

IDENTIFICATION OF THE RECREATIONAL POTENTIAL OF THE CITY OF ODESSA

S.S. Storozhuk,

mesvet@ukr.net, ORCID: 0000-0001-8390-7190

Odessa State Academy of Civil Engineering and Architecture, Ukraine

Abstract: The article is devoted to the identification of the recreational potential of the city of Odessa for the development of tourism. For this, the analysis of the existing landscape and recreational areas of the city was carried out using the general plan of Odessa. It has been established that the results of assessing the recreational potential of Odessa make up 20% of the total city territory, which suggests that almost all types of landscape and recreational territories are scarce and disordered, especially in the coastal zone.

The capacity of coastal recreation areas on the seashore (near the beach and water area) is set based on the size of the beach area and the length of the coastal strip. The results show that on the seaside coast of Odessa at the same time on the beach can be more than 53 thousand vacationers, although every season the beach recreation area is visited by more than 75 thousand people (city residents and tourists), which is not enough for the development of tourism in the city. All this testifies to a huge shortage of coastal recreation areas on the seaside coast of Odessa.

Thus, as a result of assessing the recreational potential of coastal common areas, using the example of the city of Odessa, it was revealed: Greening of public areas, namely parks, gardens, squares, pedestrian boulevards, are not evenly distributed throughout the city in relation to the general territory and administrative districts of the city. This is a prerequisite for the use of other territories, including abandoned economic plots in these areas, for new recreational areas, as well as for the rehabilitation of existing parks in a depressed state. For example, an increase in the recreational territories of the Malinovsky district makes it possible to rehabilitate the Savitsky and Dyukovsky parks. On the territory of the Suvorov District – restoration and modernization of the existing Luzanovka Hydropark; the creation of specialized parks on the «Fields of irrigation and filtration» (landscape, zoological and botanical) on «Zhevakhov Mountain» – the organization of an open-air museum of architecture and life, a park of architectural miniatures, a golf course. The huge shortage of coastal recreation areas on the seaside coast of Odessa and the lack of free access of the population to the entire coastline makes it possible to reorganize the coastal territory using the abandoned territories of «Irrigation and filtration fields» (Khadzhibey estuary), «Meat-packing plant» and «Odessilmash» for organizing seaside pedestrian boulevards, promenades and public beaches. Also on the territory of «Meat-packing plant» and «Odessilmash» it is possible to create exhibition, sports parks and attractions.

Keywords: landscape and recreational areas, green areas, coastal zones, seaside, tourism.

The introduction (problem setting). Landscape and recreational areas are a network of green areas and other open spaces for various purposes, namely: landscape complexes, recreational areas, resorts and health-improving areas, cultural heritage and tourist areas, territories of nature reserves and water resources, and other areas of green construction.

When forming a network of landscape and recreational areas in cities, the following are distinguished: *common areas* (areas of landscape gardening); *restricted areas* (residential areas, public service facilities, cultural heritage, production); *special-purpose territories* (protected natural areas, landscaping of sanitary protection and security zones, along pedestrian-transport networks, corridors, agricultural and other territories).

In cities, green areas belong to recreational lands and are part of a single network of landscape and recreational areas. Areas of green areas are established in accordance with the existing boundaries of land use, natural boundaries and highways. The green areas of public use of settlements include multifunctional and specialized parks, gardens, squares, boulevards, city forest parks, green areas of promenades and beaches, botanical gardens and zoological parks, parks-monuments of garden and park art and other natural and artificial creations objects.

The share of green areas for various purposes (green areas for general use, limited and specialized purposes) within the city should be at least 40%, taking into account green areas within neighborhoods [1].

The purpose and objectives of the research. The purpose of the article is to identify the recreational potential of the city of Odessa, for this analysis of the existing landscape and recreational areas of the city using the master plan of Odessa (DIPROMISTO, 2015), DBN B.2.2-12: 2019 «Planning and development of territories» and «Methods for determining the recreational capacity of resorts and recreation areas» (by T. Panchenko).

The basic material and its results. To identify the recreational potential of Odessa, in general, and in certain administrative districts, an analysis of the existing recreational areas of the city in the master plan of Odessa was carried out (DIPROMISTO, 2015). Determination of recreational potential was carried out on the basis of «Methods for determining the recreational capacity of resorts and recreation areas» (by T. Panchenko), presented in the works: «Urban planning. Designer's Guide» (2006) and «Landscape and Recreational Planning of Nature Reserves» (2015) [2-4].

