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PREFACE

DEAR SCIENTISTS

The platform, which was established under the initiative and leadership of Prof. Dr. Atila GÜL with the motto of "Common Platform Where Spatial Planning and Design, Building, Landscape and Construction Meets", has been organized since 2021 (1st and 2nd International Symposium on Architectural Sciences and Applications 2021/2022), the books he edited (Architectural Sciences and Sustainability and Architectural Sciences and Conservation), and the Journal of Architectural Sciences and Applications, which left its 7th year behind, are excited to add a new one to these academic studies that he brought to the scientific life.

In 2022, Architectural Sciences and Applications Platform is proud to publish 6 more edited books. One of these books has the title of Architectural Sciences and Spatial Planning and has been edited by the undersigned below. Of course, the contribution and support of scientists and authors, especially in the academic sense, is of great importance in bringing this book to academic life.

The achievements of the Journal of Architectural Sciences and Applications (JASA/MBUD), which has been built on the focus of interdisciplinary and multi-disciplinary studies brought to the academic portfolio of Architectural Sciences (design and planning disciplines) and has been continuing for 7 years, started in 2021 and continued with increasing momentum this year. It created a driving and encouraging force in preparing the edited books called JASA/MBUD. All these formations and steps are scenarios put forward for the purpose of bringing them to the academic publication life by being evaluated as a proactive step towards eliminating the deficiency in the literature.

This year, in 2022, the book, which includes 10 book chapters, was published in English with 361 pages. The prepared book will be

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delivered to you in both e-book and printed form (for a fee). The book was published by İKSAD Publishing House and we share with you the information conveyed to us by the publishing house (indexes scanned, having contents and competencies covering academic applications/Associate Professor Application Criteria and Academic Incentive Applications).

We wish to continue this process that we have started in the coming years, and we will ensure the continuity of the books with successive numbers. We are proud to have reached these numbers with the contributions and supports from you.

First of all, I would like to thank the Reviewer Committee, Architectural Sciences and Applications Academic Platform, who contributed greatly to the publication of both books, and İKSAD Publishing House and its responsables who successfully followed the process. Many thanks to Sibel AKTEN, Lecturer, who has meticulously dealt with all the details of the book and has taken care of the book's success from the editorial processes to the referee processes with great determination and stability....

The biggest thank you deserves you, the authors of the book chapter. Thank you for sharing the quality and valuable works you have prepared with us.

November 15, 2022

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Processes of Outdoor Recreational Strategic Management Planning

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1. Introduction

In parallel with the developments in social, economic, cultural, environmental, technological, and political dimensions in modern society, the concepts of recreation, open and green spaces, and free/leisure time continue to be current and play an important role in human life (Gül et al., 2004; Gül, Örucü & Karaca, 2006; Gül et al., 2016). It is accepted that factors such as the increase in urbanization trend, the gradual development of transportation/accessibility opportunities, climate change, the global epidemic (Covid-19), and the increase in the use of digital technology cause the change and diversification of recreational demands and trends.

In addition, unhealthy, uncontrolled, and rapid urbanization and the inadequacy of existing green open spaces and recreation facilities in urban areas have caused many citizens to spend their time in natural and rural areas rather than cities (Gül & Gezer, 2004).

Recreation is a universal and vital need for the individual and society. It is seen that he has been engaged in recreational activities in every period of human history. The need for recreation has positive benefits in terms of physical, intellectual, and mental aspects that recreational activities provide individually and socially. In addition, factors such as socialization, creativity, development of personal skills and abilities, social solidarity/integration, effect on work success and work efficiency, economic mobility, and making people happy are also effective.

Recreational activities and trends are directly related to lifestyles. New developments and changes in daily life lead to the differentiation of people's lifestyles. With the developing technology, it can save time by doing things faster, and this situation creates free time. However, developments in digital technology, communication, or transportation also lead people to lead an inactive (sedentary) and virtual lifestyle. It is accepted that this situation contradicts recreational purposes.

Recreation is the whole of the actions that include active and passive activities, which are done in free time outside the compulsory life activities of the person, do not aim to win any prize, provide physical, intellectual, and mental renewal and development, and are performed as a result of an inner impulse of the person.

Outdoor recreation refers to activities that people undertake out of doors in places where they can access nature or green areas, mainly as part of their daily or weekend routines (Bell et al., 2007).

Recreation approaches aim to provide different contributions to the individual/society such as meeting needs, free/leisure time, adding value, and regeneration. At the same time, participation in recreational activities may vary to the level of satisfaction of individuals, as well as with the effect of some factors specific to individuals or societies. In terms of recreational areas, possible demands and trends, activity preferences, diversity and intensities, and duration of use can vary greatly. Recreational activities are directly related to Maslow's Pyramid of Needs approach. The Pyramid of Needs, from bottom to top, is in order; original physiological demands, protection, belonging

and socialization, respect, status, and proving yourself (Maslow, 1943).

Besides providing recreation, rest, and entertainment opportunities, there are also negative environmental effects such as soil compaction, loss of organic matter, damage or loss of vegetation, damage to fauna and water resources, loss of area, and pollution (Leung & Marion, 2000; Uzun et al., 2013; Gül & Akten, 2005; Akten et al., 2012; Kurt Konakoğlu & Kurdoğlu, 2020).

According to Gold (1980), recreation planning is a method based on the use of information, which provides resource allocation for the association of space, time, and society with each other to meet the free and leisure needs of society today and in the future.

Recreation planning is a process that includes methods that can establish a relationship between people's free or leisure time (demand and needs) and recreation resources (supply).

It can be defined as determining the current potential of the land in question for recreation and making land use decisions that can bring together multiple uses that will ensure optimum utilization of this land, especially without disturbing the ecological balance.

Recreation includes a holistic planning/design and management/governance organization. It requires holistic management planning in which recreational activities are defined in action and processes for various purposes compatible with recreational resource values are included.

There are many deficiencies in the recreation planning process in natural areas, include are ecological policies (ecopolitics) are not at the forefront, resource values are not prioritized for protection, carrying capacity is not foreseen, decisions are not taken for visitor management, there is no participation at every stage of the process, the demands and tendencies of the area users/visitors and local people are not taken into account, not defining cooperation with stakeholders such as NGOs, not foreseeing awareness and educational actions for protection, lack of design projects, etc. (Gül, 2005; Akten & Gül, 2014).

In this study, an approach to outdoor recreation management planning/design processes has been proposed by examining the concepts of recreation and leisure and the methods and tools used in recreation planning. The proposed methodology of planning is a description, explanation, and justification of the methods or techniques that planners or managers should use to prepare outdoor recreation development plans.

2. Conceptual Framework

2.1. Recreation Concept

The concept of recreation comes from the Latin word "recreatio". It means the re-creation or acquisition of something, which is associated with the English words "re-repeat" and "create". Today, recreation is generally used to mean regaining freshness or vitality. The person engages in various activities for this purpose. Activities that do not contribute to the individual in terms of rest, enjoyment, and entertainment are not considered recreation (Koç, 1991). There are many different definitions of recreation. The most accepted definitions are shown in Table 1.

