten waterslides in the park where there of them are in kids' pool. (Figure 5.21) In 1999 summer season, the personnel capacity of the park was 30-35 person. Entrance fee was free for the ages between 0-6, 5 \$ for the ages between 7-12 and 10 \$ for the ages over 12. (Figure 5.22)



Figure 5.21. The view, Aquaworld-Antalya





LEGEND

- 1 Entrance
- 2 Shops
- 3 Free Fall
- 4 Twister
- 5 Kamikaze
- 6 Black Hall
- 7 Open Water Slide
- 8 Crazy River
- 9 Swimming Pool
- 10 Splash Pool
- 11 Fast Food

İZMİR YÜKSEK TEKNOLOJİ ENSTİTÜSÜ
REKTÖRLÜĞÜ
Kütüphane ve Dokümantasyon Daire Bşk.

Figure 5.22.

Site Plan of Aquaworld in Antalya – Kemer

Aquafun –Belek

Belek is a modern holiday center and a golf paradise, 40 km. away from Antalya. There is a blend of aesthetics and nature on the sea with sandy beaches and shady pine forests. The National Golf Club is located in Belek. Twenty three hotels exist around Aquafun. Aquafun was opened in 1998. Its area belongs to private property. Entrepreneur company was BM Holding. Its season is between May and October. Aquafun has a capacity of 250 person per day. There are nine waterslides in the park, where three of them exist in kid's pool. The number of personnel is 23 (management personnel is not included). Entrance fee is free for the ages between 0-6, 1.000.000 for the ages between 7-12 and 2.000.000 for the other age groups.

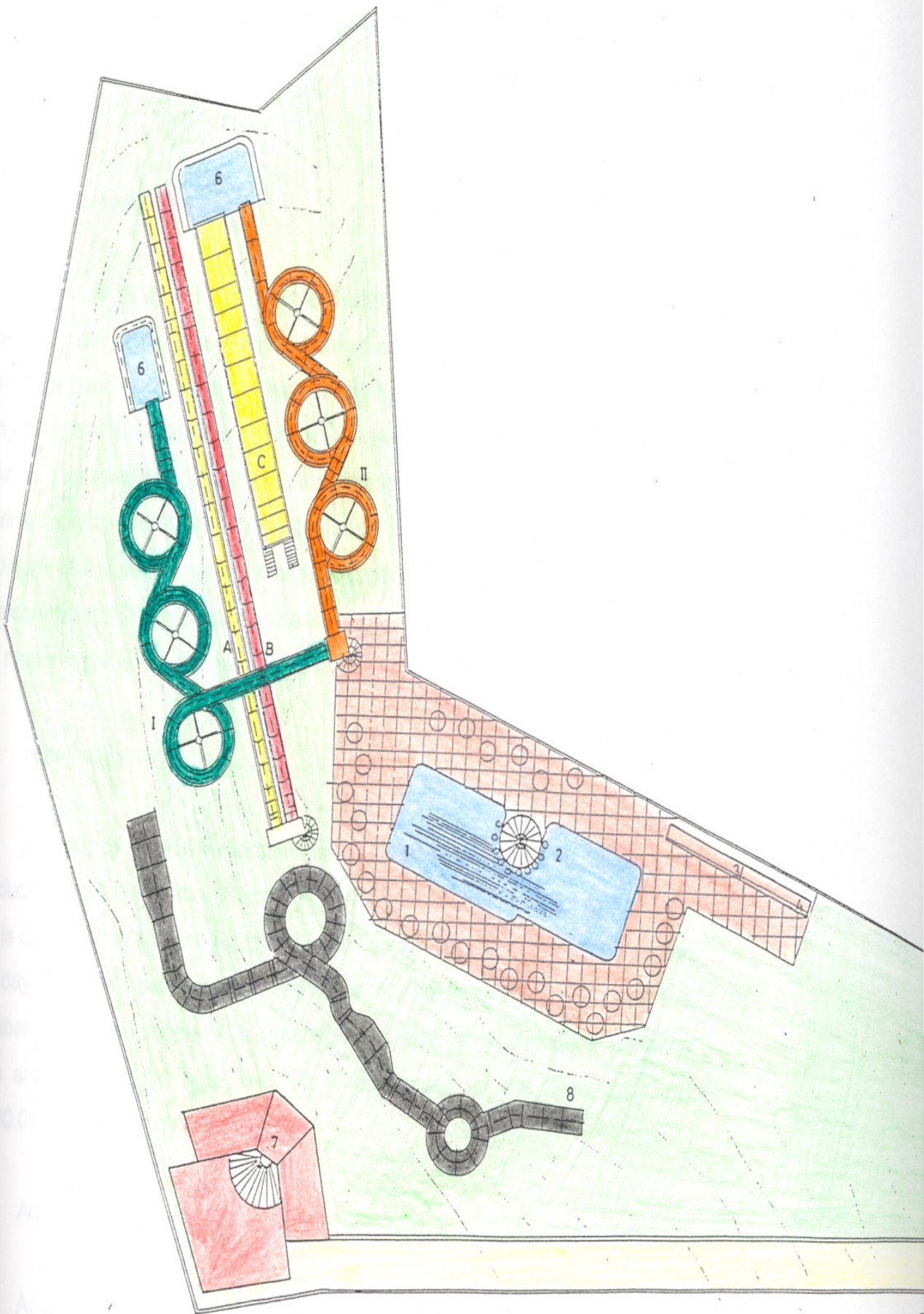
Aquapark-Alanya

Alanya is in the east of Antalya with a distance of 131 km. Alanya is a large popular resort center and is crowned by a 13th century Seljuk fortress which is one of the most magnificent sights on the Mediterranean. Alanya is an ideal holiday resort with its castle located on the Peninsula with the height of 250 m., its endless beaches and various tourist establishments. Aquapark was opened in 1995. As a location criterion, it is suitable for such an establishment. Slides in the park were constructed by the company "Polin". (Figure 5.23) Its



Figure 5.23. The view, Aquapark-Alanya

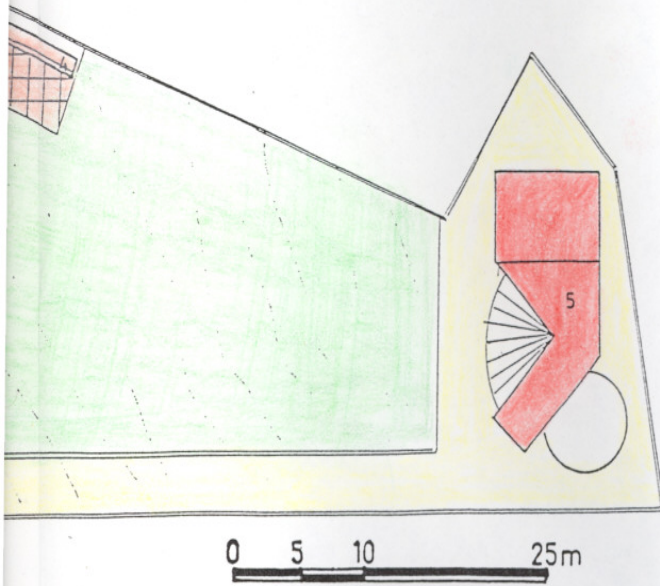
area belongs to private property. It is open during the months between May-October. The aquapark has a capacity of 1000 person per day. There are seven water slides and three of them are in children's pool. The number of personnels





LEGEND

- I Open Slide
- II Open Slide
- A Kamikaze
- B Kamikaze
- C Carpet Slide
- 1 Swimming Pool
- 2 Pool Bar
- 3 Showers – Changing Cubicles
- 4 W.C.
- 5 Restaurant
- 6 Splash Pool
- 7 Entrance
- 8 Crazy River



İZMİR YÜKSEK TEKNOLOJİ ENSTİTÜSÜ
REKTÖRLÜĞÜ
Kütüphane ve Dokümantasyon Daire Bşk.

Figure 5.24.

Site Plan of Aquapark in Antalya – Alanya

is 45-50 when it works with full capacity and 25-30 on the other times. Entrance fees are, 3.000.000 TL. for the ages between 5-15 and 3.500.000 TL. for the ages over 15. The most important problem occurs in the establishment is electricity cut. (Figure 5.24)

5.3.2. Aydın-Kuşadası

Aydın is situated in the west of Turkey. Aydın is also rich in culture and history. It was at the celebrated school of culture. Kuşadası is 65 km. away from Aydın and accessibility is supplied by Kuşadası-Aydın minibuses in every thirty minutes. Kuşadası is situated on the west coasts of Turkey-90 km. south of İzmir. Kuşadası is a lovely port along the shores of the bay. A large modern marina facilities life for visitor yachters. The city is bathed under sunshine for 300 days of the year. There are three aquaparks in Kuşadası. Aquapark, which was opened in 1998 in Kuşadası-Kadınlar Denizi and was damaged because of the heavy rains, is not included to this number. (Figure 5.25)

Aquafun-Liman

Aquafun is near by Kuşadası-Marina. It was opened in 1998. Slides were produced by "Polkar" firm. . Waterslide part is open during May-October and the bar is open also in winters. Aquafun-Liman has a visiter capacity of 1500 person per day. There are seven waterslides where three of them are in kid's pool. The number of the personnels is 35. (management staff is not included). Entrance fees are; free for the ages 0-6, 50 % discounted for the ages 7-12 and 4.000.000 TL. for the other age group.

Aqualand-Sahil Sitesi

Aqualand is located in Sahil Sitesi. This park was patterned from Italy. It was opened in 1998. Aqualand has an area of 33.000 sqm and it belongs to private property. Its terms depends on seasons. The capacity of serving is 2000 person per day. There are nine waterslides; four of them in children's pool

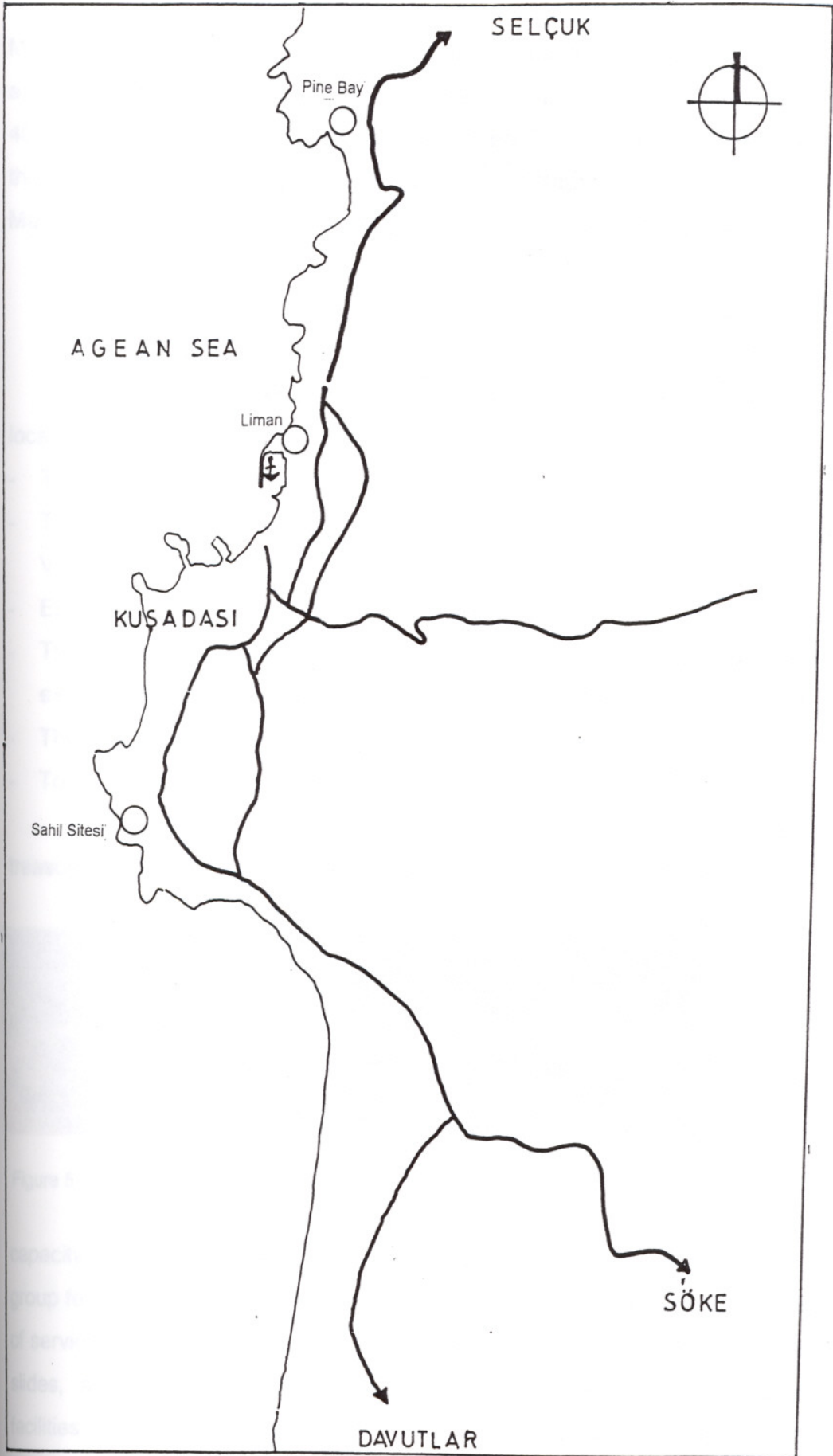


Figure 5.25. Map of Aquapark in Aydın -Kuşadası

Moreover, the park serves with its live music on each night, daytime animations a la carte and snack restaurants, bars, green areas. The personnel capacity is 40 person. Entrance fee; 0-6 age is without fee, 7-12 age is % 50 reduced and the other age group is 4.000.000 TL. Restaurant is used in winter. Management's most important problem is insufficient educated personnel.