Considering that the landscape and recreational areas are a network of landscaping and other open spaces for various purposes, it is established that the results of the assessment of recreational potential of Odessa is 20% of the total area of the city, which means that almost all types of such are scarce and unorganized territories, especially in the coastal zone. (Fig. 1)

The formation of a network of landscape and recreational areas in Odessa is based on the normative recommendations of the above-mentioned DBN and includes: recreational areas of general use (areas of landscape gardening, forest parks, etc.); green areas of limited use (residential areas, cultural heritage, etc.); green areas for special purposes (landscaping along pedestrian and transport networks, sanitary protection and security zones). Since the city of Odessa is located in the southeastern steppe part of the territory of Ukraine with a population of over 500 thousand people, its prospective needs in landscape and recreational territories are determined by the indicators of regulatory support at the rate of 200 m²/person. Taking it into account, the corresponding calculations were carried out and the main structural elements of green areas for various purposes and the normative share of green spaces within the area of their territory were determined, which are shown in Table 1.

The indicators of the data in Table 1 indicates that there are many parks, squares and gardens in Odessa, but they are located unevenly within the city; for example, in the Suvorov district there is only one park – «Luzanivka Hydropark», in Kyiv – «Yunost Park» and «Memorial of the Heroic Defense of Odessa 411th Coastal Battery», in the Malynovsky district – 3 parks, two of which are depressed (Dukovskyi Park, Park Savytskogo). Basically all parks, squares and gardens, including the Botanical Garden of ONU are located in the Primorsky district, there are also two pedestrian boulevards (Primorsky Boulevard, Zhvanetsky Boulevard) and a zoo; The Health Route runs along the coastal area of the district in its historic area. The peculiarities of uneven distribution of public recreational areas in different districts of Odessa is a prerequisite and justification for the expediency of using other territories, including abandoned economic areas for new recreational zones (Fig. 2).