Table 1. Definitions of Recreation

References	Definitions of Recreation
Tanrıverdi (1975)	It is all the activities of gaining spiritual and physical vitality by doing and watching activities that connect the person to life, relaxing and pleasurable in places where the natural beauties meet to eliminate the fatigue caused by the activities of people and similar works.
Akesen (1978)	It is an action or action that is satisfying in terms of the taste of individuals, aiming at spiritual and physical regeneration, and also includes the individual's social, cultural, economic, and physiological opportunities and dependent leisure use.
Gold (1980)	It is all leisure time activities that people evaluate in line with their demands.
Smith (1983)	It is thousands of different phenomena that provide different satisfactions in different locations, each of which different participants demand the use of different resources.
Edginton & Ford (1985)	It is a social institution in the modern sense, a collection of information, and a professional field of study. Recreation; It is a tool for a full and happy life independent of work, valuable in itself, meeting many important needs of the person. With this approach, recreation can most commonly be defined as activities in that people voluntarily participate in their spare time and provide personal satisfaction.
Koç (1991)	It is the whole of activities done in free time, formed as a result of the individual's own will and inner impulse, aiming to renew the individual physically and intellectually, and made dependent

	on the individual's social, economic, and cultural opportunities.
Yurtseven (1992)	It is all the activities of gaining spiritual and physical vitality by performing and observing activities that bind the person to live in places where nature is present, to eliminate the intensity and stress resulting from daily activities, duties, and similar works.
Akesen (1996)	Recreation is all action in and associated with leisure, which includes free stillness, which means action or preplanned inactivity.
Karaküçük (1997)	Recreation is the whole of activities performed voluntarily, individually or in groups, in independent and unconnected free time, to regain, protect or maintain the physical and mental health of people and to get pleasure.
Anderson (1998)	They are activities that respond to the spiritual expectations and demands of individuals, enable these individuals to develop, and are carried out freely in people's free time without pressure and coercion.
Kraus (1998)	It is the activities that make people get away from the work environment and the stress of their daily life or the activities that make people happy in their free time.
Broadhurst (2001)	Recreation is an activity that includes physical, emotional, social, and cognitive parts that people participate in their free time.
Tütüncü (2012)	It is a field of study that includes multi-disciplinary activities that people do voluntarily in their free and spare time, without being exposed to any coercion, to improve their quality of life without harming nature.
Koçyiğit & Yıldız (2014)	It is the activities they want to get close to people, gain the initiative, suitable for their self and enjoy doing, in short, they do entertainment to renew and develop, and they do in their spare time, apart from the activities they are responsible for, in line with their desires.
Hazar (2014)	They are the activities that individuals participate in fully willingly and achieve satisfaction in the period other than the behaviors they are obligated to do.

The American Camping Association (ACA) defined recreation as an experience that provides creative and educational opportunities to group life outdoors and stated that natural environmental resources contribute to the mental, physical, social and spiritual development of the user (Kurum, 1992).

According to Allen & McCool (1982), the model shows the relationships between participation in outdoor recreation activities and

safe ecological behavior, an individual's environmental ethics can be improved by participating in central outdoor recreation activities, which leads to more reliable environmental behavior of people. Thus, they can increasingly become aware of the sensitivity of the environment, and the effects of themselves and other people on the environment, and take action individually to reduce these effects on the environment (Burr, 1992).

The concept of "recreation" can be defined in general as follows, using many definitions.

“Recreation is the sum of all actions including active or passive activities as individually & in groups that are done in free/leisure time, outside of the compulsory life activities of the human being, any award and non-profit, providing to the person with physical, intellectual/mental renewal and development by self-made.

The main purpose of recreation is to relax, have fun, improve oneself, be happy and integrate with life.

2.2. Basic Features of Recreation

The main features of the recreation can be summarized as follows (Tezcan, 1982; Günışık, 1963; Jenny, 1956; Pamay, 1979; Küçüktopuzlu, 1987; Sağcan, 1986; Koç, 1991; Gülez, 1989; Koç & Şahin, 1999; Karaküçük, 1999; Edginton et al., 2018).

- Recreation is a necessity,
- There is no coercion, the person participates in the activity voluntarily and as a result of the internal push,

- Volunteering is essential. It should not be done by external pressures, legal rules, or coercion,
- The "initiative" in recreational activities should be left to the person himself,
- Recreational activities can be applied in all kinds of open or closed areas and all seasons and climatic conditions,
- Recreation includes or requires an activity. This mobility covers a wide range of activities including physical, mental, social, and emotional,
- Recreation has instructive, educational, entertaining, relaxing, and regenerative features,
- Entertainment is an invariable outcome of recreation, but it is not an end in itself for recreation,
- Recreation may differ from person to person and profession, as well as from time and place,
- It allows people of all ages and genders to participate in activities,
- Recreation, while doing an activity, allows being interested or performing in the second or more activities,
- Participation in recreation depends on personal satisfaction and perception of the activity,
- Recreation should be by the traditions, customs, and moral/spiritual values of the society and should not contradict social values,

- Recreation action, planned or unplanned, can be done with skilled or unskilled people, or in organized or unorganized places,
- It can be carried out by individuals or groups for a short time or continuously, in a certain period or continuously,
- Gains experience,
- Increases social assistance and solidarity,
- Reinforces the harmony of humans with nature,
- Recreation increases people's creative power, desire for life, and workforce,
- It has a psychological aspect, reduces fear,
- Recreation is an activity that provides pleasure and joy,
- Non-monetary or non-profit,
- Develops international relations, etc.

Factors affecting recreational needs and tendencies:

- The effects of population growth and population-related changes on the recreation pattern,
- Changing living standards and increasing standards,
- Increasing transportation and accessibility opportunities (Mobility),
- Decreasing working hours and increasing free time,
- Increasing the level of education,
- Rapid urbanization and gradual alienation from the natural environment,

- Insufficient urban open and green spaces and increasing demand,
- It is the emergence of changes in recreational behavior and desires,
- Increasing visual and print media, advertising and promotion activities,
- Development of digital technology,
- With the widespread use of the Internet and social media,
- An increase in the level of financial situation,
- National and local tourism policies and practices gaining importance, etc.

2.3. Free Time and Leisure Time Concepts

The concepts of free time or leisure time are the parts of time that are excluded from the time spent by individuals for working and other compulsory activities (e.g. sleeping, eating, etc.).

Free time or leisure time has three basic functions in general. These; are rest, entertainment, and self-development/development functions. In their free time, people want to forget their daily troubles and troubles and rest, if possible, to have some fun. The issue to be considered here is; It is generally stated that recreational activities are done in free time, but activities performed in every spare time will not be recreation (Güleç, 1989).

Recreation activities constitute certain forms of use, especially in the spare period. Leisure time, on the other hand, refers to the period used especially during work and sleep time. There is a certain difference

between free time and leisure time. Leisure time reflects a “direction”, while free time includes a potential “open to the direction”.

The concept of free time can be grouped as follows, within the principles adopted in recreational planning (Bayraktar, 1972).

- a. Daily free time
 - Free time during the active period of the day, which includes work,
 - Free time during the passive part of the day (free time after work),
- b. Weekly free time,
- c. Annual free time (Irregular holidays such as public and religious holidays and free time including annual holidays).

Some values or consequences emerge from the good or bad uses of free/leisure time. Free/ leisure time, when it can be used appropriately, provides people with opportunities to rest, have fun, train themselves, develop themselves, be creative, socialize, mature, develop their vision and knowledge, experience their responsibility, and freedom, and find themselves. When used poorly, it can cause harmful habits, stagnation, laziness, carelessness, selfishness, disorder, lack of thought, boredom, unhappiness, and others. After all, free or leisure time can be likened to a double-edged sword.

2.4. Recreation Classification Types

- Structural classification: “indoor and outdoor”
- Territorial classification: “urban and rural (natural)”
- Contextual classification: “active and passive”

- Temporal classification: daily and holiday (“weekly” and “yearly”)
- Resource classification: "user-oriented recreation areas and resource-based recreation areas".

2.5. Recreation Activities

The concept of activity is the actions of people for specific purposes (e.g. cultural, social, entertainment, educational, scientific, health, political, etc.). Recreational activities are the activities in which individuals participate in open or closed areas, individually or collectively, of their own will, in their free or leisure time, for entertainment, rest, satisfaction, discovery, and pleasure, etc.

Recreational activities are classified in many ways. Simple fun, mental (intellectual) activities, sporting events, music and dance events, picture events, hobby activities, educational events, relaxing activities, social events, artistic events, scientific events, humanitarian services, outdoor activities, and political events.