Adaland

Adaland is situated in the north of Kuşadası. It was opened in 1999. Its location is suitable for such an activity. The location criteria of Adaland are;

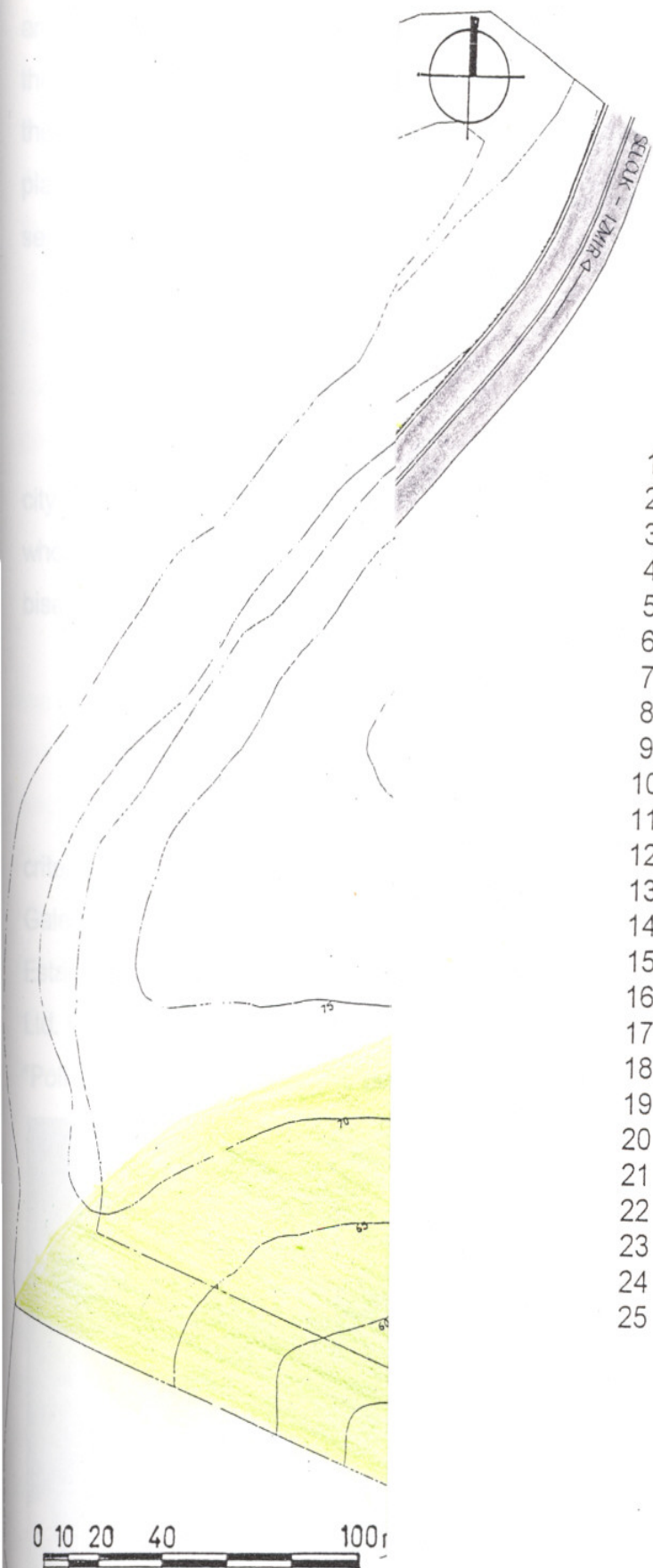
- The proximity to İzmir, Aydın and Denizli.
- The proximity to the historical places Efes, Selçuk and Meryemana(the Virgin Mary) where summer vacations are spent.
- Easy accessibility from Söke, Bodrum and Didim.
- The proximity to Gümüldür and Davutlar where summer resorts exist and the existence of public transportation from Gümüldür, Seferihisar and Urla.
- The existence of the port.
- To be a popular place in foreign countries.

It is located on 276.000 sqm. area. Its land had been rented from the treasury. Slides were produced by "Polkar" firm.(Figure 5.26) Personnel



Figure 5.26. The view, Adaland-Kuşadası

capacity is 82 person. Entrance fee; 0-6 age is without fee and the other age group fee is 3.500.000. Adaland is a water game and fun center with a capacity of service 5.000 person per a day. There are a lot of water entertainments like slides, action pools, waterfotball, bumper boats. The other entertainment facilities are; bars, bowling center, disco, cowboy house, rodeo and Turkish house and tent. The fantastic disco has 3.000 sqm. area. The tent bar,



LEGEND

- 1 Turkish House
- 2 Pool
- 3 Kiddies Pool
- 4 Lakelet
- 5 Splash Pool
- 6 Cafe
- 7 Activity Pool
- 8 Wave Pool
- 9 Cowboy House
- 10 Parking Area
- 11 Orchesta Bar
- 12 Bar
- 13 Entrance
- 14 Twister
- 15 Kamikaze
- 16 Free Fall
- 17 Multi Slide
- 18 Slide
- 19 Rafting
- 20 Boat Track
- 21 Blackhole
- 22 Crazyriver
- 23 Rainbow
- 24 Flying Carpet
- 25 Tube

PINE BAY
TURISTIK TESIS

Figure 5.27.

Site Plan of Adaland in Aydın - Kuşadası

amphitheatre, dance towers, dance shows, surprise water and light games are the characteristics of the park. There are twenty-two slides; ten of them are in the kids' pool and eleven swimming pools. Adaland's wastewater treatment plant has an extra capacity of 50% of the existent demand and there is a sedimentation pond with a capacity of 2000 tons. (Figure 5.27)

5.3.3. Adana

Adana is situated in the middle of Cukurova Plan, and is the fourth largest city in Turkey. The city is located in the most fertile agricultural lands of the whole country which is fed by the vital water of Seyhan River. Seyhan River bisects the city. Tea houses and restaurants are located along Seyhan River.

Aqualand

Aqualand is located in Yüreğir and is near Seyhan River. Its location criteria is to be recreation area and close to the Mimar Sinan Culture Trust and Galeria. It was opened in 1998. Its designer is Architect Timuçin Avaroğlu. Establishment was built on municipal land by the entrepreneur company Alke Ltd. Com. The area is located on area of 80.000 sqm. Slides were produced by "Polkar" firm. (Figure 5.28) Its personnel capacity is 110. Its service capacity is



Figure 5.28. The view, Aqualand-Adana

2500 person per day. Waterslides are open during May and October. However, bar, restaurant and tennis courts can be used also in winters. There are six slides; two of them are in the kids' pool. There is a lazy river with a length of 350 metres. You can fight with waves in 1500 sqm. wave pool. Children also enjoy their time out of the swimming pools and waterslides, in the kids' particularly for kids. Covered swimming pool is aimed to be opened in the following year. Furthermore, Aqualand also provides service for weddings, cocktails, parties, concerts, meetings and organisations with meal. Visitors of Aqualand are generally the Americans from Incirlik. (Figure 5.29)

5.3.4. Muğla-Bodrum

The city of Muğla, includes the most popular holiday centres like Bodrum, Marmaris, Datça, Köyceğiz and Fethiye. Beautiful resorts, comfortable hotels and motels, cozy guest houses, impressive ruins of past civilizations and magnificent landscapes offer holiday-makers a plenty of choice. Bodrum is a charming and fascinating little port in the south of İzmir with a distance of 270 km. It is situated on the Aegean coasts of Turkey. Population of Bodrum is around 30.000 and they learn their livings by fishing, boat-building, agriculture, weaving and tourism, which has become the most important industry in the last few years.

Aquapark

Aquapark Dedeman Bodrum is Bodrum's first aquapark entertainment centre. It is situated on a 40.000 sqm. land. Aquapark in Bodrum-Ortakent is located on the intersection point of the roads coming from TurgutReis, Yalıkavak and the centre of Bodrum. Besides its easy accessibility, the slope and the solidity of the land is also suitable for the construction of such an establishment. Aquapark's land belongs to private property. Waterslides were brought from Spain. Personnel capacity of the park is 55 person. (management personnel is not included). On the other hand service capacity of the park is 10.000 person per day. Entrance fees are; free for ages 0-6 and over 55, 3.000.000 TL. for the ages 7-12 and 6.000.000 TL. for the other age group. With a total of 24





LEGEND

- 1 Wave Pool
- 2 Kids Play Pool
- 3 Lazy River
- 4 Splash Pool
- 5 Doctor
- 6 Administration
- 7 Changing Cubicles
- 8 Personnel Facility
- 9 Shop
- 10 Restaurant
- 11 Storage
- 12 Workshop
- 13 W.C.

Figure 5.29. Site Plan of Aqualand in Adana

waterslides exist in the aquapark, two of them are in the kids' pool. (Figure 5.30) The other activities are; wave pool, kid's pool, fast food restaurants and bars, step courses, gymnastics, pool contests, animations during the day, special parties, and dances during the night. (Figure 5.31)