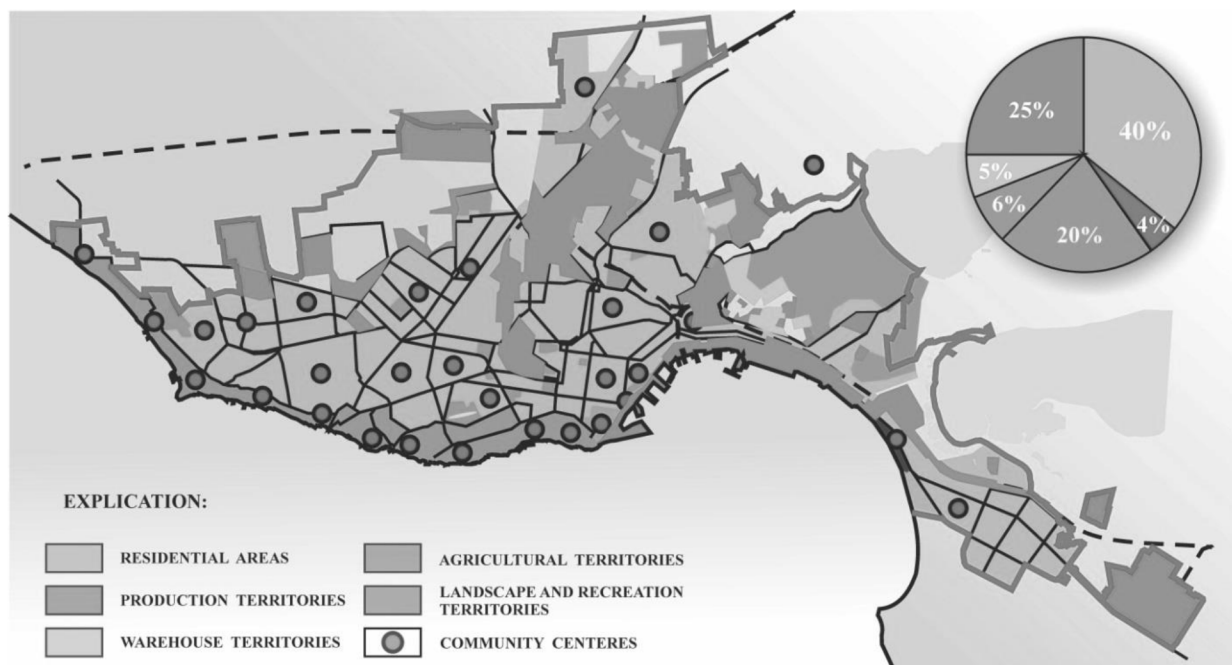


Fig. 1 The functional-planning organization of Odessa city

Table 1 Comparative characteristics of green areas of Odessa

№	Structural elements	Green areas of Odessa	Level of landscap- ing, not less than %
1. Landscaped public areas			
1	<i>Multifunctional parks:</i>		
	Urban District	-	65
	<i>Suvorovsky</i>	Luzanivka Hydropark	
	<i>Primorsky</i>	Shevchenko Park, Greek Park, Istanbul Park, Preobrazhenskyi Park, Arboretum Victory, Artillery Park	
	<i>Malinowski</i>	Gorky Park, Dukovskyi Park, Park Savytskogo,	
	<i>Kyiv</i>	Yunost Park	
	Gardens, squares	Mechnikov Square, Prokhorovsky Square, Seredynsky Square, Paustovsky Square, Astronauts Square, Gamov Square, Mikhailovsky Square, Oleksiyivsky Square, Heroes-Pilots Square, Kherson Square, City Garden, Palais Royal Square, Witte Square	75
	Boulevards	Seaside Boulevard, Zhvanetsky Boulevard	60
	City forest parks	Park "Coastal Slopes" (Health track)	80
2	<i>Specialized parks:</i>		
	Children's	-	40
	Sports	-	15

Memorial	Memorial of the heroic defense of Odessa 411th coastal battery	30
Zoological	Zoo	40
Botanical	Botanical Garden of ONU named after I. I. Mechnikov	55
Exhibition		50
Open-air museums of architecture and everyday life	-	60
Amusement park and architectural miniatures	-	45
Golf courses	-	75
2. Green areas of limited use		
3 Building plots:		
Residential buildings		25
Children's preschool institutions		45
Schools		50
Cultural and recreational facilities		40
Sports and recreation facilities and playgrounds		30
Health care facilities		55
Resort and recreational facilities		60

It has been established that zones of short-term and long-term rest of the population are created mainly on recreational lands within cities (inner city), suburban zones (suburban), in settlement systems (suburban or inter-settlement), while zones of short-term rest, as a rule, are located, taking into account their availability by public transport at a distance of no more than 30 km. This condition is absolutely acceptable for Odessa, given its successful location on the shores of the Odessa Gulf of the Black Sea with the availability of public city beaches; for example, a remote point of a residential area (Lenposelok) is at a distance of 11.5 km from the coastline, creates a comfortable environment for short-term rest, taking into account its convenient accessibility for the population. At the same time, it should be noted that free access of the population to the Odessa coast is not possible everywhere; 33% of the total coastline is covered by the industrial zones of the city, most of which are in a depressed state.

It is known that on the territories, adjacent to the beach zones and water areas, as a rule, beachside and aquatorial zones are created. The capacity of coastal recreation areas on the coast is determined by the appropriate method (by T. Panchenko), according to the beaches' square (W_1) and the length of a coast line (W_2) according to the formula [2, 3]:

$$W_1 = F/N_1k;$$

$$W_2 = L/N_2k$$

where F – the total square of natural and artificial beaches, m^2 ;

L – the total length of a coast line of natural and artificial beaches, which is used for the entrance into water, m ;

N_1 – the norm for the beach square per one visitor (5-8 m^2);

N_2 – the norm for the length of a beach's coast line per one visitor (0,2-0,25 m);

k – the coefficient of a beach's simultaneous load (0,5-1,0).

The calculations results for the capacity of seaside rest zones on the sea coast of Odessa city in presented in Table 2.

Table 2 The capacity of seaside rest zones on the sea coast of Odessa city

City	F, m^2	L, m	$N_1,$ (5-8 m ²)	$N_2,$ (0,2-0,25 m)	$k,$ (0,5-1,0)	W_1	W_2
Odessa	426500	20000	8	0,25	1,0	53 312,5	80 000

According to the results of calculations of the capacity of coastal recreation areas on the seaside coast of Odessa, it can be seen that at the same time more than 53 thousand vacationers can be on the beach, which is not enough for the development of tourism in the city. Analyzing the indicators of the tourist high season in Odessa in recent years, it can be seen that every year the flow of tourists is increasing, for example, over the past 3 years it has increased by 20%, and as a result of the current global pandemic of coronavirus infection COVID-19, caused by the SARS-CoV-2 coronavirus, the borders of many states are closed, which led to the prosperity of local (domestic tourism), in 2020 it was likely to receive about 5 million guests. The number of tourists grows in the summer months (May-September), which is approximately 80% of the total flow of all tourists, where the peak, depending on weather conditions, is in July-August. As a result, it can be calculated that on a summer day there were more than 17 thousand hours of tourists, wishing to visit the beach area of the Black Sea coast of Odessa in 2019, and 26 thousand hours in 2020 (Table 3). More than 1 million inhabitants live in the city of Odessa, of which 125 thousand are schoolchildren and children of kindergarten age (according to the Department of Education and Science of the Odessa City Council, August 28, 2017), most of whom spend all their free time in the summer holidays on coastal recreational areas. Using the data only for schoolchildren and children of kindergarten age (50%), it can be assumed that more than 60 thousand city residents and 17 thousand tourists visit the beach recreation area, which is more than 75 thousand hours per day, with permissible calculations of the capacity of coastal recreation areas in Odessa – 53 thousand hours. This indicates a huge shortage of coastal recreation areas on the seaside coast of Odessa (Fig. 3) [5-8].