Recreational activities are the most important component of free/leisure time or recreational activities in human life. For this reason, organizing the activities in the most ideal way is the most important issue for the recreation areas and the planning process.

3. Outdoor Recreation Planning and Design

The planning approach is a systematic organizational process that includes the realization of the goals/objectives to be achieved in the future from the current situation of an area or subject, with the help of time and tools.

The plan, on the other hand, expresses an operational result in which the spatial, social, and economic processes that the current situation will take in the future are defined and constructed. In other words, it is a result of the planning process (Koçel, 2003).

Planning is the taking of decisions to be developed to reach the determined goals in a system where mutual relations exist between them (Suher, 1996). Planning is a decision-making process. The elements constituting this process are intelligibility, applicability, public participation, mutual learning, responsibility, and ownership, representing interdisciplinary work and communication (Eagles et al., 2003).

Planning is the most important process of providing the necessary opportunities for people to evaluate their free time in terms of recreational activities. Recreation planning is a process that includes methods that can establish a relationship between people's free or leisure time (demand and needs) and recreation resources (supply).

It can be defined as determining the current potential of the land in question for recreation and making land use decisions that can bring together multiple uses that will ensure optimum utilization of this land, especially without disturbing the ecological balance. According to Gold (1980), recreation planning is a method based on the use of information, which provides resource allocation for the association of space, time, and society with each other to meet the free and leisure needs of society today and in the future. Recreation planning is

considered to be the whole of the work done to meet the recreational demands in a continuous and balanced way.

Recreation planning can also be considered a mixture of spatial and social planning with its general dimensions. The recreation planning process is conceptually expressed as a holistic process of studies carried out to determine the demands/needs of people for making use of their free/leisure time and to meet them continuously and in a balanced way without harming recreation resources. Recreation planning is not a static process, but a dynamic and variable process. They represent processes that complement and follow each other that provide this dynamism.

The main purpose of recreational planning is the development of physical plans and programs that will serve to establish the most appropriate and long-term balance between recreational resources and the recreational needs of people. In this context, it is to improve the quality of life of the individual and society, to provide a healthy, enjoyable, safe, meaning to life, and to create a livable environment suitable for the public interest.

There are two basic criteria to be considered in recreation planning. One is the recreational resource (supply) that tries to meet the recreational demand within the limits of its possibilities. The other is the individual and society that has various qualities and quantities and makes recreational demands and needs. Recreation planning approaches generally aim to realize recreational activities according to

demands and needs or anticipate recreational activities compatible with natural and cultural resources.

Individual values and demands are very important in recreation planning. However, to protect and develop natural and cultural resource values in the best way, public values and benefits should be prioritized. The recreation planning process concerns many disciplines such as landscape architecture, building architecture, geography, tourism professionals, public administration, sociology, forestry, recreation management, and others. Both the concept of recreation and the planning of recreation make teamwork obligatory because it is complex and covers many different disciplines.

For this purpose, in the first step of planning, limited existing or potential resources and continuous user demands and trends should be determined in detail. On the other hand, predicting the long-term dimensions of user demands with the determined resources and reflecting them in the plan-program goals is an important condition for reaching the targets.

Major tasks of recreational planning/design (developed from Gold, 1980).

- Informing the decision makers on this issue by determining the existing or expected free/leisure time opportunities qualitatively and quantitatively,
- Improvement and development of free/leisure use in urban living environments,

- Ensuring the use of the free/leisure opportunities of the society at the optimum distance, diversity, and in the best environment,
- Protection and development of all kinds of recreational resources in a way that will provide the highest and best recreational benefits,
- Integration of recreation planning with other related types of planning,
- Associating recreation areas and activities between planning and design scales, integrating and ensuring continuity,
- Making official institutions effective in recreation and recreation planning,
- Evaluation of the effects of recreational development existing or designed in the public and private sectors,
- To support and encourage public-private sector cooperation in the provision and evaluation of leisure time opportunities in city centers or rural areas,
- Making existing or designed recreational opportunities and services realistic,
- To encourage scientific research and practices in this field to improve recreation opportunities and services.

Recreation planning is a phenomenon that needs to be addressed at the national, regional, macro and micro-catchment, urban, rural, and site scales (between 1/1000000 and 1/1000 scales). It is a series of future-oriented, order-building, and optimal decisions that will reveal versatile use by associating resource values with its users aesthetically

and functionally. Recreation design, on the other hand, includes application-oriented design projects (between 1/500-1/100 scales) and detailing (between 1/50-1/1 scales) made at the scale of micro-areas, sites, and objects within the framework of planning and afterward.

4. Methods and Tools Used in Outdoor Recreation Planning

Different methods and tools for recreation planning have been developed and used extensively in Canada and the USA. Much of the conceptual theory used in tourism and recreation planning originates from the “*Products Analysis Sequence for Outdoor Leisure Procedure*” (PASOLP) developed in the 1970s (Baud Bovy & Lawson, 1977). PASOLP is a progressive process that has five main steps:

- Surveys and analysis of the factors
- Definition of alternative products
- Recommendation of the needs and priorities for tourism and recreation development
- Preparation of plans for the tourism and recreation sectors
- Implementation of the development

Kiemstedt (1967) aimed to gradually determine the recreational suitability of various landscape areas with the "Value of Diversity" (V-Wert) method. The first formalized (repeatable) method for transparently and intersubjectively assessing the diversity of the landscape was developed by Kiemstedt in 1967. The method followed a multicriteria benefit analysis approach. In this method, the

recreational suitability of the planning area was determined according to the existing characteristics of the area. These are soil, water structure (e.g. water edges), weather (climate), vegetation (forest edges, use in terms of forestry, etc.), and agricultural land use (e.g. field, meadow-pasture, etc.). The criteria for these five groups of activities are grouped under 4 headings. These are; the quantity of forest and water edges (m/km^2), relief energy (height difference), quality and quantity of agricultural land uses, and climate factors. With these criterion values, the "Value of Diversity" for recreational suitability can be calculated for each coordinate area over a formula (Gülez, 1996; Demircioğlu, 2010).

Suitability Method: In the suitability method developed by Wedeck, data on soil, water, and vegetation characteristics are collected to determine the uses of settlement, recreation, agriculture, and waste areas to adjust the balance of protection and use of environmental effects, and the qualities determined for each criterion is evaluated as suitable or unsuitable (Köseoğlu, 1982).

Ecological Ceiling Method: In this method developed by Golany, the data are scored according to the criteria under the main classes determined as physical, environmental, socio-economic, and transportation criteria and the scores are marked on the map. Then, the suitability of the area is determined by evaluating the highest scores and alternative areas entered into the cells (Demircioğlu, 2010).

Many data sources and planning tools can be used for applying science in The National Environmental Policy Act (NEPA)

assessments. These tools were designed to be used in planning at various scales and many seek to integrate both social science and biophysical information. It organized recreation planning tools into three types: planning frameworks, analytic applications, and visitor data (McCool et al., 2007). NEPA focused on frameworks used for wildland recreation planning in the U.S. that approximate the steps of the traditional rational planning process (i.e., define the problem, identify goals and objectives, develop and analyze alternatives, select the preferred alternative, implement and monitor the plan) (Cerveny et al., 2011). There are different methods and tools for recreation planning in Table 2. (Cerveny et al., 2011).