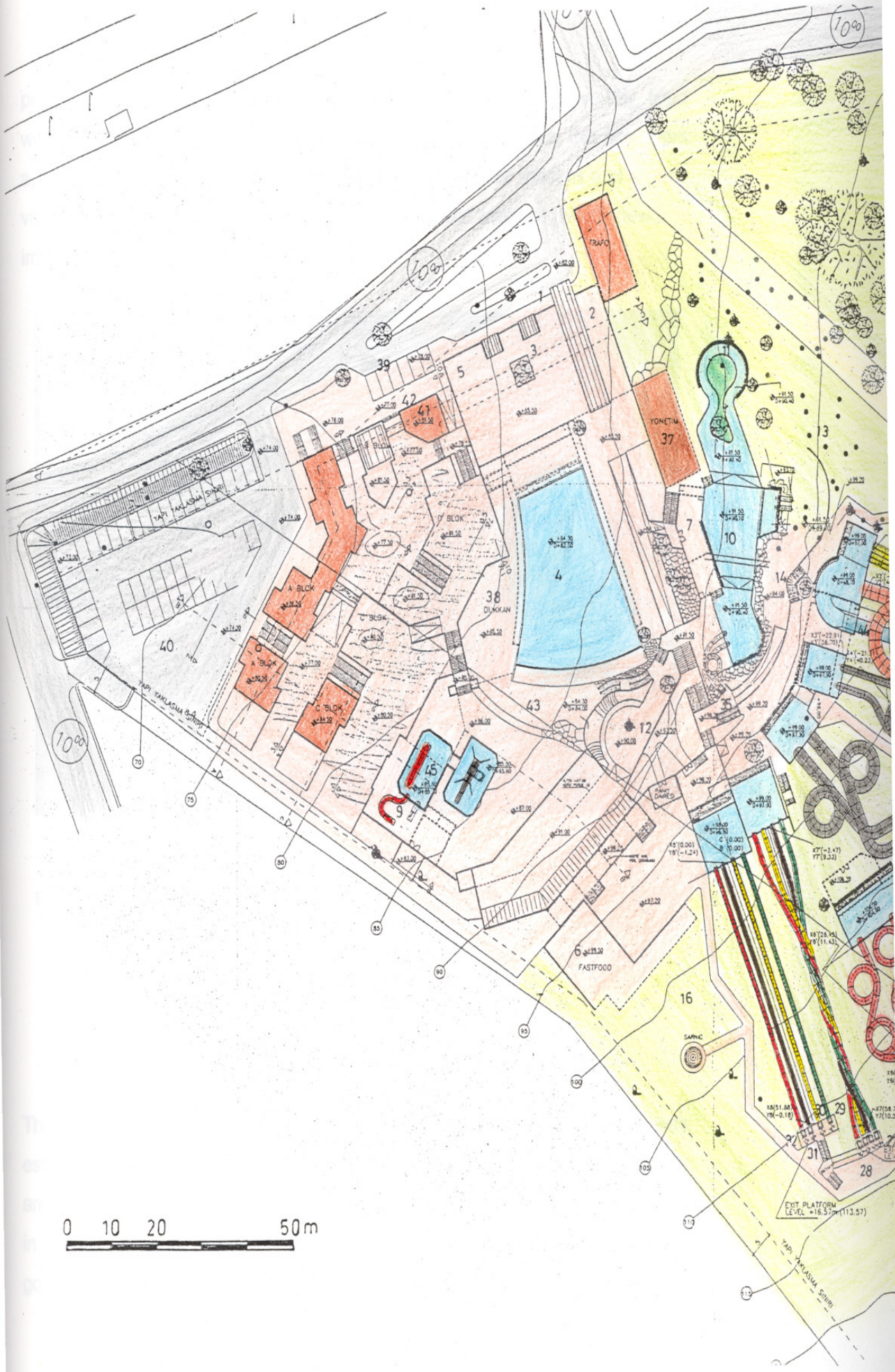


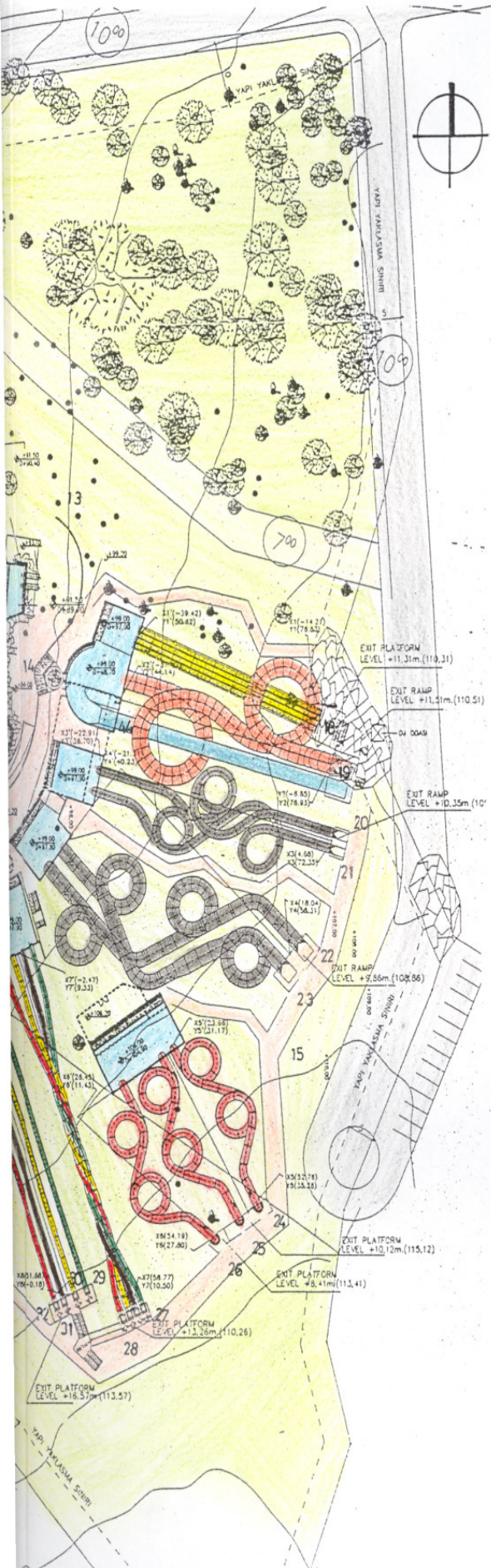
Figure 5.30. The view, Aquapark-Bodrum

5.3.5. İstanbul – Büyükçekmece

Aqualand

Aqualand is situated in Büyükçekmece, İstanbul. Because of the increase in the amount of Residential areas in and around Büyükçekmece and because the municipality's decisions about the utilization its of lands, Aqualand was built in this region. Its land had been rented from the municipality for 27 years. The park was sampled from Sweeden and the waterslides were constructed by a Sweeden firm. It was established in 1999. Aqualand was designed by Arc. Zafer Özsayın. Service period of Aqualand's waterslides changes according to the weather conditions in summer. In winters, swimming pool is used, with an area of 1800 sqm. area. Six waterslides exist in Aqualand, three of them are in the children's pool. (Figure 5.32) Two waterslides will be served in this year. Capacity of service is 3000 person per a day. Personnel capacity is 89 person. Entrance fee; 0-6 age is without fee, 7-12 age is % 50 reduced and the other age group is 4.000.000 TL. The 3rd largest, and one of the most beautiful





LEGEND

- 1 Entrance
- 2 Information
- 3 Safety Boxes
- 4 Wave Pool
- 5 Changing Cubicles
- 6 Fast Food 1
- 7 Fast Food 2
- 8 Bar
- 9 Mini slide
- 10 Activity Pool
- 11 Lazy River
- 12 Jacuzzi
- 13 Fast Food 3
- 14 Doctor
- 15 D.J.'s Cabin
- 16 Beer Garden
- 17 Showers
- 18 Multi Slide
- 19 Big Hole
- 20-21 Black Hole
- 22-23 Crazy River
- 24-25-26 Giant Slide
- 27-28 Twin-Twister
- 29-30-31-32 Kamikaze
- 33-34 Spiro Tube
- 35-36 Hydro Tube
- 37 Administration
- 38 Shopping Center
- 39 Coach Parking
- 40 Parking
- 41 Chess
- 42 Bank Automat
- 43 Night Life
- 44 Conveyor
- 45 Kiddies Pool

İZMİR YÜKSEK TEKNOLOJİ ENSTİTÜSÜ
REKTÖRLÜĞÜ
Kütüphane ve Dokümantasyon Daire Bşk.

Figure 5.31.

Site Plan of Aquapark in Muğla – Bodrum

provinces of Turkey is Izmir, extending on the shores of an attractive bay, filled with ships and yachts. Backed by mountains and facing the sea, this site offers a fine appearance, both with its natural panorama and its modern and orderly view. Lovely palm trees decorate the promenades and avenues, where new and impressive buildings stand. (Figure 5.33)

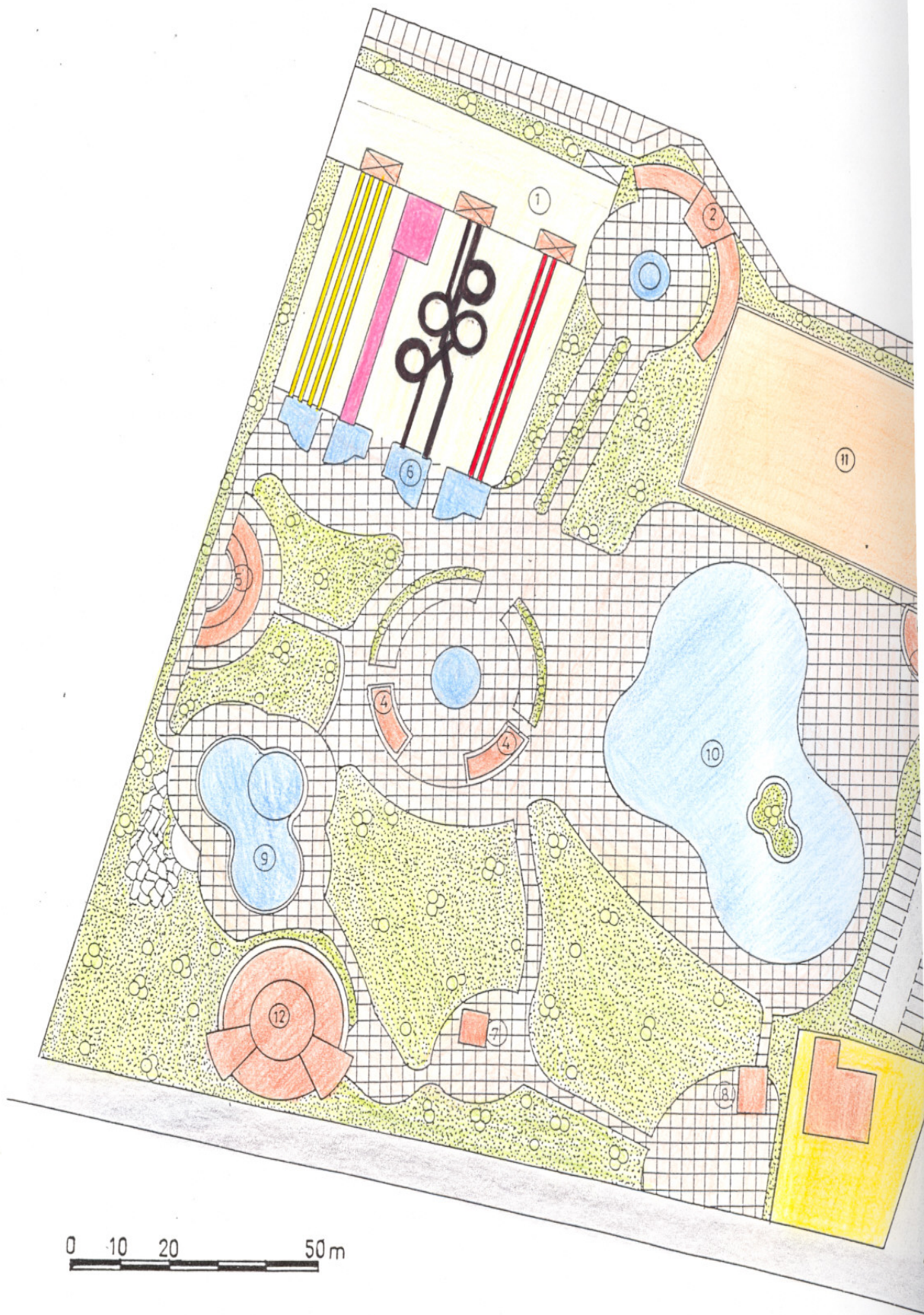


Figure 5.32. The view, Aqualand-Istanbul

5.3.6. izmir

İzmir Aqualand Aşık Veysel Park-Bornova

This aqualand is located 1 km. away from Bornova city centre. It was established on an area of 153.600 sqm and there is a shopping center within an area of 2500 sqm. This aqualand is stated as the biggest entertainment center in Turkey. Other facilities in the aquapark are; cinema, discotheque, restaurant, golf area, bowling center, go-card area, water rides and pools. (Figure 5.34)



LEGEND

- 1 Slide Tower
- 2 Entrance
- 3 W.C.
- 4 Bar
- 5 W.C.
- 6 Splash Pool
- 7 Kiosk
- 8 Kiosk
- 9 Kiddies Pool
- 10 Lakelet
- 11 Swimming Pool
- 12 Disco



Figure 5.33.

Site Plan of Aqualand in Istanbul

İZMİR YÜRS
RE
Kütüphane ve

5.4. Evaluation

Aquapark examples are considered in the U.S.A., Europe and Turkey. The aquaparks in U.S.A. are open-air and their basic activity bases on water fun. Examined samples are the first three aquaparks that were published in Amusement Business trade paper in 1997. These selected samples are; Wet'n Wild (Orlando), Blizzard Beach and Typhoon Lagoon. Blizzard Beach and Typhoon Lagoon aquaparks are in Disneyland. European aquapark examples were selected from the member associations of Europe Waterpark Association (EWA). Most of the European aquaparks are closed because of the wheather. In addition, thirteen of aquaparks uses in Turkey have been examined. These uses are located in Antalya, Aydın, İstanbul, Muğla and İzmir. 50 % of the uses are located in Antalya.

Foreign aquapark samples studies in this chapter belong to the member associations of aquapark organizations. Commercial aquapark organizations present feasibility studies and the services until the opening day an that the safety conditions are steadily controlled in aquaparks. Aquapark is a new type of use in Turkey, its number is rapidly increasing. Furthermore as the aquaparks analyzed, it can be seen that lack of aquapark standards, convience with the safety conditions and control mechanism. In this frame work, thefollowing chapter is examined location requirements and design criteria of aquaaparks.

NAME	LOCATION	DESIGNER	DATE OF OPENING	SEASONS	OWNERSHIP	LOCATION CRITERIA	VISITOR CAPACITY (person)	PERSONNEL DISTRIBUTION (person)							PROBLEMS	AREA (sqm2)	FEE	WINTER USAGE	SLIDER FIRM	AUTHORIZATION		
								Fast-food	Cleaner	Activity	Cashier	DJ	Technical Service	Security								
Aquapark	Antalya- Dedeman	Arc Ali Çiçek	1993	May - October	Municipality-49 year	Proximity to the City centre, near the hotel	1.000	20		18	4				4	Less personnel (attend of the session)	0-12 without fee, 5.500.000		Polin	Yes		
Aqualand	Antalya-Ake İnş		1995	May - October	Municipality-49 year	Proximity to the City Center	1.000	Total= 185-190						2	7	25	No maintenance, less personnel	26.000	0-6 without fee, 7-12 3.000.000, 4.000.000		Polar	Yes
Aquapark	Antalya-Alanya	Arc Mustafa Temiz	1995	May - October	Private Ownership	Suitable land for location	1000	Total = 45-50 (full capacity) or 25-30									power outage	5-15 3.000.000, 3.500.000		Polin	Yes	
Aquasland	Antalya-Göksoy Ltd	Landscape Arc Zübeyde Özkan Özsu	1996	May - September	Private Ownership		1500	Total = 65									Unaccessible	4.800	0-12 1.500.00, 2.500.000		Polar	No
Aquafun	Antalya-Belek		1998	April - October	Private Ownership	Proximity hotels	250	5		7	5							0-6 without fee, 7-12 1.000.000, 2.000.000		Bowling, billiards	Yes	
Aquaworld	Antalya-Kemer	Arc Ertuğrul Yücel	1997	May - October	Municipality-15 year	Vacant and suitable Municipality land	750-1000	Total = 30-35										10.000	0-6 without fee, 7-12 5 \$, 10 \$	Maintenance	Polin	Yes
Aquafun	Aydın-Kuşadası (Liman)		05.06.1998	May - October	Unauthorized	Near the seaside	1500	20	6	10									0-6 without fee, 7-12 %50 reduced, 4.000.000	Bar	Spanish	No
Aqualand	Aydın-Kuşadası (Sahil Sitesi)	Sampled to Italy	21.06.1998	Depend on weather	Private Ownership		2000	40								Personal Education	33.000	0-6 without fee, 7-12 %50 reduced, 4.000.000		Restaurant	Italy	No
Adaland	Aydın-Kuşadası (Pine Bay)	Arc Ali Çiçek	24.07.1999	Depend on weather	Public Land	Suitable land for location	5000	Total = 82										278.000		Disco - Bar	Polar	Yes
Aqualand	Adana	Arc Timuçin Avaroğlu	04.08.1998	May-October	Municipality		2500	Total=110										80.000		Tennis courts, restaurant, bar	Polar	Yes
Aquapark	Muğla-Bodrum	Arc Ali Çiçek	26.06.1999	June - October	Private Ownership	Accessible			10	33					12			40.000	0-6/55+ without fee, 7-12 3.000.000, 8.000.000			Yes
Aqualand	Istanbul-Beşikmece	Sampled to Sweden (Arc Zafer Özsayın)	02.07.1999	Depend on weather	Municipality-27 year	Municipality land, high residential density	3000	64	15	6								3000	0-6 without fee, 7-12 %50 reduced, 4.000.000	Swimming Pool	Sweden	Yes

Table 5.1. List of Aquapark in Turkey

NAME	Big Hole	Black Hole	Cobra	Crazy River	Flying Carpet	Free Fall	Giant Slide	Hill Slide	Hydro Tube	Jumbo	Kamikaze	Kid's Slide	Multi Slide	Phantom	Piton	Spiro Tube	Twin Twister	Water Slide	
Aquapark (Antalya-Dedeman)		1	1	1						1	1	1	1	1	1		1	2	1
Aqualand (Antalya-Alke İnş.)		1		1			1		1		1	3	1					1	
Aquapark (Antalya-Alanya)				1	1						2	2			1				
Aquaatlantis (Antalya-Göksoy Ltd.)		1			1							3			1			1	1
Aquafun (Antalya-Belek)		1	1		1							3			1				2
Aquaworld (Antalya-Kemer)		1		2		1					1	3					1		1
Aquafun (Aydın-Kuşadası-Liman)		1			1							3							2
Aqualand (Aydın-Kuşadası-Sahil Site)											2	4	1						2
Adaland (Aydın-Kuşadası-Pine Bay)	1	1		2	1	2	2		1		1	10	1						
Aqualand (Adana)		2					2		1		2	2							
Aquapark (Muğla-Bodrum)	1	2		2			3		2		4	2	1			2	2		
Aqualand (İstanbul-B.Çekmece)					1						2	3		1					

Table 5.2. List of Water Slides in Turkey Aquapark

NAME	Activity Pool	Jacuzzi	Kiddy Pool	Lazy River	Swimming Pool	Wave Pool
Aquapark (Antalya Dedeman)	exist	exist	exist	exist	exist	exist
Aqualand (Antalya- Alke İnş.)	exist	exist	exist	exist	exist	exist
Aquapark (Antalya-Alanya)			exist			
Aquaatlantis (Antalya- Göksoy Ltd.)			exist		exist	
Aquafun (Antalya-Belek)			exist			
Aquaworld (Antalya-Kemer)	exist		exist			
Aquafun (Aydın-Kuşadası-Liman)		exist	exist			
Aqualand (Aydın-Kuşadası-Sahil Site)	exist	exist	exist			
Adaland (Aydın-Kuşadası-Pine Bay)	exist	exist	exist	exist	exist	exist
Aqualand (Adana)						
Aquapark (Muğla-Bodrum)	exist	exist	exist	exist	exist	exist
Aqualand (İstanbul-B.Çekmece)	exist		exist		exist	

Table 5.3. List of Aqua Activities

CHAPTER 6

DESIGN CRITERIA DEVELOPMENT FOR AQUAPARKS

Aquapark is an alternative for occupying leisure times that occur as a result of the developed entertainment industry. Although it is a new type of use in Turkey, its number is rapidly increasing. However, in the plans that were prepared according to the Development Act numbered 3194, there was not any area determined for an aquapark use. Thus, aquaparks are established on the lands that were proposed for a park, or for a facility of recreation and tourism. Parks are active green area uses. Establishing aquaparks on those areas, that are free for public use, increases the amount of green area necessary per capita. The aquaparks in Antalya-Alanya and Adana were built on the areas that were considered as green area on the development plan of the city.

In our country, planning policies and control mechanisms concerning aquaparks must be developed. In this concept, related to the main topic of the thesis, location requirements and design criteria of aquaparks were determined with the "must and optional facilities" existing in that use. Those proposed criteria were determined according to the examination of the aquaparks and the interviews with the authorities. Furthermore, aquapark samples on the world were also analysed.

6.1. Determination Of Typical (Must) And Special (Optional) Facilities

Must and optional facilities in an aquapark are determined by users' requirements and demands. In some of the countries users play an active role in the determination process of facilities and activities. In Turkey, unfortunately only in

the aquapark located within the boundaries of Muğla-Bodrum, inquiries including user's demands are made.

Must Activities: There are two basic characteristics of the aquaparks on the world.

- Aquaparks where facilities concerning water fun exist: water rides, wave pools, activity pools, etc.
- Aquaparks where facilities concerning relaxation and health exist: sauna, lazy canals, etc. In recent years, number of that kind of aquaparks increases.

The aquaparks in Turkey have the characteristics of being "water fun", therefore, water rides were mentioned under must activities.

1. Entrance Facility: Entrance fees are taken and informations about the aquapark are given. In reception part, there are private cases where valuable things can be checked.

2. Changing Room-Shower-WC

3. Nursery/Day Care: In aquaparks, there is an accident risk of the ratio of 0,002. So, nursery must certainly be existed.

4. Water Slides: The number and the variation of waterslides existed in aquaparks show a difference. Existance of different water slide alternatives is a factor that increases attractiveness.*

5. Place for having food and drinks: There should be fast-food restaurants and cafe.

*Architect Bülent Özsvaş, authoritative of Polkar Company, states that there must be at least eight waterslide types in an aquapark; water slide, dimensional ride, crazy river, black hall, multi-slide, family slide, twister and phantom-kamikaze

6.. Staff Facility: This is a place where the workers can dress themselves and can have food.

- 1- Bar, restaurant, cafe
- 2- Shops
- 3- Wave pool
- 4- Swimming pool.
- 5- Outing pool
- 6- Amphitheatre
- 7- Discotheque.
- 8- Bowling centre.
- 9- Chess
- 10-Bumping boots.
- 11-Rodeo
- 12-Turkish House&Tent.
- 13-Cowboy House
- 14-Blowed football area.
- 15-Trombolin

6.2. Locational Requirements

When we look at the green area and recreation area standards by Chiara, Paneo and Zelnik, we see that aquaparks are classified in the Citywide Recreation and Parks. The number of population served varies according to the communities. Minimum area of an aquapark that serves for 1000 person should be 20.000 sqm. This part was formed as a result of the examination of the general recreation planning principles of Turkish and world samples.

A. Natural Factors: Topographic and geological structure, water sources, climate and panorama are the effective factors for the land selection of an aquapark.

Geological Structure: Soil structure must be analysed. On soft grounds and on the areas having a risk of landslide, aquaparks can not be constructed. The aquapark existed in Aydın-Kuşadası was demolished because of a landslide, in 1999. The damage cost was stated as approximately 1.7 trillion TL.

Topographic Structure: It is preferred to construct an aquapark on inclined lands. Therefore, both the cost and the accessibility to the slides are facilitated.

Climate: It is important on deciding whether the establishment would be open-air or closed. It is the effective factor on the determination of the beginning and ending time of the seasons if the establishment is built open-air.

Existance of a Water Source: An aquapark is an establishment where facilities with water exist. Therefore, there mustn't be any water problem on the area that the aquapark exists.

B. Demographic Studies: The settled population of the city and local and foreign tourist population that visit the city must be carefully analysed. Location of aquaparks are generally decided in the regions where there is an active topurit population with 15 days period. In the feasibility studies of Kuşadası-Aqualand, the number users were calculated according to the data of 10% of local population and 15% of the number of tourists and short-term resort tenants. Furthermore, population distribution, according to the ages, must be known. Pro-Slide Company stated that, people between the ages 5-35 use the aquaparks most. An aquapark is feasible, if it has a service capacity for 1000 person.

C. Demands of Users: Collection of data concerning the culture of the society, their habitudes and requirements will help to determine the demands of users. Moreover, demands of users are changeable, so necessary examinations about this subject must be done. Disneyland built in France, in

1992, was named as "cultural chernobyl" and reservations decreased because of the reaction of the society, hotels were closed four months later.

D. Economic Factors: Income conditions of the local population and the tourist must be analysed in the region where the aquapark will be built. This is very important, because the organization must gain profit for covering the investment costs and for its continuity.

E. Location: As the places of the aquaparks are examined, it can be seen that, most of them are located in the regions that the local and foreign tourists prefer most, like Antalya, Bodrum, Kuşadası. Another location alternative is to build the aquapark where dense residential area exists within a residential area of a population of 20.000.

F. Size: Aquaparks are feasible if they have a capacity of minimum 1000 person. Architect Bülent Özsvaş, authoritative of Polkar company states that optimum area of an aquapark should be between 2 ha. and 7 ha.

G. Accessibility: Easy and comfortable accessibility must be provided with different transportation alternatives. Furthermore, private inner-city vehicles of aquaparks service for public.

H. Noise: In aquaparks, high volumed music is listened. Thus, an aquapark must be located on area having a certain distance that does not affect the uses like hospitals, dormitories and nursing houses, negatively.

I. Conformity Uses: Existence of industrial plants, cemeteries or prisons around an aquapark area can negatively affect the use.

6.3. Design Criteria

Design process plays an important role in enhancing the use of the aquapark by the members of community. The projects must be attractive to potential guests and efficient in running costs. They must be carefully planned for the numbers of guests anticipated and designed to secure a unique magic a convincing realism. Design criteria of aquapark is mentioned below:

1) Safety: Satisfaction of the guests by the facilities in the aquapark is related to the safety they feel.

2) Provision for the elderly and handicapped users : The design should be provide the accessibility, mobility and safety of the handicapped users. Ramps should be used instead of stairs where possible.

3) Maintenance and Operations: The daily operations and maintenance of facilities are critical user satisfaction.

4) Parking: Generally, the standard is one of parking area Per three person.

5) Signage: Signage gives information to the guests and facilities the mobility. There are three categories of signage:

- Identification: It is used at the entrance and gives information about the facilities.
- Directional: It provides easy accessible to the guests to different directions.
- Regulatory: It includes that must be obeyed concerning the facilities. It is very important for the aquaparks, because every slide has a using guide. If the guests do not obey these rules, accidents will be inevitable.

6) Accessibility: Amount facilities easy and pleasant access should be provided. Circulation system allow walkers to pass by and check out areas' potential contact. There is a wide pathway through the park.

7) Diversity: Existence of different facilities and activities increase the attraction of the aquapark.

8) Flexibility: Technological developments can provide the development of new alternatives in the facilities. Furthermore, in the design, necessary flexibility should be provided for the changes that can be applied according to the guests' demands in the future.

9) Landscape: Planting and detailing create a rich and varied aesthetic environment with ranges of color texture, shape and in addition to that, using the trees that increases the attractiveness. Also, landscape elements that prevent noise that can be used around the area.

10) Texture: As a base covering, an unslippery material should be preferred. Also, gathering places and orientation can be expressed by the texture.

6.4. Management Criteria

The owners of aquapark enterprises aim to increase their profits, therefore, they want to increase the number of guests in every age group and to provide the continuity of the enterprise. Tom Brain, author of "The Amusement Park Guide", states that in very less number of aquaparks the managers work as mayors; they determine people's life styles, activities, desires and safety. According to Tom Brain; "there is no room for unsuccessful manager in this industry".

Management Structure Criteria:

1- Relationship with the guests is the key to make that enterprise to be life long. Thus, the personnel should be genial, well-educated and they should know the using guides of the slides.

2- There is a reporting system that will identify damage caused by poor design.

3- Providing safe, secure environment that offers attractive, exciting, healthy and qualified aquatic experience.

4- Comfort should be afforded to the participants like; shade plantings, benches.

5- Garbage cans are provided, they have been placed in another receptacle, such as a wooden box.

6- Developing an equitable and affordable level of service.

7- Long queues along slides should be prevented and the place, where those queues occur, should be in the shade.

8- There must be a maintenance programme.

9- The roads inside the aquapark must be clean.

10- There should be a satisfying broad range of aquatic interest.

11- Landscape maintenance must be provided.

12- Tom Brain underlines the importance of the details. For instance; number of light bulbs not burning in the sign painting feelings and sun sticking to the railings.

6.4.1. Aquapark Safety

In an aquapark, there are many rules that the visitors must obey. Particularly, not using the water rides according to the rules, can cause injuries even accidents that results with death. In aquaparks, there is an accident risk of a ratio of 0.002. In order to decrease that risk, personnel must explain the rules to the guests briefly. Furthermore, next to each slide, sliding rules must be explained with graphics (diagrams) and rules must be written in certain languages.

The rules applied by the members of the World Water Association, are mentioned as below;

- Learn to swim. The best thing anyone can do to stay safe in and around the water is to learn to swim--this includes adults and children. The American Red Cross has swimming courses for people of any age and swimming ability.

- Small children should be instructed to Not swallow park water. Chlorine and water pH readings are usually posted at large parks.

- Zero depth pools are recommended for toddlers. These pools have water games, sprays, and fountains with no appreciable water depth.

- Plastic swim diapers are required at many parks. Changing is often restricted to designated, sanitized changing areas.

- Prescription eyeglasses and sunglasses are allowed in water areas if used with safety straps.

- Health restrictions apply to some rides. Personnel with neck or back problems heart conditions, prone to motion sickness, or pregnant may not ride high speed or rapid descent rides.

- Age and height restrictions apply to many rides. Size and coordination is critical to safety inside open water flumes.

- No "chains" of people are allowed on water rides. A minimum of 5 seconds between riders is required, however, each park can adopt it's own spacing requirement between riders.

- Be sure the area is well supervised by lifeguards before you or others in your group enter the water.

- Read all posted signs. Follow the rules and directions given by lifeguards. Ask questions if you are not sure about a correct procedure.

- When you go from one attraction to another, note that the water depth may be different and that the attraction should be used in a different way.

- The degree of the slope and width of the open flume determines the recommendations on riding positions. The basic position has the rider with his/her face up, hands behind the head, and feet first crossed at the ankles. Sitting up positions are recommended for slower, open flumes with wide diameters and large slope degrees (6.5 or larger).

- Inner tubes and mats are not designed for "bumper" use. Immediately after use, remove the equipment from the pool to prevent other riders from hitting it.

- No running in or around the pools.

- Alcoholic beverages are not allowed in most parks. In parks allowing alcohol, consumption is restricted to certain areas.

- No horseplay is a standard regulation in all parks.

- If you must smoke, do so in designated areas away from the pools.

· Shoes are required when walking around the pools, but may be prohibited for riding purposes.

· Bathing attire and ride surfaces may be incompatible. Denim that is stiff may not slide well on surfaces with low water flows. Metals buttons, belts, and other objects can mar the ride's surface. Nylon and spandex slide well on wet surfaces.

· Some facilities provide life jackets at no charge. If you cannot swim, wear a Coast Guard-approved life jacket. Check others in your group as well.