Table 2. Different Methods and Tools for Recreation Planning (Cervený et al., 2011)

Name of methods or tools	Definition	Steps of the Process	Strengths and Weaknesses:
The Recreation Opportunity Spectrum (ROS)	ROS was developed in the 1970s by Forest Service scientists and managers to address growing recreation use and to integrate visitor experience information with recreation site attributes (Clark & Stankey 1979; McCool et al., 2007). The development of ROS was based on empirical research on recreation visitors and their site preferences and usage. ROS was also the conceptual precursor to LAC, VERP, and VIM. The ROS process utilizes social, biological, and managerial characteristics to produce a map of opportunity zones ranging from low-use-primitive to high-use-urban type recreational settings (McCool et al., 2007; More & Ddver, 2005). ROS is not a planning framework, because it does not include the systematic development and analysis of alternatives. Recent research shows that ROS has been applied primarily as a descriptive inventory assessment (Stankey, 1999). ROS is used by field managers, landscape architects, city planners, etc. for the planning process to reveal the recreation potential in open areas and to increase the recreational diversity over the existing potential. It is a tool	Steps of the Process of ROS (Nilsen & Tayler, 1997). 1. Inventory and map the three setting perspectives that affect the experience of the recreational, namely the physical, social, and managerial components. 2. Complete analysis: a) identify setting inconsistencies; b) define recreation opportunity classes; c) integrate with forest management activities; and d) identify conflicts and recommend mitigation. 3. Schedule. 4. Design. 5. Execute projects. 6. Monitor.	Strengths: It is a practical process with principles that force managers to rationalize management from three perspectives: • protection of the resource; • opportunities for public use; and • the organization’s ability to meet preset conditions. It links supply with demand and can be readily integrated with other processes. It ensures that a range of recreation opportunities are provided to the public. Weaknesses: The recreation opportunity spectrum, its setting indicators, and their criteria must be accepted in total by managers before any options or decisions can be made. Disagreement will affect the rest of the planning program. ROS maps need to be related to the physical and biophysical characteristics of each area (Nilsen & Tayler, 1997).

	that includes behavioral elements developed for ROS considers the recreational activities demanded by the recreational users and the physical, social, and administrative situation of the area, and divides the recreation areas into six different classes from urban to primitive.		
Limits of Accessible Change) (LAC)	of LAC was developed by the Forest Service in the 1980s in response to requests to establish recreation-carrying capacities in wilderness areas (McCool & Cole 1997; Nilsen & Tayler 1997). LAC involves identifying recreation opportunities and desired resource and social conditions for a particular area and evaluating the effects of the change to those conditions. The steps of the LAC process have been used to inform a wide variety of planning efforts, including the development of VERP and VIM (McCool et al., 2007).	Steps of recreation planning frameworks of LAC (Nilsen & Tayler, 1997; Cervený et al., 2011). • Identify area issues and concerns • Define and describe wilderness recreation opportunity classes • Select indicators of biophysical and social conditions • Inventory existing biophysical and social conditions • Specify standards for biophysical and social conditions in each opportunity • Identify alternative opportunity class allocations reflecting area-wide issues and concerns and existing biophysical and social conditions • Identify management actions for each alternative • Evaluate and select a preferred alternative • Implement actions and monitor	Strengths: The final product is a strategic and tactical plan for the area based on defined limits of acceptable change for each opportunity class, with indicators of change that can be used to monitor ecological and social conditions. Weaknesses: The process focuses on issues and concerns that guide subsequent data collection and analysis. Strategic and tactical direction may not be provided on management topics where there are no current issues or concerns (Nilsen & Tayler, 1997).

		conditions	
Visitor Experience and Resource Protection (VERP)	VERP was developed by the National Park Service (NPS) in the mid-1990s primarily for recreation planning in national parks, though it has been applied in other settings. The framework includes an explicit step for public involvement.	Steps of recreation planning frameworks of VERP (Nilsen & Tayler, 1997; Cervený et al., 2011). • Assemble an interdisciplinary project team. • Develop a public involvement strategy. • Develop statements of park purpose, significance, and primary interpretive themes; identity planning mandates and constraints. • Analyze park resources and existing visitor use. • Describe a potential range of visitor experiences and resource • conditions (potential prescriptive zones). • Allocate the potential zones to specific locations within the park (prescriptive management zoning). • Select indicators and specify standards for each zone; develop a monitoring plan. • Monitor resource and social indicators. • Take management actions	Strengths: Like VAMP, VERP is a thought process that draws on the talents of a team and is guided by policy and the park's purpose statement. It guides resource analysis through the use of statements of significance and sensitivity, and visitor opportunity analysis is guided by statements defining important elements of the visitor experience. Zoning is the focus of management. Weaknesses: Additional work is required to pilot the approach in different environments. "Experience" is not defined and the indicators for it are absent beyond the examples for Arches National Park. The will and ability to monitor sufficiently to provide information to guide management actions must also be tested (Nilsen & Tayler, 1997).

**Management
Process for Visitor
Activities (VAMP)**

Created by Parks Canada as a companion process to the Natural Resources Management Process within the Parks Canada Management Planning System. The process guides the planning and management of new parks, developing parks, and established parks (Nilsen & Tayler, 1997).

The general steps of the management plan process are: (Nilsen & Tayler, 1997).

1. Produce project terms of reference.
2. Confirm existing park purpose and objectives statements.
3. Organize a database describing park ecosystems and settings, potential visitor educational and recreational opportunities, existing visitor activities and services, and the regional context.
4. Analyse the existing situation to identify heritage themes, resource capability, and suitability, appropriate visitor activities, the park's role in the region, and the role of the private sector.
5. Produce alternative visitor activity concepts for these settings, experiences to be supported, visitor market segments, levels of service guidelines, and roles of the region and the private sector.
6. Create a park management plan, including the park's

Strengths: Comprehensive decision-making process based on a hierarchy. It benefits from the structured thinking required to analyze both opportunity and impact. It combines social science principles with those of marketing to focus on visitor opportunities.

Weaknesses: Although well-developed at the service planning level, VAMP does not yet have the clout it should have at the management planning level, mainly because the “opportunities for experience” definition has not been built into management plans or the zoning (Nilsen & Tayler, 1997).

			purpose and role, management objectives and guidelines, regional relationships, and the role of the private sector. 7. Implementation—set priorities for park conservation and park service planning.
Visitor Impact Management (VIM)	VIM was developed in the early 1990s for the NPS by scientists at the University of Maryland. This approach emphasizes three factors related to visitor impacts: problem conditions, causal factors, and management strategies (Nilsen & Tayler 1997). VIM focuses more heavily on the impacts or problems of visitor use, rather than on recreation opportunities and benefits (McCool et al., 2007).	Steps of recreation planning frameworks of VIM (Nilsen & Tayler, 1997; Cervený et al., 2011). • Conduct pre-assessment and database review • Review Management objectives • Select key indicators • Select standards for key impact indicators • Compare standards and existing conditions • Identify probable causes of impacts • Identify management strategies • Implement	Strengths: The process provides for a balanced use of scientific and judgemental considerations. It places heavy emphasis on understanding causal factors to identify management strategies. The process also provides a classification of management strategies and a matrix for evaluating them. Weaknesses: The process does not make use of ROS, although it could. It is written to address current conditions of impact, rather than to assess potential impacts. (Nilsen & Tayler, 1997).
Recreation Carrying Capacity (RCC)	RCC was a concept first used in natural resources management referring to the limits of growth that an area can achieve due to environmental factors (Shelby & Heberlein, 1986). The concept was applied to the recreation management of parks as early as the 1930s when officials asked how many people	Carrying capacity planning deals with 6 stages (Lim, 1998). • Defining the carrying capacity • Determining the type of tourism (use) • Listing of targets • Determination of criteria affecting	Researchers have shown that the issue of carrying capacity is essentially a qualitative concept and that it is very difficult to measure (Tokmak, 2008). According to Saveriades (2000), carrying capacity is not a scientific concept