· Last, but not least, use plenty of sunscreen on all exposed skin to ensure maximum skin protection. Hats, visors, and shirts are recommended to prevent overexposure around the pools. (http://rota-www.med.navy.mil/safety/Safety_Topics1/waterpark_safety.htm)

If the guests do not obey the rules mentioned above, the accidents are unavoidable. (see Appendix)

6.5. Evaluation

In this chapter, location requirements and design criteria of aquaparks were determined with the "must and optional facilities". Must and optional facilities in an aquapark are determined by users' requirements and demands. There are two basic characteristics of the aquaparks on the world; water fun and facilities concerning health. The aquaparks in Turkey have the characteristics of being "water fun". Must activities are; entrance facility, changing room-shower-wc, nursery/day care, water slides, place for having food and drinks, staff facility. Some optional facilities are; shops, wave pool, swimming pool, outing pool, amphitheatre, discotheque, bowling centre and bumping boots. Minimum area of an aquapark that serves for 1000 person should be 20.000 sqm. Location requirements were formed as a result of the examination of the general recreation planning principles of Turkish and world samples. Natural factors (geological structure, topographic structure, climate, existence of a water source),

demographic studies, demands of users, economic factors, location, size, noise and conformity uses factors are formed for aquaparks location requirements. Aquaparks must be carefully planned for the numbers of guests anticipated and designed to secure a unique magic a convincing realism. Design criteria of aquapark is; safety, provision for elderly and handicapped users, maintenance and operations, sign, parking, diversity, accessibility, landscape, flexibility and texture. There are many rules that the visitors must obey in an aquapark. Particularly, not using the water rides according to the rules, can cause injuries even accidents that results with death. For that reason, personnel must explain the rules to the guests briefly . Aquaparks must be convience with the security conditions.

CHAPTER 7

AN AQUAPARK DESIGN STUDY IN İZMİR

In the previous chapter, design criteria of different aquaparks whether in our country or in foreign countries were mentioned. In this case study, developed design criteria were applied on the aquapark area proposed in İzmir – Bornova. Furthermore, facilities existed in the design area and their dimensions were mentioned in this chapter.

7.1. Site Analysis of the Project Area

In this part, general data concerning İzmir and Bornova were taken for the Greater Municipality of İzmir, Governmental Institute of Meteorology. There is a completed aquapark project in the study area, thus, in the concept of thesis area of the that project was taken as a constant measure and a new design was formed.

7.1.1. Location

İzmir is the third greatest city of Turkey. Bornova is situated in the east part of İzmir and its distance from the city centre is approximately 10 km. (Fig. 7.1) Study area includes a part of the recreation area in Bornova. There is a residential area on the east of the area and recreation area on the other sides.(Figure 7.2) Accessibility to the area can be provided by bus, metro, service buses of the aquapark and by private vehicles. (see Fig. 7.3)

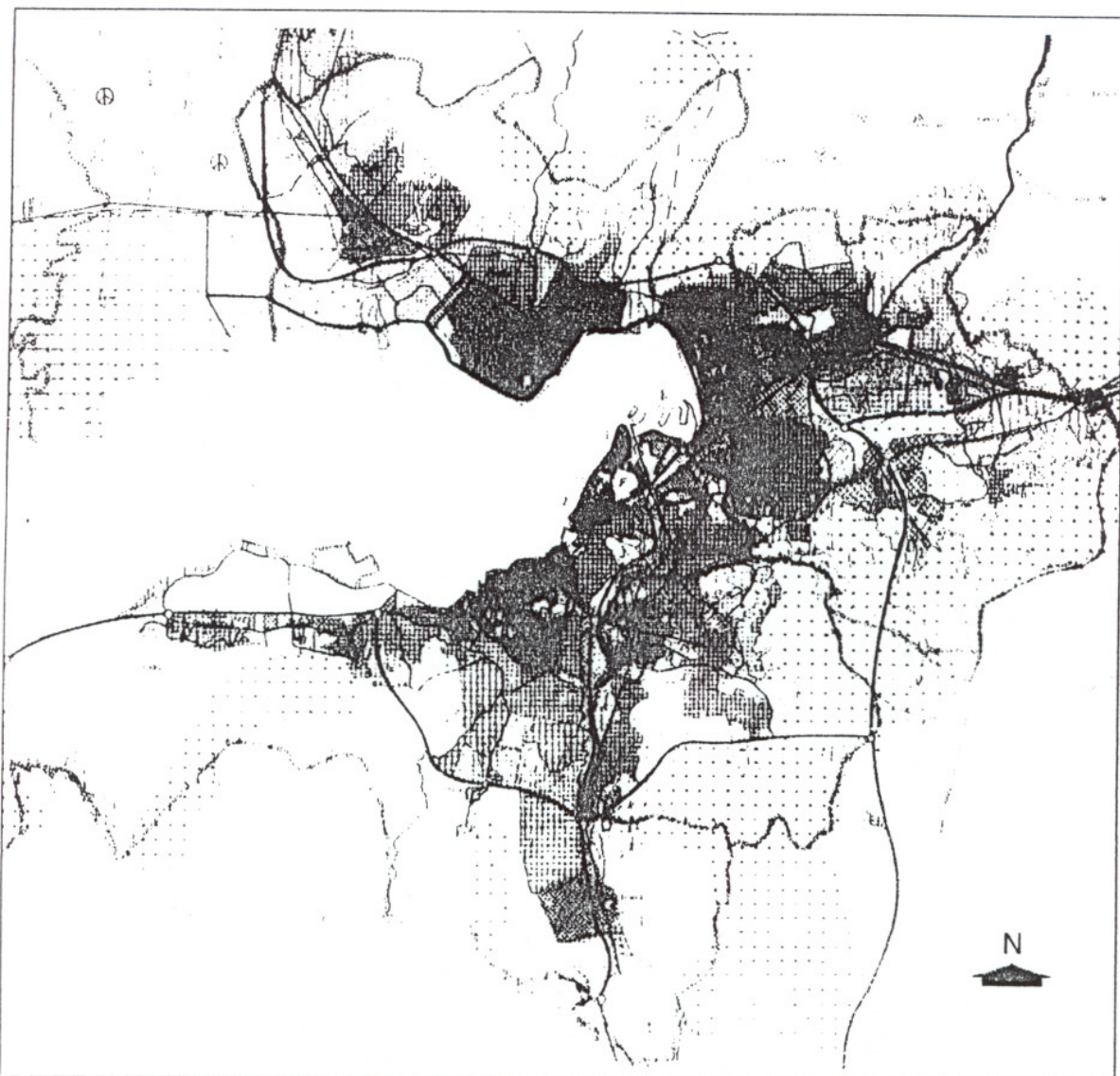


Figure 7.1. Study Area in Izmir (Greater Municipality of Izmir, scale: 1/100.000)

7.1.2. Demographic Structure

According to the 1990 census, total population of Izmir is 2.694.770 and %10 of this total number lives in Bornova. Aquaparks are basically visited by the age group of 5-35. 56.9% of the population in Izmir is between the ages 5 and 35. This ratio in Bornova is 60.5% because Ege University is an important factor for the increase of young population.

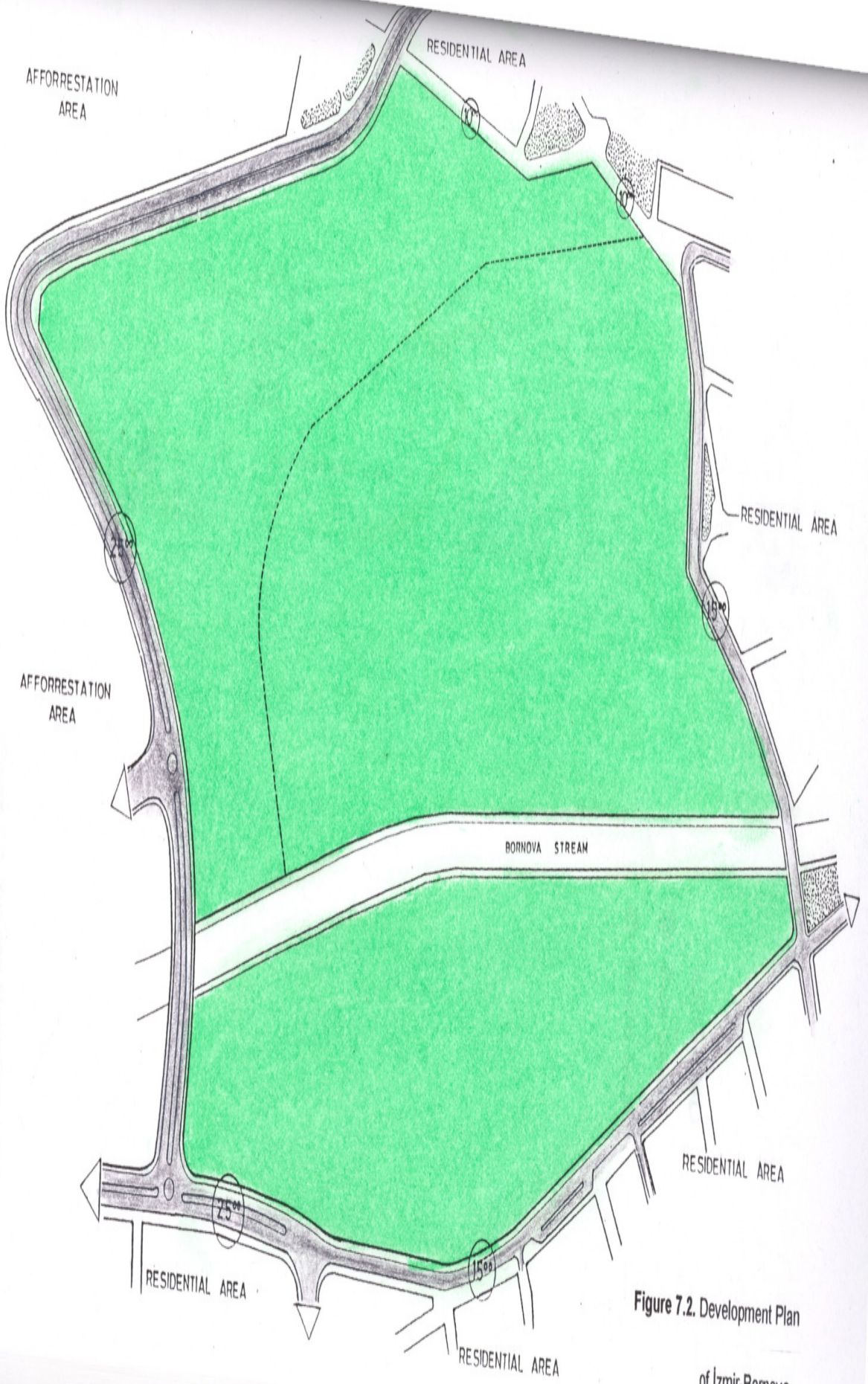
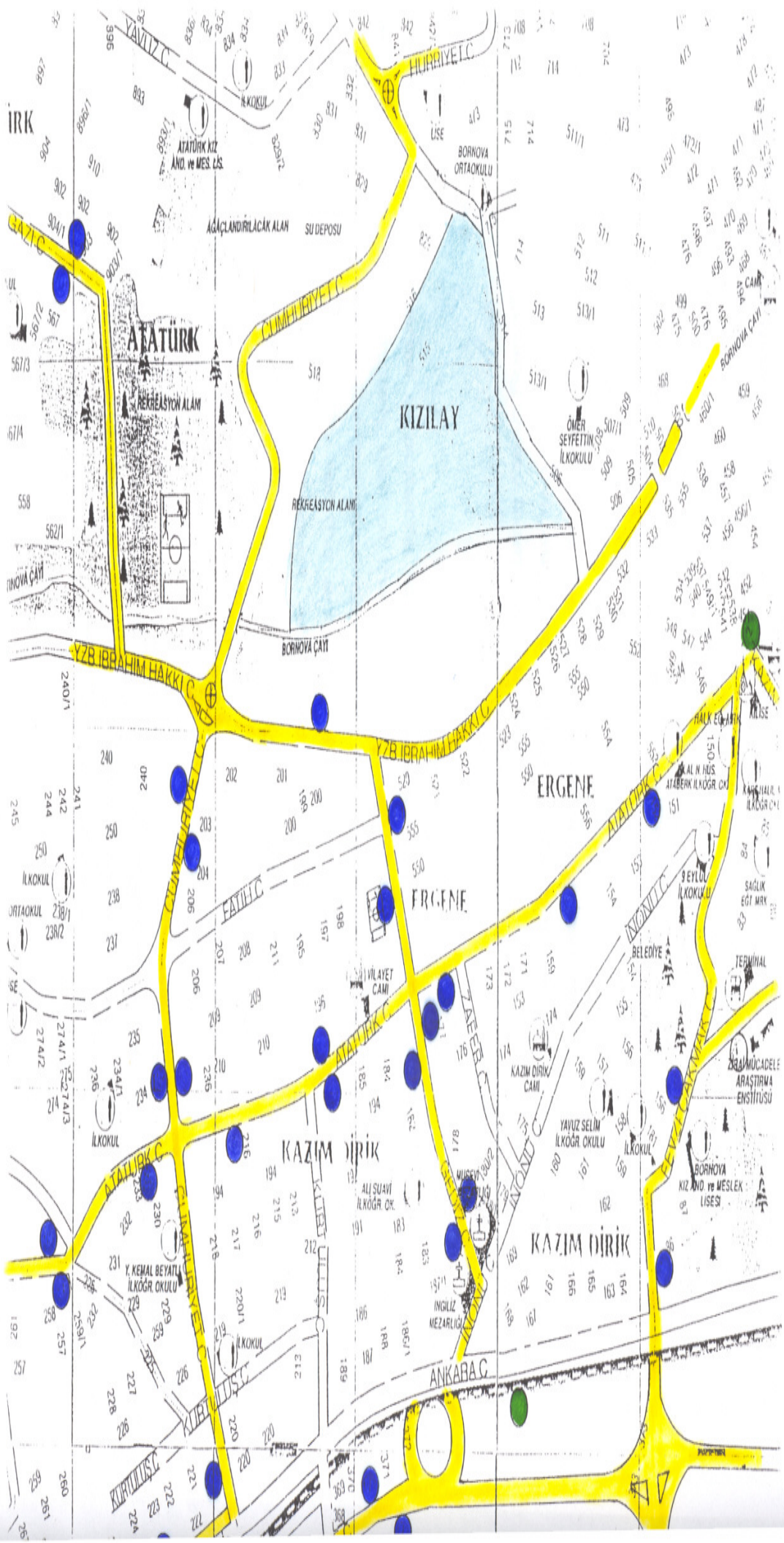
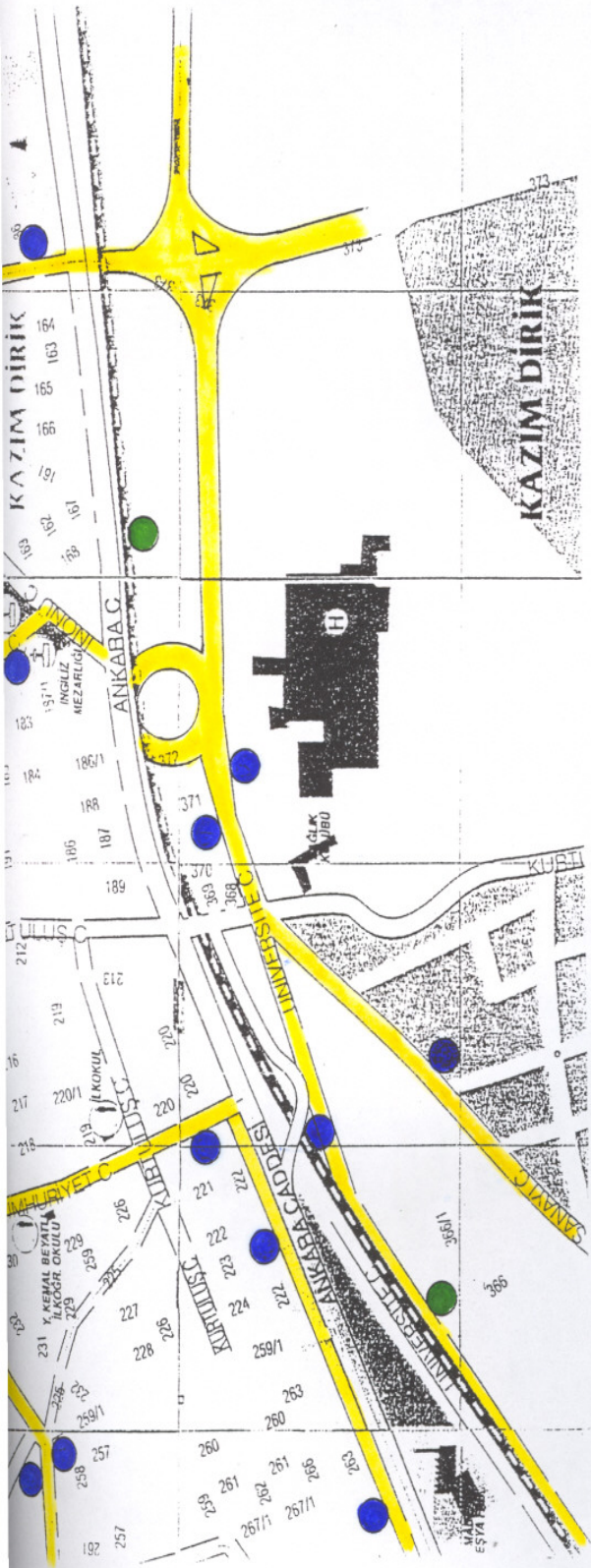


Figure 7.2. Development Plan
of Izmir-Bornova





LEGEND

● Bus Stop

● Metro Stop

Figure 7.3. Bus and Metro Circulation

7.1.3. Social Structure

One of the most important factors that forms the social structure of a city is the economic factors. Economic structure of İzmir depends on industry, commerce and tourism. İzmir is an International city with its industrial associations, international fair, chambers and entrepreneurs. The places for the leisure occupation of the people living in İzmir are; cultural centres, cinemas, theaters and places for sports activities.

Aquapark is a new alternative proposed for the occupation of leisure time. Aquapark is a daily – used placed and it provides opportunities to the people in many respect for relaxation and getting away from the daily stress.

7.1.4. Natural Factors

Geological structure of the area is suitable for an aquapark use. As the slope analysis of the area, approximately half of the area is between the slope of 0-5% and the most important factor for the decrease of the investment cost of water slides and it also provides a facility for the accessibility inside the area. Climate analyses of use in June, July, August and partially in May and September. Moreover, the area also provides a water source which is an important natural factor for an aquapark.

7.2 Design Programme

The design programme of the project demonstrate a similar characteristic with the suggested design criteria for typical activities and special facilities in aquapark. In other words, the design process is based on must and optional activities that are suggested previous chapter.

Aquapark area is 150.000 sqm and service capacity is 5000 person perday. The present use of the east part of the project area is a residential area and design is integrated with this area with road whether by vehicles and pedestrians . Therefore, main entrance is defined to the project area on this

side. There exists a bus stop on the west side of the area and the pedestrian way behind the bus stop leads people to directly to the aquapark . Surface car parking area is provided with the project area with a capacity of 340 cars, 16 of them are coach parking.

There are three main facilities in aquapark. One of them is entrance facilities. Entrance facilities include reception, staff rooms, changing room, safe boxes, nursery, shops, bar and restaurant. (Figure 7.4) In winters, restaurant, bar and disco will be used with and areas of 1200 sqm. The 200 seat restaurant is designed first floor, will serve food for meeting , receptions and parties during day time. Second floor is designed bar and disco. The other main facility is pools. These are activity pool, kid's pool, lazy river, open and closed swimming pool. Closed swimming pool is 1800 sqm and and designed for health development of the individual both psychological and physiologically. The third main facility is water slides. These are designed slopy area. Eighteen water slides proposed in aquapark, some of them are free fall, kamikaze, black hall crazy river and giant slide. The other activities are bar, cafe fast food, billard area, basketball and tennis courts. (Figure 7.5)

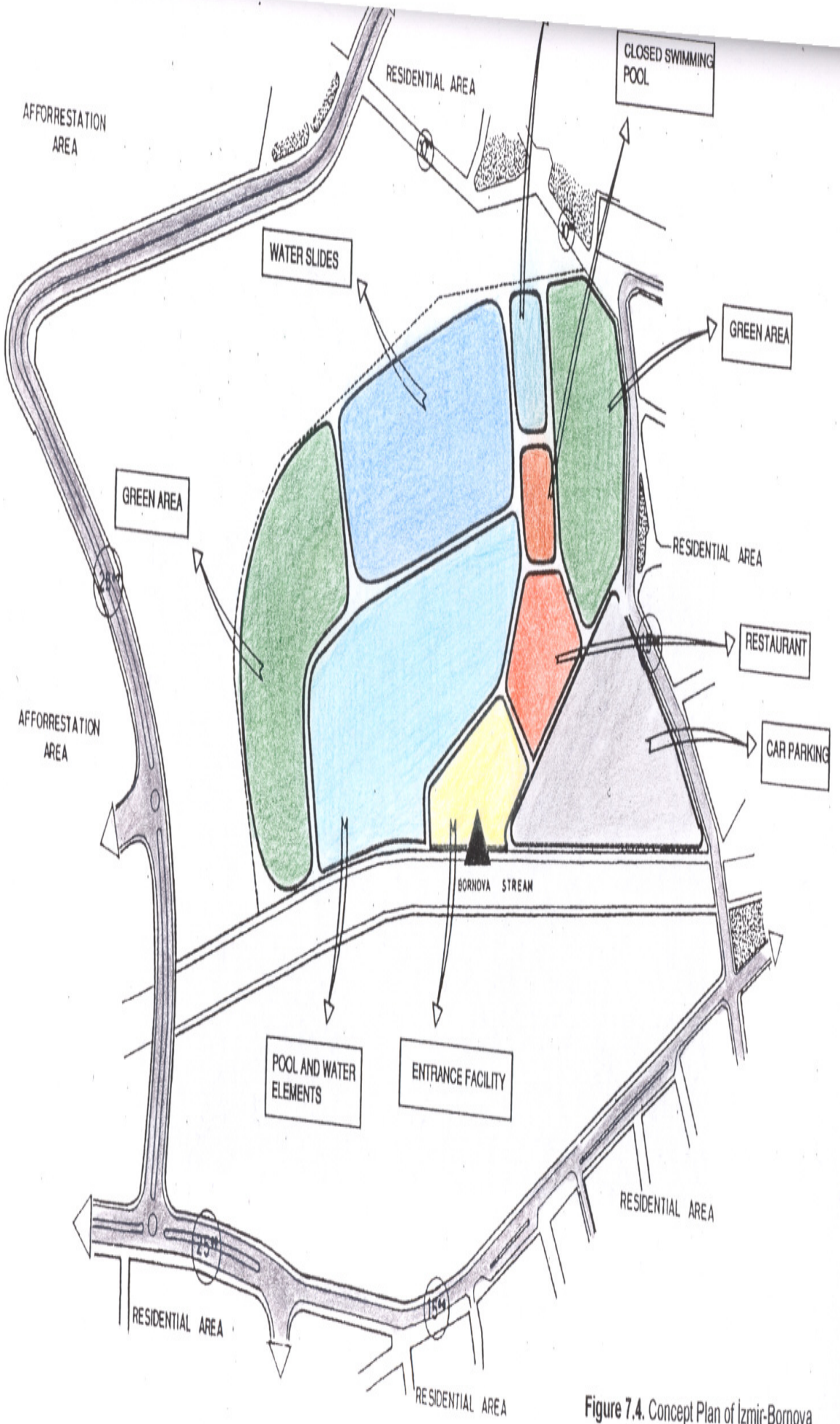


Figure 7.4. Concept Plan of Izmir-Bornova

CONCLUSION

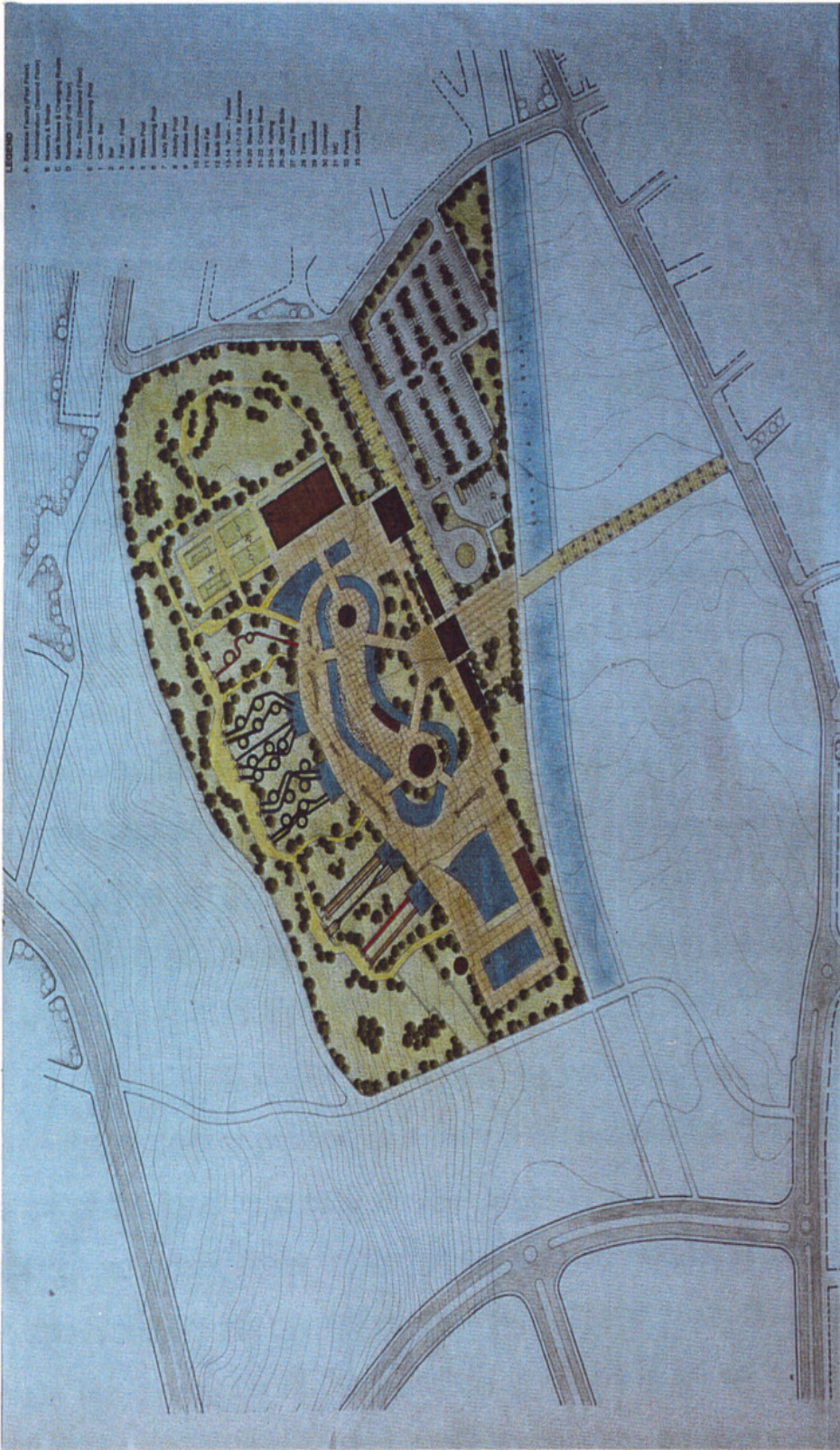


Figure 7.5. Site Plan of Aquapark in Izmir-Bornova

CHAPTER 8

CONCLUSION

Leisure time earns an individual, many positive aspects, like; being initiative, constructive, creative, tolerant, reliable and to be willingly for working and teamwork. As social and individual activities entertainment and recreation are very important for a healthy individual and society. Here, it can be mentioned that, entertainment and recreation have prevalent advantages; people's social solidarity, strengthening democracy and increasing individual health. Therefore, entertainment and recreation are almost necessary activity types for a healthy human being and society. However, what these activities should be, in which conditions entertainment and recreation activities can provide individual and social benefits must be defined, clearly.