	could coexist in a wilderness area before the wilderness quality is destroyed (Manning, 1999). In the 1970s, recreation scientists began using the concept to determine levels of the appropriate use of a park, wilderness, or other management area. Recreation Carrying Capacity (RCC) typically involves defining recreation opportunities, establishing indicators and standards of quality to be maintained, and monitoring these indicators for change (Nilsen & Tayler, 1997).	capacity • Determination of usage levels or thresholds. Demonstrating the carrying capacity	or formula used to obtain a numerical expression that indicates the point of termination of development, but it is not a fixed / unchangeable concept as it develops with time and growth. The method to be chosen in capacity determination studies can generally vary depending on the type and nature of the information aimed to be obtained for capacity.
The Scenery Management System (SMS)	SMS was developed in the mid-1990s to integrate different 'visual resource management systems that were being used by the Forest Service and BLM (More & Driver, 2005; USFS, 1996). These applications were developed by landscape architects to map the scenic quality and sensitivity of natural landscapes so that the visual preferences of the public would be included in agency planning activities and management decisions.		SMS is a tool that contributes to and provides opportunities for the integration of biological, physical, and socio-cultural resources in the field of recreation with visual aesthetics at the planning stage (USDA, 1995). In addition to recreational opportunities, this tool has a structure that affects both the quality of the landscape (visual aesthetics) and the opportunities available during the experience of the users in the area.
Benefits-Based Management (BBM)	BBM was developed with a similar zoning approach as ROS, but rather than focusing on recreation opportunities provided by settings, it identifies potential beneficial outcomes (social, physical, and psychological) of leisure		

	participation (McCool et al., 2007; More & Driver, 2005). In other words, ROS is a tool for analyzing the supply of recreation opportunities; BBM is a conceptual tool to help analyze the need or demand side of outdoor recreation.	
Place-Based Planning (PBP)	PBP starts from a different assumption than ROS, SMS, or BBM. Rather than planning primarily for instrumental outcomes, this approach seeks to understand the symbolic and emotional meanings and attachments people have to geographic places (Williams et al., 1992). Place meanings are often not substitutable (Eisenhauer et al., 2000; Kruger & Williams, 2007).	Place-based planning approaches and BBM (outcomes-focused management) are both new, and the mechanisms for turning these applications into integrative planning frameworks have not been fully developed.
The Gap Analysis Tool For Outdoor (GATOR)	GATOR is one of the tools that enable analytical analysis. However, it is a method in which not only analytical data but also demographic data for users are integrated. GATOR provides an easy method to continuously monitor for gaps in service. GATOR reveals which facility or area should be used more or less with the determination of unused areas and the demographic information of recreation users changing over time (Chamberlain, 2014).	The GATOR tool allows the production of interactive maps, where many stakeholders and local people can be consulted or informed continuously. Thus, inter-institutional coordination is ensured and discussions about future decisions can be followed up-to-date thanks to this transparent mechanism.

Gülez Method (1990): It is a method for evaluating the recreational potential of forest areas. In this method, the recreational potential of the area is determined as a percentage as a result of the sum of the scores obtained from the main factors such as landscape value, climate value, accessibility, recreational convenience, and negative factors (Gülez, 1990; Gülez, 1992).

According to Uzun & Altunkasa (1991), the recreation planning process consists of 6 main phases that complement each other.

1. Recreational resource (supply) inventory,
2. Detailing the recreational demands and requirements of the users,
3. Detailing the dimensions of recreational supply and demand in the long run,
4. Producing recreational planning alternatives,
5. Creation of recreational plans and programs,
6. Implementation of plans and programs; organization, management, and maintenance.

Steiner (2008), pointed out that the sociocultural and biophysical structure is important in determining the most appropriate land use in the ecologic planning process. In this direction, he developed a model with ten basic stages for ecological planning. These stages are:

- 1- Identification of problems and opportunities
- 2- Determination of planning goals
- 3- Performing landscape analysis
- 4- Performing detailed studies

- 5- Determination of planning preferences and options
- 6- Creating the landscape plan
- 7- Public participation and education
- 8- Creating detailed designs
- 9- Implementation of plan and design
- 10- Management

According to Torkildsen (2012), recreation planning is a dynamic and variable process and includes ten stages that complement and follow each other.

1. Determination of goals, objectives, and policies,
2. Evaluation of available activities and services,
3. Scope assessment,
4. Evaluation of potential demand,
5. Determining the shortcomings and surpluses in the supply-demand relationship,
6. Identifying and evaluating resources,
7. Determination of management approaches; (methods to be followed in activities such as purchasing, procurement, personnel management, resource management, concessions, and partnerships)
8. Strategy development,
9. Creating an action plan,
10. Monitoring and evaluation.

All of the frameworks follow the steps of standard rational planning: terms of reference, database development, situation analysis, synthesis, objectives, alternatives, final plan, and implementation.

Each approach, therefore, recognizes, in varying degrees, a hierarchy of decisions that need to be made, ranging from inventory and analysis to the development of a management concept (strategic decisions), and subsequently, implementation and operations (tactical decisions) (Nilsen & Tayler, 1997).

All the approaches include (Nilsen & Tayler, 1997).

- Interdisciplinary planning teams,
- A focus on the management of human-induced change,
- A need for sound natural science and social science information,
- Formal and informal data gathered over time,
- The establishment of clear, measurable management objectives,
- The definition of recreation opportunity settings as a “combination of biological, social and managerial conditions that give value to a place” (Clark & Stankey, 1990: 127),
- The hierarchy of demand and the link between activities, settings, experiences, and benefits (Driver & Brown, 1978),
- Recognition that “there is no single, predictable environmental or behavioral response to recreation use” (Graefe, 1990: 214),
- Recognition that “most impacts do not exhibit a direct linear relationship with user density,” and a variety of situational factors must be considered (Graefe, 1990: 214),
- Recognition that it is important to provide a diversity of recreation and educational opportunities,

- A focus on elements of the recreation setting, because these are the components of the recreation opportunity that managers can readily influence,
- A range of direct and indirect management strategies (Graefe et al., 1990), in particular, zoning or landscape classification along a spectrum,
- Ongoing monitoring and evaluation.

5. Outdoor Recreation Strategic Management Planning (ORSMP) Approach and Processes

McCool et al. (2007) describe a planning 'framework' as a "process that involves a sequence of steps that leads managers and planners to explicate the particular issue. The planning process is an organized sequence of steps requiring conscious and continuous action.

Strategic plan: It is defined as a plan that includes the medium and long-term goals, basic principles and policies, targets and priorities, performance criteria of public administrations, the methods to be followed to achieve them, and resource allocations (Kamu Mali Yönetimi ve Kontrol Kanunu, 2003).

Outdoor Recreation Strategic Management Planning (ORSMP) is an organizational process includes that tools, principles, and methods to be used in line with the foreseen management goals and objectives, determination and development of recreational activities (e.g. types of activities, activity sites, recreational areas, facilities, etc.), creation of optimal (ideal) decision options, operational (design process) and managerial decisions, practices, risk, monitoring, and control mechanisms, etc.

The logical framework of ORSMP represents a cyclical process where 6W+2H questions are answered and linked Figure 1.

Outdoor Recreation Strategic Management Planning (ORSMP)
Logical Framework

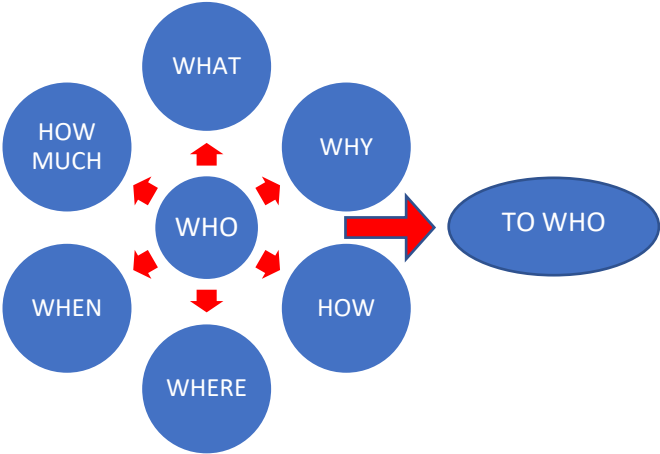


Figure 1. The Logical Framework of ORSMP

Planning of outdoor recreation areas requires the development and use of methods and tools according to natural and cultural resource values (recreation supply).

In this context, meeting the recreational demand, defining suitable structures, facilities, and activities, and improving the quality of recreation should be foreseen according to the objectives determined following the opportunities offered by the recreational supply and the physical capacity it will carry in the outdoor recreation planning process.

In this study, a holistic and participatory recreational management plan model has been proposed for the supply-based determination of recreational opportunities in Outdoor Recreation Strategic Management Planning (ORSMP). The Outdoor Recreation Strategic Management Planning Process was envisaged in 7 stages.

Stage 1: Formation of the Planning Team

The planning team is responsible for acquiring, analyzing, and interpreting all kinds of data at all stages of management planning, making decisions regarding implementation and management processes, determining activities, and coordinating and cooperating with stakeholders. The planning team should have the skills and competence in facilitating, organizing, leading, analyzing and problem solving, creative, negotiation, etc., as well as being an expert in their field. The planning team is also responsible for being well organized and designed to maximize stakeholder engagement.

According to the management purpose and characteristics of the recreation area, permanent, temporary, and supportive participants or stakeholders are determined, and responsibilities and task definitions are made. List of relevant stakeholders that can be involved in the planning team;

- Relevant stakeholders that can be involved in the planning team,
- Managers and technical experts of government institutions and organizations,
- Spatial planning and design disciplines (Landscape Architect, City Planner, Building Architect, etc.),
- Other related professional disciplines (tourism management, recreation specialist, biologist, ecologist, forest engineering, archaeologist, agricultural engineering, geographer, economist,

fisheries engineering, geologist, sociologist, economist, tourist guide, etc.),

- Recreation and tourism managers,
- Local people,
- Representatives of Non-Governmental Organizations (NGOs),
- Foundation representatives,
- Visitors and tourists (domestic and foreign),
- Tourism agencies and guides,
- Tourism and recreation investors and companies,
- Students,
- Other stakeholder representatives vb.

Stage 2. Resource Inventory and Survey

Resource Inventory, in all spatial studies; is a process that includes collecting natural and cultural resource data of the area, creating a database, determining the current situation, revealing how it is, conducting research and examination, classifying, associating, analyzing, evaluating, interpreting, linear, textual and figural visualization.

Source inventory data is obtained inside the recreation area and outside the area that can be directly related to the area. Relevant data are provided and correlated, taking into account not only the recreation area itself but also the society and environment surrounding the recreation area.

There is a need for all current and potential data to be obtained in the field to be up-to-date and reliable and to be systematically evaluated.

The use of incomplete and outdated data adversely affects the healthy and accurate planning and decision-making process. All obtained data is digitized, stored, and analyzed in a GIS environment.

Inventory studies for the recreation area include office and survey (field) works.

Office and data supply studies: First of all, the recreation area and the literature on the subject are searched and filed and used as a base for inventory studies. All existing written and visual data about the area are collected. A digital base sheet (Status sheet) and maps are created. The point, linear and spatial data are processed. Data is systematically classified, filed, stored, a database created, etc.

Survey studies: It is a process carried out to obtain data by researching, observing, and examining the source data of the area in the field and/or controlling and revising the data obtained in the office work (tree or structure survey, survey studies, field examinations, and observations, etc.) (Table 3. and Table 4.).

Table 3. Recreational Natural Resource (supply) Inventory

Data	Sub data
Climate	Precipitation, temperature, humidity, wind, snow, baking, sunbathing time, etc
Soil, geology, and mineral values	Soil type, depth, organic matter ratio, bedrock, large soil groups and types, earthquake fault lines, underground and surface mines and quarry areas, etc.
Topographic, slope, and erosion conditions	Creation of contour base, altitude classes, slope classes, erosion classes, etc.
Hydrology and water resources,	Sea, wet-dry stream, stream, lake, fountain, Geothermal, drainage status, aquaculture, etc.
Vegetation inventory	Forests, trees, maquis, medicinal and aromatic plants, agricultural plants, pasture plants, etc.
Wildlife	common species endangered species, susceptible species, endemic species, etc
Biodiversity	Species diversity, genetic diversity, ecosystem diversity,

		process diversity, endangered species, susceptible species, endemic species, etc.
Natural landscape values	visual	Vista points, geological monuments, monument trees, etc.

Table 4. Recreational Cultural Resource Inventory

Data	Sub data
Social and Historical Data	History of the area, local identity, traditions, customs, handicrafts, gastronomy, customs, existing historical and archaeological values, recreational structures and objects, stakeholder demands and trends, demographic structure, education, and health data, tourism data (number of tourists, number of agencies, number of tourist guides, etc.), etc.
Spatial Data	Existing land use and land classification, residential areas and development plan, local architecture inventory, property and cadastre status, open and green space systems, transportation and accessibility, infrastructure systems (electricity, sewerage, internet, water network, natural gas. etc), legally protected areas/objects, agricultural structures and facilities, tourism and recreational facilities, buildings and objects, landscape landmark values, environmental problems, etc.
Economic, Legal, and Political Data	Livelihoods, income status, business production potential, marketing and employment status, sectoral products/services and economic dimension of the area, tourism economy (accommodation facilities, bed capacity, tourism income, touristic product production, and marketing, etc.), energy production-distribution and storage, finance, fund and credit facilities, the number and function of cooperatives, the number and function of NGOs, their relationship with the current legislation, international agreements, top plan decisions for the field, approaches of decision-makers and politicians, possible investment program decisions of institutions and organizations in the field, project cost and implementation cost, finance, and budget possibilities, etc.

User/Visitor/Stakeholder Recreational Demand and Needs Inventory and SWOT process

Methods such as surveys, interviews, interviews, etc. are applied to determine the demands and tendencies of users/visitors/stakeholders for recreational area use and activities.

In addition, to determine the current situation for the area is determined by the user/visitor/stakeholders with the SWOT technique (internal factors: strengths and weaknesses, external factors: opportunities and threats).

Stage 3: Analysis and Evaluation

Considering all inventory data, analyzes are made and correlated by the purpose. Textual and numerical interpretations are made from the data and decision options are created by obtaining new findings. Natural source data analyzes are given in Table 5.

Natural Source Data Analysis

Table 5. Natural Source Data Analysis

Data	Sub Data
Climatic data analysis	Insolation status, duration and angle, shading rate, annual precipitation, intensity and temperature, min. and max. and average temperatures, cloudiness density, frost condition and duration, prevailing wind direction, relative humidity, aspect analysis, bio comfort compatibility analysis, etc.
Topography, soil, and bedrock data analysis	Slope analysis, erosion status and analysis, elevation analysis, land morphology, surface drainage analysis, interesting geological objects and areas, earthquake analysis, soil structure, depth (0-30 cm, 30-60 cm, 60 <), its structure, texture, organic matter ratio, physical and chemical structure, pH ratio, bedrock type, surface stony condition, soil salt ratio, etc.
Water resources data analysis	Detection of water resource types in the area (well, fountain, artesian city water, etc.) and its capacity, level, physical and chemical content of the existing water resource and analysis of natural water resources (sea, lake, dam, seasonal and annual use of water resources), determination of swamps and areas with high groundwater, drainage, and hydrological analysis, etc.
Natural vegetation data analysis	Area and inland natural plant species and their densities, endemic status, biodiversity status, endangered and risky species, and their distribution, monumental trees and their features, forest fire risk, etc.
Biodiversity data analysis	Natural animal and plant species and their distribution in and around the area, endemic status and distribution,

			endangered/risky species and their distribution, biological diversity status and density, wild animal migration routes and stopover points, etc.
Natural analysis	visual	landscape	Vista points analysis, geological monuments, monument trees analysis, precision landscape analysis, etc

Cultural Source Data Analysis: Cultural source data analyzes are given in Table 6.