Today, commercial institutions, that basically focus on entertainment and recreation like; Amusement Parks, Theme Parks and Aquaparks have spread with parallel to the changes in "entertainment industry" occurred and developed particularly in America. An aquapark is an alternative area in the "occupation of leisure" and also began to spread in our country.

Investment cost of aquaparks is very high, therefore, this increases the importance of the location criteria of such an economic enterprise. There are also different aquapark areas existed in our country, where 17 of them were realized and 3 of them are on project stage in the last 7 years. It is impossible, to estimate the dimension of this rapid development in future. Nevertheless, social standings, standards concerning the use and site selection of aquaparks were not defined in our current planning system. Moreover, it should be discussed that, in which area they should be dealt; whether an entertainment and recreation use or commercial and tourism aimed use. Thus, this kind of clearness in the planning process will determine the place of the aquapark use in the planning legend.

General goal of entertainment areas is to provide the amusement of people and to make them have a good time. However, this goal takes a secondary place for commercial establishments. The initial objective is to derive profit and they provide that with the supply of entertainment demand. Therefore, it is necessary to deal with the aquaparks as an institution of "entertainment industry".

In this framework, aquaparks define an area except parks, active-passive areas and recreation areas. Parks and green areas have a purpose of recreation instead of an economic concept and they aren't defined as a sector. Although public areas are legally described as "the areas that everyone can use with a fee", parks and active-passive green areas are used without any entrance fee. Furthermore, those areas are defined as public lands and certain fees taken from the visitors are used for the maintenance and continuity of the areas instead of profit purpose. Namely, those places are available for everyone as a "public land". However, the aim of an organized production process in the aquaparks and similar places is, to derive profit by using the consumption (namely, people's requirements). Thus, acceptance of aquaparks as "public lands" is argumentative, because activities on those areas depend on the fees. It is impossible to cover the price of making use of those activities by public.

In the researches concerning the investment costs of aquaparks, it was stated that, Adaland opened in 1999 in Kuşadası had cost 6-7 millions and will cover its investment cost in two summer seasons with working full capacity. If those costs are examined, it can be seen that, it is necessary to make a research over aquapark users. Aquaparks are placed on in the status of "profit organizations" with these investment costs and this necessitates the determination of that kind of uses as tourism areas instead of public areas.

Aquaparks can be evaluated with respect to Management, Planning and Design Criteria, as follows:

- In a coherent recreation planning, requirements should be determined in the basis of demographic and age group distributions of the society. According

to these examinations, people's requirements should be taken into consideration and studies related to the interests, abilities and common values in a society should be made.

- Regulations and rules should be formed concerning the establishment, management and activity areas of aquaparks. In this framework, control authorities must be developed.

- Aquapark is a result product of entertainment insight and culture. Thus, it is necessary to make researches basically specialized on entertainment insight and culture to develop suggestions concerning our country. In the other countries, researches concerning the subject, are made in the departments opened under the concept of "leisure studies". The number of similar studies is limited in our country. Therefore, studies about the future trends and demands should be developed.

- More detailed examination should be made related to the location requirements and design criteria of aquaparks.

- In our country, a part of aquapark implementations were realized on public lands. Thus, feasibility studies of those investments should be made and public interest must be taken into consideration, because there is a consumption of areas left for public uses. For instance, in Bornova example, although the area was vacant and not organized, it was planned as an aquapark area instead of panning it as a public land. Unfortunately, this application causes the decrease of open and green areas that are already insufficient in the city. Aquaparks are also open area uses, but their production costs are very high and this reflects on the entrance fees, therefore, aquaparks have the risk of addressing only a certain part of the society.

- Aquaparks are day-visit establishments. Through the examinations, it was observed that, these uses were built on the areas that had been considered as park, recreation and tourism areas on the development plans. However, there is a necessity of a new legend concerning those areas.

- Discussing, whether aquaparks are public or private lands, has great importance with respect to the management, planning and location criteria.

- There is a need of comprehensive organizations related to the occupation of leisure time, and with that kind of organizations spatial arrangements also develop.

- The ratio and continuity of that kind of commercial investments and activities through national and local economies must be examined and an organization should be formed which can answer the demands and the specific conditions of the country. In the foreign examples like Canada and USA, governments are responsible of the leisure activities within their organization schemes. However, this sector is in the beginning stage for our country, therefore, there isn't such an organization.

To conclude; Aquapark is a new landuse type in our country. This thesis is the first study related to this subject. In the country scale, social requirements should be determined for the occupation of leisure time. Social, physical and economic data must be examined before taking an aquapark construction decision. In addition, a control authority should be formed for their suitability to the design criteria and security conditions. Nonexistence of entertainment and recreation areas in planning studies depends on the insufficiency of those kind of activities in our culture. Thus, with the new researches, it is necessary to explain the entertainment concept in our culture and in this framework, design criteria should be briefly defined and for the realization of planning decisions and investments concerning entertainment and recreation areas new alternative uses should be determined.

REFERENCES

Books:

1. David L.Sills, "Leisure", International Encyclopaedia Of The Social Science, (Crowell Callier and Macmillan , Inc., 1969), Vol. IX-X, PP. 248-253.
2. De Chiara, Ponero Zelnik Mc Graw Hill, Time Saver Standardsfor Housing and Residential Development, (Mc Graw Hill, 1995, Vol.1), p.246
3. George E.Fogg, Park and Planning Guidelines, Published by National Recreation &Park Association, 1992, pp.1-4, 25, 67-69
4. George Torkildsen, Leisure and Recreation Management, An Imprint of Chapman & Hall, Third Edition, 1992, pp.13-75, 117-121, 129-179
5. James Murphy, "Concepts of Leisure", Recreation an Introductory Handbook, edited by Alan Graefe, Stan Parker, (Venture Publishing Inc., 1987, pp.11-17)
6. John Urry, "Consuming Places", (Routledge, 1995).
7. Kathleen A.Cordes, Hilmi M.İbrahim, Applications in Recreation and Leisure For Today and The Future, (Mosby-Year Book, Inc., 1996, pp.1-35).
8. Mahmut Tezcan, "Boş Zamanlar Sosyolojisi", Ankara Üniversitesi Eğitim Bilgiler Fakültesi Yayınları, Ankara, 1993
9. Nermin Abadan, "Üniversite Öğrencilerinin Serbest Zaman Faaliyetleri", Ankara Üniversitesi Siyasal Bilgiler Fakültesi Yayınları, Ajans Türk Matbaası, Ankara, 1961, s.1-29, 124-155

10. Richard Kraus, "Leisure in a Changing in America", (Macmillian College Publishing Company, Inc.,1994), pp.1-34, pp.359-388.
11. Richard Kraus, "Recreation & Leisure in Modern Society", (Jones and Barlett Publishers, 1998)
12. Robin Wilson, Richard Eberlin, "Outdoor Water Recreation", Handbook of Sports and Recreational Building Design, Volume 3, Outdoor Sports, Edited by Grait John and Helen Heard, 1985, pp.90-93
13. Sebastian de Grazia, "The Problems and Promise of Leisure", Environment and Policy, edited by William R.Ewald, Jr,(Indiana University Press, 1968),pp.111-133.
14. Seligman E.R.A., Chief Edwin, "Leisure", Encyclopaedia Of Social Sciences, edited by E.R.A. Seligman and Chief Edwan, (The Macmillan Company, U.S.A., 1950), V ol. IX-X, pp.402-405.
15. Seligman E.R.A., Chief Edwin, "Play", Encyclopaedia Of Social Sciences, edited by E.R.A. Seligman and Chief Edwan, (The Macmillan Company, U.S.A., 1950), V ol. XII-XII, pp.160-161.
16. Stephen Williams, "Outdoor and the Urban Environment", (Routledge, 1995).
17. Suat Karaküçük, "Rekreasyon Boş Zamanları Değerlendirme Kavram Kapsam ve Bir Araştırma, Seren Ofset,1997).

Periodical Articles:

1. Filiz Aydoğan, "Bertrand Russel'da Aylaklık ve Boş Zaman", Kuram, Mayıs,1998,s.37-40.
2. Halil Turhanlı, "Ütopyaları Gösteren Haritalar Yeni Babil'de Hayat", ROLL, (Kasım, 1999), s. 45-47.
3. Herbert Applebaum, "İş ve Boş Zaman", Çalışmak Yorar", Çalışmak Yorar, 1997, sayı 12, s.47-51.

Thesis:

1. G. Demirkan, "Boş Vakit Değerlendirmeye Yönelik Rekreasyon Alan Planlaması ve Ankara için Uygulanması", (Yüksek Lisans Tezi, Ege Üniversitesi Kent Mimarlığı Bölümü, İzmir, 1978)
2. Nilgün Kiper, " Importance of Play Areas in Child D evelopment and Design Guideliness for Plar Areas", (Master of Urban Design, İzmir Institute of Technology, 1999)

Internet Web Sites:

1. "Amusement Leisure Worldwide"
<http://www.amusementleisure.com> (7.7.1999)
2. "Blizzard Beach"
<http://www.blizzardbeach.orlondo.com>
3. "CPSC"
<http://www.Cpsc.gov/-cpscpub/pubs/amuse.html#Detailed>
(23.12.1999)

4. "EWA"
http://www.Waterpark.de/_nome-e.html (13.11.1999)
5. "Fun Guide's World Of Amusement Parks"
<http://www.funguide.com> (12.5.1999)
6. "IAAPA"
<http://www.iaapa.org> (24.12.1999)
7. "ITPS"
<http://www.interthemepark.com/asia.htm> (23.12.1999)
8. "Interview: Tim O'Brien"
<http://themeparks.About.com/travel/vacations/themeparks/libr.../aao/0199ht>
(11.11.1999)
9. "Leisure as Time"
<http://www.leisure.studies.uiuc.edu/resources/definitions/time.html> (7.8.1999)
10. "NAPHA"
<http://www.interthemepark.com> (24.12.1999)
11. "ProSlide"
<http://www.ProSlide.com> (20.12.1999)
12. "Water Parks in the United States"
http://users.sgi.net/~rollocst/a_park.html (3.11.1999)
13. "White Water West - The Company"
<http://whitewaterwest.com/company.html> (13.11.1999)
14. "Water Park Safety"
http://rota-www.med.navy.mil/safety/Safety_Topics1/Waterpark_safety.htm
(12.11.1999)

15. "U.S. Water Slide and Ride Fatalities (1972-1997)"

<http://members.aol.com/rides911/water.htm> (26.10.1999)

16. "Wet'n Wild"

(<http://www.wetwild.com/orlando>) (20.12.1999)

BIBLIOGRAPHY

1. Akın Süel, "Rekreasyon Planlamasında Genelleme", (D.E.Ü. Müh. Mim. Fak. Basım Ünitesi, 1983)
2. Albert J.Rutledge, Asla, Anatomy of Park the Essentials of Recreation Area Planning and Design, (McGraw Hill, Inc., 1971, pp.91-105, 107-148)
3. Alan Bryman, "Disneyland His Worlds", Routledge, 1995, pp.63-80.
4. Cemal Arkon, Şehir Planlamada Terimler Sözlüğü, (D.E.Ü. Müh. Mim. Fak. Basım Ünitesi, 1989)
5. Arthur H. Mittelstaedt, Jr., Leisure in our Changing Society an Interdisciplinary View, (The New York State Recreation and Parks Society, Inc., 1974, pp.156-159)
6. Bertrand Russell, Aylaklığa Övgü, (cem yayınevi, 1992)
7. Chris Rojek, Decentring Leisure Rethinking Leisure Theory, (Sage Publishing Ltd., 1995),
8. Elinor C.Guggenheimer, Planning for Parks and Recreation Needs in Urban Areas, (Twayne Publishers,Inc., New York, 1969, pp.21-54, 88-95,123-125, 153-165, 172-195, 228-255)
9. Gary Cross, "Leisure in Historical Perspective", Recreation an Introductory Handbook, edited by Alan Graefe, Stan Parker, (Venture Publishing Inc., 1987, pp.25-29)
10. Geraint John, Micheal Collins, "Leisure Pools", Handbook of Sports and Recreational Building Design, Volume 1, Ice Rinks and Swimming Pools, Edited by Graint John and Helen Heard, 1985, pp.68-79

11. Leisure - Time Facilities For Young People From 13 to 25 Years of Age, Survey made for the Council for Cultural Co - operation by the Space for Youth Foundation, Rotterdam, Strasbourg, 1967, pp.15-34, 56-65
12. John Neulinger, "The Psychology of Leisure", Recreation an Introductory Handbook, edited by Alan Graefe, Stan Parker, (Venture Publishing Inc., 1987, pp.37-40)
13. John Wilson, "The Sociology of Leisure", Recreation an Introductory Handbook, edited by Alan Graefe, Stan Parker, (Venture Publishing Inc., 1987, pp.49-53)
14. Jullian W. Smith, "Enviromental Implications for Leisure", Leisure in our Changing Society an Interdiciplinary View, The New York State Recreation and Parks Society, Inc., 1974, pp.47-59
15. Marshall Berman, "Katı Olan Herşey Buharlaşıyor, (İletişim Yayınları, 1999)
16. Max Kaplan, "Characteristic of the New Leisure", Leisure in our Changing Society an Interdiciplinary View, The New York State Recreation and Parks Society, Inc., 1974, pp. 1-30
17. Micheal Laure, "An Introduction to Landscape Architecture", Second Edition, (Australia;Pitman Edition Published, 1976)
18. Nejat Bozkurt, "20.yy. Düşünce Akımları Yorumlar ve Eleştiriler", (Sarmal Yayınevi, 1998).
19. Riva Poor, "The Economics of Leisure: An Emerging Emphasis on Human Development", Leisure in our Changing Society an Interdiciplinary View, The New York State Recreation and Parks Society, Inc., 1974, pp.113-136