Table 6. Cultural Source Data Analysis

Data		Sub Data
Socio-cultural analysis	data	Demographic analysis, local identity values and image relationship analysis, tourism data analysis, analysis of tourism/recreation facilities and objects, analysis of historical and archaeological values, areas with protection status (historical, archaeological, and registered structures and objects) analysis, cultural heritage values analysis, education and health data analysis, stakeholder demand and trends analysis, etc.
Spatial data analysis		Location of the study area, legal and physical boundaries, total amount of project area (building area and landscape area, etc.), current development plan relationship and analysis, building density-space analysis, structure-functionality analysis, existing recreational building and building coordinates and its dimensions, island and parcel information, transport and accessibility data analysis (transport types, vehicle, pedestrian and bicycle paths, transport focal points, road widths, road material type, available parking lots, public transport stops, etc.), property status and functionality analysis, architectural texture, analysis of registered buildings for protection, analysis of open and green area systems in and around the area (green area types, amount of green area per capita, tree survey, old trees, urban equipment and furniture analysis, etc.), landmark points analysis , visual analysis with photographs, analysis of existing problems and negativities (noise, pollution, etc.) in and around the area, existing water resources (well, artesian, city water sleep) analysis, analysis of existing and possible infrastructure and superstructure systems (electricity, sewerage, natural gas, etc.), etc.
Economic and political data analysis		Current and potential financial analysis of the area, income status, production and consumption relationship, tourism sector and sub-sector analysis, tourism economic analysis, relationship and analysis of current legal and legislation, relationship to top plan decisions for the area, project cost, and application budget possibilities analysis, etc.
SWOT analysis		Strengths and weaknesses, threats, and opportunities are predicted with SWOT analysis, all inventory data, and surveys to

	stakeholders. With the Likert scoring technique, each of them is ranked in order of importance. Strategic actions are defined with the current situation analysis as a result of the SWOT matrix association.
Pressure and threat analysis	Current pressures and potential threats to natural and cultural resource values within the area are determined by inventory data and stakeholder views. Reflecting on strategic planning decisions, necessary improvements and measures are suggested.

Determination of Recreation Activities and Activity Location Selection Analysis

Recreational activities are determined by analyzing the area according to recreational goals and objectives, resource values, and stakeholder demands and trends. To determine the appropriate location selection for each of the recreational activities, the most suitable places are determined by using multi-criteria analysis methods (e.g. suitability or threshold analyses) in GIS according to the activity type. Each activity is designed as spatial, point, and linear (routine) and reflected in strategic management plans.

Stage 4: Determination of Recreational Site-Specific Goals And Objectives

As a result of inventory data, SWOT, and threat/pressure analyses, future field-specific goals/objectives are defined and detailed. The goals/objectives and tools should be systematic, realistic, measurable, applicable, consistent, adaptable, cost-effective, and acceptable to stakeholders. A goal is an objective to which the planned activities can be directed. Goals should imply commitment and reflect careful study, as they define recommendations for action and the entire course of the planning effort. Tools are ways to achieve ends. In any chain of goals

(where each goal is a means to achieve higher-level goals), a goal would be an end in the chain viewed from below and a means viewed from above. Goals should be evaluated to make it easier to choose between different goals. Each tool in a given goal chain should be evaluated in terms of how it affects progress towards the highest end goal in that chain in light of available land, labor, capital, and management resources and accepted constraints. Structuring a priority ranking requires a clear understanding of the ultimate ends that goal chains serve and of the relative value assigned to the ultimate end (Uleck, 1971).

Stage 5: Site-Specific Protection and Recreational Use Zoning

According to SWOT and survey results, protection and recreational use zones in the area are determined and defined by multi-criteria analysis methods (e.g., suitability or threshold analyses).

Program options are created, associated, and developed as a result of field analysis of facilities, buildings, and activities envisaged in the designated recreational areas. Zoning forms the core of recreation management planning. The main purpose of zoning is to develop a common vision among all stakeholders to resolve conflicts over actions for conservation and recreational uses. What will happen in the field is defined formally (project) and textually.

Three basic zonings can be developed in recreation sites.

- a. Zoning for Recreational Use:** It is a zone open to recreational activities and uses. There will be buildings, facilities, and equipment that will meet all kinds of needs of the

visitors (e.g., daily activities, accommodation, eating, drinking, WC, maintenance, and repair). According to the planning purposes, needs, and site characteristics, many sub-regions can be established in the same area.

b. Protection Zone: It is the zone where natural (biodiversity, plants, wild animals, geomorphological shapes, etc.) and cultural (archaeological, ethnographic, local and authentic architecture, mythological values, etc.) resource values are taken under protection as areal or object/species. Depending on the resource values, it may be closed to any use or limited use (for example, nature-based ecotourism activities or archaeological sites open to visitors only) may be allowed.

c. Buffer Zone (Transition zone): It is the transition zone from the protection zone to the recreational use zone or from the recreational zone to the protection zone. The main purpose of the buffer zone is to protect the natural and cultural resource values in the protection zone against the effects and effects caused by recreational use. Likewise, it can be established to prevent recreational resources and visitors from being adversely affected from outside the area.

In the planning site, zoning should be foreseen to ensure the integrity and applicability of recreational use (recreational structure, facilities, activities, etc.) compatible with natural and cultural resource values,

- Zones with common features and problems should be defined in line with the foreseen goals/objectives,

- Plan decisions/actions should be developed separately for the defined zoning,
- Plan decisions/actions should be applicable, flexible, and sustainable,
- An effective administrative organization should be established.

Stage 6: Synthesis and Decisions

Outdoor Recreational Strategic Management Planning (ORSMP) and Decisions

For ORSMP, recreational use-protection zones and sub-zones are created as a result of all analyzes (e.g., natural and cultural inventory analysis, SWOT and threat/pressure analysis, activity and site selection suitability analysis, etc.). Strategic decisions and policies (e.g., goals/objectives, actions/activities, stakeholder responsibilities, schedule, activity types, action programs, recreational facilities/structures, budget, governance organization, etc.) are made, defined, and detailed for the entire area and each zone/subzone.

A holistic and fragmented design concept is developed for the recreational site. For this purpose, a digital map of the area is produced and all spatial data are processed. Holistic concept approaches are developed in terms of usage and protection zones, transportation, architectural structures/facilities, landscape spatial arrangement approaches, activity types and locations, infrastructure systems, spatial capacities, etc., according to the determined purposes and decisions.

At the same time, it is shown in the concept plan and reported on a scale of 1/25000 or 1/10000 or 1/5000, or 1/1000 according to the size of the Site.

The developed holistic concept plan is evaluated by the relevant and authorized institutions, other stakeholders, and the project team, necessary revisions are made, and the final concept plan is decided and approved. The next design, implementation, and governance processes are shaped in line with the finalized concept plan.

Action Program for Recreational Activities

In line with the approved final concept plan, a spatial, point, and linear (routine) action program is defined for each recreational activity. Rules and principles are determined by the project team for each activity (For example, where, how, when it will be done, carrying capacity, responsibilities, cost, monitoring, governance, etc.).

The Action Program should include;

- Architectural building/facility projects and landscape design projects are prepared for each activity and the facilities in question at the point and spatial scales. The architectural building project consists of a situation sheet (1/500), building sheets (1/100 or 1/50 scales), and a project technical report. The landscape design project consists of a situation sheet (1/500 or 1/200), structural and plantation application sheets (1/200 or 1/100), detail sheets (between 1/50 and 1/1), and a project technical report.

- Recreational activities are associated with the governance organization.
- Ecological and social risk analysis is made for each activity, facility, and service.
- The visitor carrying capacity is calculated for the area and each activity. Methods for monitoring the visitor effect are determined. The framework of monitoring is determined.
- Activities are associated and integrated according to general legal and management plan decisions and policies.
- Responsible Institutions and relevant stakeholders (such as tour operators, academicians, visitors/users, local governments, and local people) are determined by the limits and scope of their responsibilities.
- Scientific, educational and promotional activities are foreseen in the field and necessary equipment and materials are determined.
- The framework of cooperation between all stakeholders (e.g., Travel agencies/tour operators and non-governmental organizations, and local people) is prepared.
- The short and long-term management and implementation costs of the activities are estimated. Priorities are determined with the time and budget calendar for implementation.
- Methods and procedures for cost-benefit analysis are defined. Not only tangible values are included, but also intangible (satisfaction and satisfaction level, etc.) values.

- Income-generating activities that will not contradict the target/objectives of the area are determined.
- Strategies for field-specific product development and marketing are created.
- Written and visual materials are prepared for the promotion of the area.
- Programs are created for the maintenance, repair, and improvement of problem areas.
- Methods and processes are defined for activity monitoring and control.
- Recreational activities should have a budget and accordingly income targets and expense limits.

Recreation Area Governance Organization

The governance organization is the holistic organization of the authorities and responsibilities, standards, values, rules, practices, and processes for the protection and use of the recreational area according to the specific conditions of the recreational area by the authorized institution. The governance organization approach includes the principles of transparency, fairness, responsibility, broad-based participation, unity, systematic, sustainability, reliability, and accountability. For an effective and competent governance organization;

- A multi-layered and broad governance structure should be established. Relevant departments and services should be established, and roles and responsibilities defined.

- Managers and technical and administrative personnel are defined in terms of quality and quantity.
- The tools, equipment, and equipment to be used are defined.
- The organizational chart should be associated with the current legislation and institutional structure.
- Cooperation and coordination between management and stakeholders should be ensured.
- An “Advisory Board” should be established for the decision-making and implementation process.
- Organization management should be consistent with plan objectives and policies.
- It should take advantage of technological opportunities.
- Annual and 5-year work and activity programs and budgets should be defined.
- Performance evaluation should be done every 3 years.
- Financial resources should be determined to develop resource conservation and recreational use options.

Recreational Visitor Management (RVM)

Recreation Visitor management (RVM) is used to evaluate environmental, social, and managerial conditions and take measures for resource and visitor management.

RVM is a roadmap where standards, indicators, measures, capacities, decisions, and principles are defined for the identification, association, analysis, and solution of adverse effects or problems resulting from recreational uses.

In this context, standards and rules are defined for attitudes and behaviors towards general visitors, monitoring, and control processes within the framework of strategic management plan decisions and action programs foreseen for recreation areas and activities.

Stage 7: Institutional Approval, Management, and Implementation

The **ORSMP** is updated and finalized by the authorized institution in consultation with the relevant stakeholders within the framework of its procedure. It is accepted and approved by the authorized institution and the implementation process is started.

After the ORSMP is approved, the governance organization chart is created by the relevant institution, and the plan decisions and projects are put into practice. All administrative work and services such as personnel, vehicles, tools, equipment, budget, design project preparation and implementation processes, work and activity programs, monitoring, control and inspection, maintenance, repair and renewal, cooperation with stakeholders, and logistics are carried out by field managers and personnel. Annual reports are prepared. Performance evaluations are made.

Stage 8: Feedback, Feedforward Revision (Re-planning)

Feedback is a process that includes reviewing, future-oriented modification, correction, and feed-forward revision of plan decisions and actions made by planners and managers based on their past experiences. Feedback can come from the planner himself, the local community, political decision-makers, and other stakeholders. Re-planning is a process that makes the whole planning process

continuous and dynamic. It includes the revision of planning as a result of the change of plan decisions and values over time according to social, economic, environmental, and spatial conditions.

In this context, management planning is restarted with a cyclical process. Thus, the plan decisions, actions, and activities are reviewed by the relevant stakeholders in consultation with the current conditions, and the planning process is completed. In general, it is recommended that management plans be reviewed and replanned at least every 10 years.

6. Conclusion and Suggestions

Today, demand and trends for outdoor recreation areas increase and diversify due to sociodemographic, economic, environmental, and technological changes. The need for new areas to meet the recreational demands and needs brings with it a direct competition with other land use sectors (agriculture, settlement, industry, mining, etc.). For this reason, it requires the organization of effective, sustainable, and holistic planning and management processes to prioritize them for recreational purposes within the framework of land use competition.

The recreation planning approach can be considered as a combination of interdisciplinary science, art, and social branches that can be associated with recreation spaces and activities that the individual and society can evaluate their free/leisure time in public and private spaces. In this context, the decision-making process in recreation planning (e.g., use of space, site selection of activity areas, design and

positioning of recreational facilities and structures, meeting recreational demands and needs) should be prioritized by taking into account the protection of resource values and public benefits.

Although there are many approaches and tools for planning outdoor recreation areas, there is no consensus on an ideal planning approach yet.

NEPA has identified the strengths and weaknesses of each of the wide variety of available recreation planning tools (Cervený et al., 2011). In addition, it also reveals the negative interaction and competition between the protection of resource values and the level of recreation use in the recreation planning process. Therefore, there is a need to develop new paradigms such as effective, efficient, proactive, creative, minimizing negative effects and competition, broad-based participation, etc. (Cervený et al., 2011).

For this purpose, the approach of ensuring the integration of holistic, scientific (analytical), participatory and sustainable management planning and decision-making processes with ecological/environmental, socio-cultural, and economic/political information is adopted.

This approach is possible with the recreation management planning process suggested above. The proposed **Outdoor Recreational Strategic Management Planning (ORSMP)** approach follows a process whose stages are interconnected. That is, there is a cycle of interdependence between the stages of the planning process, which includes both feedback and feed-forward. Features of **ORSMP**;

- It has a cyclical process.
- It presents a systematic approach.
- Plan decisions are made as a result of inventory and survey data analysis, stakeholder engagement, and suggested actions and activities that are acceptable and feasible.
- It includes future targets/objectives, tools, actions, activities, indicators, capacities, governance organization, etc.
- Provides a mechanism to present the current situation in the analysis processes and to advance the exchange of ideas among the participating stakeholders toward the solution. Identifies and brings together public and private stakeholders.
- It has a broad perspective with its multidisciplinary approach. It takes into account a variety of issues, opinions, and ideas.
- It is continuous, it is suitable for change to reach the targets and it is flexible, not static.
- Provides functional short- and long-term vision, goals, and strategic actions at different levels, monitoring, feedback, evaluation, adaptation, and revision.

Visitor management for recreational use in recreation areas is very important. Visitor management decisions should be taken and included in the management planning by researching the attitudes and behaviors of visitors, demands and tendencies, expectations, satisfaction levels, increasing awareness, educational activities, etc. in each recreation area.

Visitor management plans of a few protected areas or carrying capacity studies that will form a basis for this plan have been made by the relevant institutions (General Directorate of Nature Conservation and National Parks, General Directorate of Conservation of Natural Assets) in our country (Göktuğ & Yenilmez, 2016; Göktuğ & Yenilmez, 2015; Göktuğ & Zengin, 2021; Göktuğ et al., 2021).

In addition, a national visitor use monitoring network should be established in our country. For this purpose, a "visitor monitoring system" should be established by the responsible Institutions in areas with protection status and other public recreational areas.

Thus, it will provide a great convenience for planners, researchers, managers, and decision-makers in terms of understanding the characteristics and preferences of visitors in public recreational areas and predicting recreational demands and needs in the future.

Recreation Management Plan decisions should be flexible and revised according to the foreseen time frame, taking into account resource values, goals/purposes, and social and spatial changes. It is of great importance to investigate the effects of recreational activities and determine the results of the effects in each recreational area. Thus, it will facilitate the mitigation, repair, and management of adverse effects. A well-made recreation management plan and foreseen goals will only be successful if there are field managers, technical personnel, local people, and visitors who have awareness of conservation, prioritize public interest, have a broad vision, share, and are honest and well-intentioned.

Thanks and Information Note

The article complies with national and international research and publication ethics.

Author Contribution and Conflict of Interest Disclosure Information

Only one author contributed equally to the article. There is no conflict of interest.

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