20. Seppo E. Iso-Ahola, "The Social Psychology of Leisure", Recreation an Introductory Handbook, edited by Alan Graefe, Stan Parker, (Venture Publishing Inc., 1987, pp.41-37)
21. Shivers, Jays, George Hjelte Rutherford, Planning Recreational Places, (Fairleigh Dickonson Un., Associated Press, 1971), pp.30-60,199-204.
22. Tania Modleski, Eğlence İncelemeleri, (Metis Yayınları, 1995)
23. Thomas Goodale, "Philosophies of Leisure", Recreation an Introductory Handbook, edited by Alan Graefe, Stan Parker, (Venture Publishing Inc., 1987, pp.31-36)
24. Wayne R. Williams, "Recreational Places", (Reinhold Publishing Cooperation)
25. W.Seabrooke, C.W.N. Miles, Recreational Land Management, (E&FN Spon An Imprint Of Chapmon&Hall,1993, pp.1-23)
26. William D. Ramanovski, "Pop Culture Wars Religion and The Role of Entertainment American Life, (Intervarsity Press Downers Grove, Illions, 1996, pp.34-57).
27. Willis Susan, "Gündelik Hayat Kılavuzu", (Ayrıntı Yayınları, 1993, pp.9-32, 68-75)
28. William M.Rush, "Enviromental Planning", Urban Planning, Anthony J.Catanese, James C. Synder, Second Edition, (Mc Graw Hill Inc.,1988, pp.281-)

Periodical Articles:

1. Betsy Ceasar, "A Matter of Child's Play", *Parks & Recreation*, April 1999, pp.66-73.
2. Cammie Mcatee, "Oyuncak Kent", *Arredemento Mimarlık*, 1998-06, s. 84-88.
3. Carter J.Betz, "National Outdoor Recreation Areas", *Parks & Recreation*, January 1999,V. 34, Issue.1, pp.22-31.
4. Ding-Tzann Lii, "Social Spheres and Public Life, A Structural Origin", *Theory, Culture and Society*, 1998, pp.115-133.
5. Donald G.Reid, Roger C.Mannell, "The Globalizayion of The Economy and Potential New Roles for Work and Leisure", *Society and Leisure*, V.17, N.1,1994,PP.251-266.
6. Feyzan (Beler) Erkip, "The Distribution of Urban Public Services: The Case of Parks and Recreational Services in Ankara", *Cities*, Vol.14, No.6,pp.353-361, 1997
7. François Burkhardt, "The Disney Syndrome", *Domus*, no:787, 1996, 3-8.
8. Frank Roots, "Recreating the City as Entertainment Center: The Media Industry's Role in Transforming Potsmader Platz and Times Square", *Journal of Urban Tech.*,vol.5, no.3, December, 1998, pp.1-21.
9. France Wallach, "The Flowering of Playground Safety", *Parks & Recreation*, April 1999, pp.52-53.
10. Jim Morgan, "An Ounce of Prevention",*Parks & Recreation*, February 1999, V. 34, Number.2, pp.68-70.

11. Jiri Suzanek, Anthony J.Veal, "Time Pressure, Stress, Leisure Participation and Well-Being, *Society and Leisure*, V.21, N.2, 1998, pp.294-295
12. L.Funda Şenol, "İktidar Mücadelesinde Savaş Meydanı: Mekan Cumhuriyetin İlk Yıllarında Ankara'da Eğlence Mekanları", *Toplum ve Bilim*, Bahar,1998, s.86-104.
13. Larry N.Foster,"Got Pools? Got problems? Get a Plan?", *Parks & Recreation*, February 1999, V. 34, Number.2, pp.56-66.
14. Laurie Olin, "Open Space and Public Life", *CELA Design+Values Council of Education in Landscape Architecture*, Vol.7, 1992, pp.16-29.
15. Louise Wyman, *Landscape Architecture The dialogue between society and ideological vision*, a+u,1996:09, no:312, pp.122-125.
16. MaryLou Iverson, "The Staying Power of Soft Contained Playgrounds", *Parks & Recreation*, April 1999, pp.54-59
17. Micheal Cregan, "Open Spaces and Quality of Urban Life", *Journal of the Landscape Institute*, no:191,June 1990,pp.12-14.
18. Michele H. Bogart, "Public Space and Public Memory in Newyork's City Hall Park", *Journal of Urban History*, vol.25, no.2, January, 1999, pp.226-257.
19. Munehiko Harada, "Changing Relationship Between Work and Leisure after the "Bubble Economy" in Japan, *Society and Leisure*, V.21, N.1, 1983, pp.195-212
20. R.Peter Heron, "The Instituionolization of Leisure:Cultural Conflict and Hegemony, *Society and Leisure*, V.14, NO.1, 1991, PP.171-190
21. Nazan Yoğurtçu, "İzmir Kentinin Sosyal Altyapısı Sportif Donatımlar", *Ege Mimarlık*, Sayı.2, 1994

22. Nigel Curry, "Enhancing Countryside Recreation Benefits Through the Rights of Way System in England and Wales", TPR, Vol.68, N.4, 1997, pp.449-464
23. Sema Özer, "Becket, Benjamin ve İletişimde Modern Bunalım", Kuram,17, Mayıs, 1998.
24. Sercan Yıldırım, Sinemanın Politikası / Mekanın Politikası, Arredemento Mimarlık, 1998/7-8, s.82-87.
25. Sezai Göksu, "Çalışma-dışı zamanı satın alan post-turist öznenin sahicilik bunalımı: Turizmin değişen yüzü üzerine düşünceler", Toplum ve Bilim 71, Kış 1996, s.228-237.
26. Sharon Zukin, "Urban Life Styles: Diversity and Standardisation in Spaces of Consumption", Urban Studies, Vol.35, No:5-6, 1998, pp.825-829
27. Stephen V. Bittner, "Green Cities and Orderly Streets Space and Culture in Moskow, 1928-1933, Journal of Urban History, vol.25, no.1, November, 1998, pp.22-56.
28. Susan M. Shaw, "The Measurement of Leisure: A Quality of Life Issue", Society and Leisure, V.7, No.1, 1994, pp.91-107
29. Şenel Ergin, "Dinlenim Kuramı Üzerine Kurulan Lisansüstü Dersleri", Ege Mimarlık, Yıl 5, Sayı 16, s.56-61
30. Şükrü Aslanyürek, "The State of Leisure Studies and Research in Turkey", Society and Leisure, V.6, No.2, 1983, pp.357-368
31. Tery Hendy, "Beyond Public Playground Safety Standards", Parks & Recreation, April 1999, pp.84-97

32. Tingwei Zhang, Paul H. Gobster, "Leisure Preferences and Open Space Needs in an Urban Chinese American Community", *Journal of Architecture and Planning Research*, V.15, N.4, 1998, pp.338-355
33. Thomas LE Burton, Edgar L. Jackson, "On The Road To Where We're Going: Leisure Studies in the Future", *Society and Leisure*, V.13,N.1,1990,PP.207-227.
34. Vincent Lemieux, Micheal De La Durantaye, "The Modern State and Free Time", *Society and Leisure*, V.7, No.1, pp.91-107
35. "Circus Zandvoort, The Netherlands, 1986-1990", *a+u*, 1996:10, no:313,p.118-119.
36. William P. Stewart, "Leisure as Multiphase Experiences Challenging Traditions", *Journal of Leisure Research*, 1998, Vol.30, No.4, pp.391-400.
37. Wilson, W.J.(1996), *When Work Disappears: The Work of the New Urban Poor*", *Journal of Leisure Research*, 1998, Vol.30, No.1, pp.171-175
38. Zaha Hadid, "Aslolan, Unutulmuş Bir Modernite Geleneğinin Varolduğudur", *Arredamento Dekorasyon*, 1997/7-8, s. 42-49.

Thesis:

1. G. Çırık, "Kentsel Mekanların Tasarımında Psikolojik Boyut Üzerine Bir Araştırma ve Bir Model, Ataşehir Örneği", (İ.T.Ü., 1997).
2. Gürbüz Gircin, "Sosyolojik Açından Boş Zamanlar ve Gençlik", (Yüksek Lisans Tezi, İstanbul Üniversitesi Sosyal Bilimler Enstitüsü İktisat Fakültesi Sosyal Yapı ve Sosyal Değişme Bilim Dalı, 1987), s.4-6,63-66.

3. Kamelya Kavaklı, "Su Elemanlarının Kullanımı ve İstanbul Çevre Düzenlemelerindeki Su Elemanlarının Araştırılması", (Yüksek Lisans Tezi, İstanbul Teknik Üniversitesi Fen Bilimleri Enstitüsü, 1994).
4. M. Hanefi Caner, "A Recreational Approach and the Green Areas and Open Spaces in the City of Ankara", (Master of City Planning, METU, 1976)
5. Renin Tarman, "Meaning and Function of the Urban Park as Open Public Space for Recreation", (Master of Architecture, METU, 1994)
6. Şükrü Aslanyürek, "16. -19. yy. İstanbul Kenti Türk Toplumunu ve Boş Zaman", (Doktora Tezi, İstanbul Üniversitesi Edebiyat Fakültesi Sosyoloji Kürsüsü, Kasım, 1981)

Internet Web Sites:

1. Arthur Auatin Raney, "The Effect of Subjective Social Justice on the Enjoyment of Crime Based Video Entertainment", (University of Alabama, Phd, 1999)
2. <http://www.lib.umi.com/dissertations/search>
3. "Cedar Fair Agrees To Purchase California Water Park"
<http://www.ultimaterollercoaster.com/news/headline3.html>
(23.12.1999)
4. Josef Pieper, "Leisure The Basis of Culture"
http://eb.mariacopa.edu/departments/SS/PHI101/IIA_Leisure_Basis.htm
5. "Keeping Cool At THE waterpark" Page 1 to 2 (28.12.1999)
<http://themeparks.about.com/travel/themeparks/library>
6. "Leisure: The New Center of the Economy?" Page 1 of 6 (7.8.1999)
<http://www.ualberta.ca/elj/als/alswp3.html>

7. Miodrag Mitrasinovic, Theme Parks (Leisure, Heterotopian, Territories, University of Florida, Phd, 1998)
<http://www.lib.umi.com/dissertations/search>
8. "The Conflict of Time and Landscape Perception: Have We Become Too Busy To Stop and Smell the Roses?"
<http://www.phil.uga.edu/eecp/cliett.htm>
9. "Talking Dennis Spiegel"
<http://themeparks.about.com.com/travel/vacations/themeparks/libr.../aa060339.htm> (1.11.1999)
10. "The Problem of Free Time: It's Not What You Think" Page 1 of 3
(7.8.1999)
<http://www.ualberta.ca/elj/als/alswp8.html>
11. "The Benefits of Leisure" Page 1 of 6
<http://www.ualberta.ca/elj/als/alswp7.html> (7.8.1999)
12. "The Society of Disney Haters Official Websites"
<http://www.geocities.com/Tokyo/7998/> (14.11.1999)
13. "Thoughts Behind The Thrills"
http://enquirer.com/editions/1999/04/11/fin_thoughts_behind.html
(21.11.1999)

APPENDIX

The accidents that had happened in the waterparks in USA between the years 1972-1997 are mentioned below:

- Saturday, May 17, 1980 - A thirteen year old boy was killed during a ride on a water slide in Texas. He lost both of his legs during the accident and finally drowned.
- Saturday, July 24, 1982 - A fifteen year old boy drowned in a wave pool at Action Park in McAfee, New Jersey.
- Sunday, August 1, 1982 - In an accident at Action Park in McAfee, New Jersey, a twenty-seven year old man was killed after being electrocuted while on the Kayak Experience ride. Two other victims also suffered electrical shock and were hospitalized.
- An investigation by the State Labor Department concluded that, although the ride's equipment was properly installed and maintained, an electrical problem existed in an underwater electrical fan system, used to simulate rapids. The current in the motor circuit of an underwater fan that churned the surface of the water had the potential to incur bodily injury under certain circumstances. The investigation ultimately concluded that no safety laws or ride regulations were violated. A park spokesman said that the investigation had absolved the park of responsibility, claiming that there was no "proof" of mechanical failure. Nevertheless, the Kayak Experience was drained and closed after the incident. The spokesman said that by permanently closing the ride, people would not feel uncomfortable. "We don't want them to think there's any chance of anything wrong."
- Sunday, July 19, 1987 - An eighteen year old man drowned in a wave pool at Action Park in McAfee, New Jersey.
- Tuesday, July 28, 1987 - At an amusement park in New Jersey, a fifty-five year old man sustained a fractured hip in a water slide accident. The man was thrown sideways into the pool at the end of the slide as his hip collided

with the concrete spillway at the edge of the pool. He died three weeks after the incident from complications resulting from the accident.

- Wednesday, July 29, 1992 - In a water ride accident in Hillsborough County, Florida, a ten year old boy drowned.
- Saturday, July 9, 1994 - In an accident in Spartansburg, South Carolina, a six year old girl drowned after a fall from a bumper boat amusement ride. She landed in water, where she got caught in the ride's propeller.
- Saturday, May 29, 1993 - An eighteen year old male drowned in an accident in El Paso, Texas.
- Monday, June 2, 1997 - A seventeen year old girl was killed and thirty-two teenagers were injured when a waterslide collapsed at Waterworld USA park in Concord, California. A group of high school seniors celebrating their graduation ignored a lifeguard's warning and rushed past him in an attempt to slide down the ride all together. The combined weight of the students exceeded the original design load by four times, and a section of the ride, a Banzai Pipeline waterslide, collapsed. Some riders fell from heights of 30 feet. The students admitted that they were trying to break the school record for the largest number of students riding the slide at one time.
- Thursday, July 17, 1997 - An eight year old boy drowned at the Runaway Rapids Waterpark in Keansburg, New Jersey.
(<http://members.aol.com/rides911/water.htm>)