Table 3 The indexes of touristic high season in Odessa

№	Year	A number of tourists, (season)	A number of tourists, (day: May – September)
1	2014	1 000 000	5 229
2	2015	1 700 000	8 889
3	2016	2 100 000	10 980
4	2017	2 500 000	13 071
5	2018	3 200 000	16 732
6	2019	3 300 000	17 255
7	2020	5 000 000	26 144

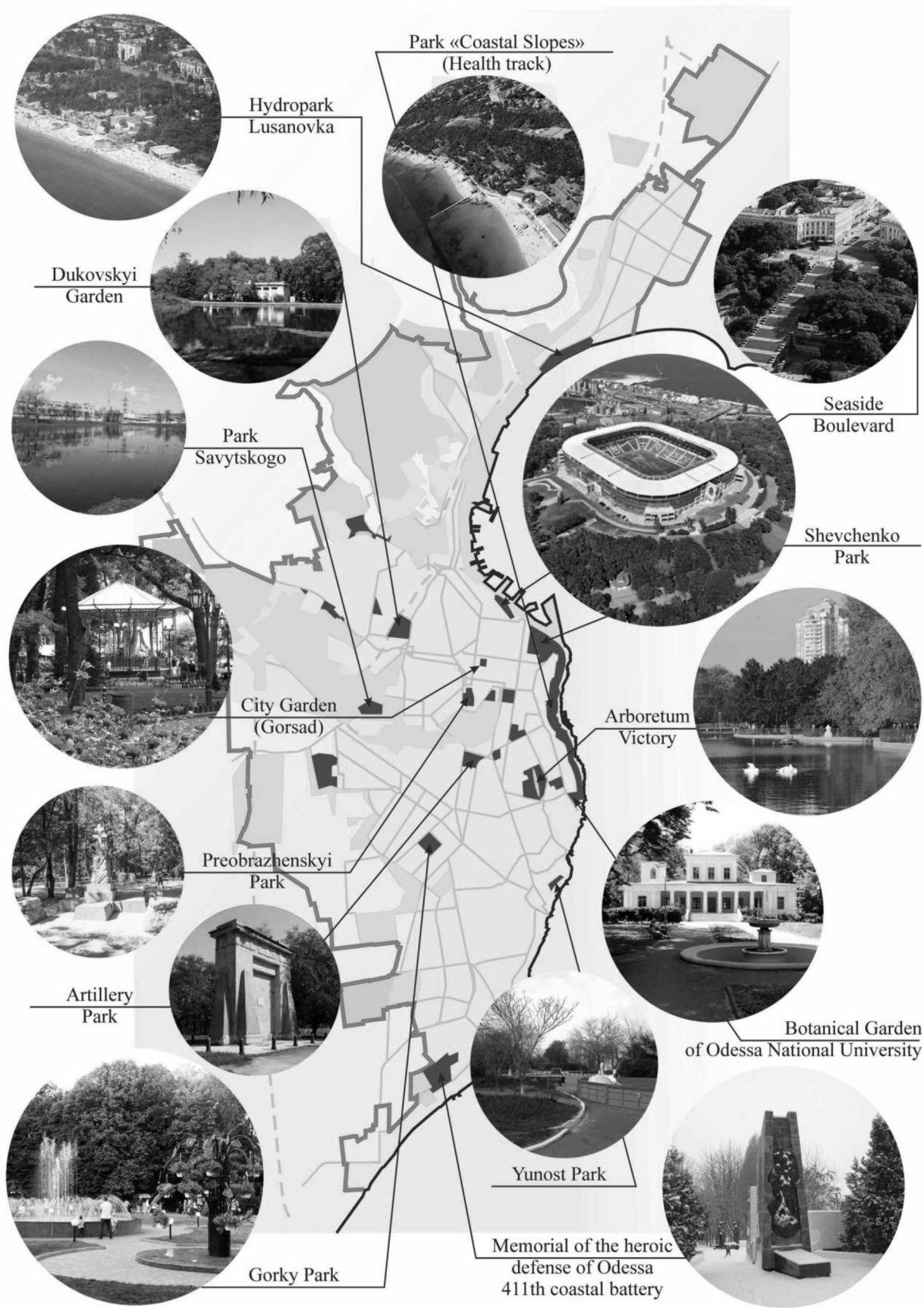


Fig. 2 Green public areas of Odessa (parks, gardens, etc.)

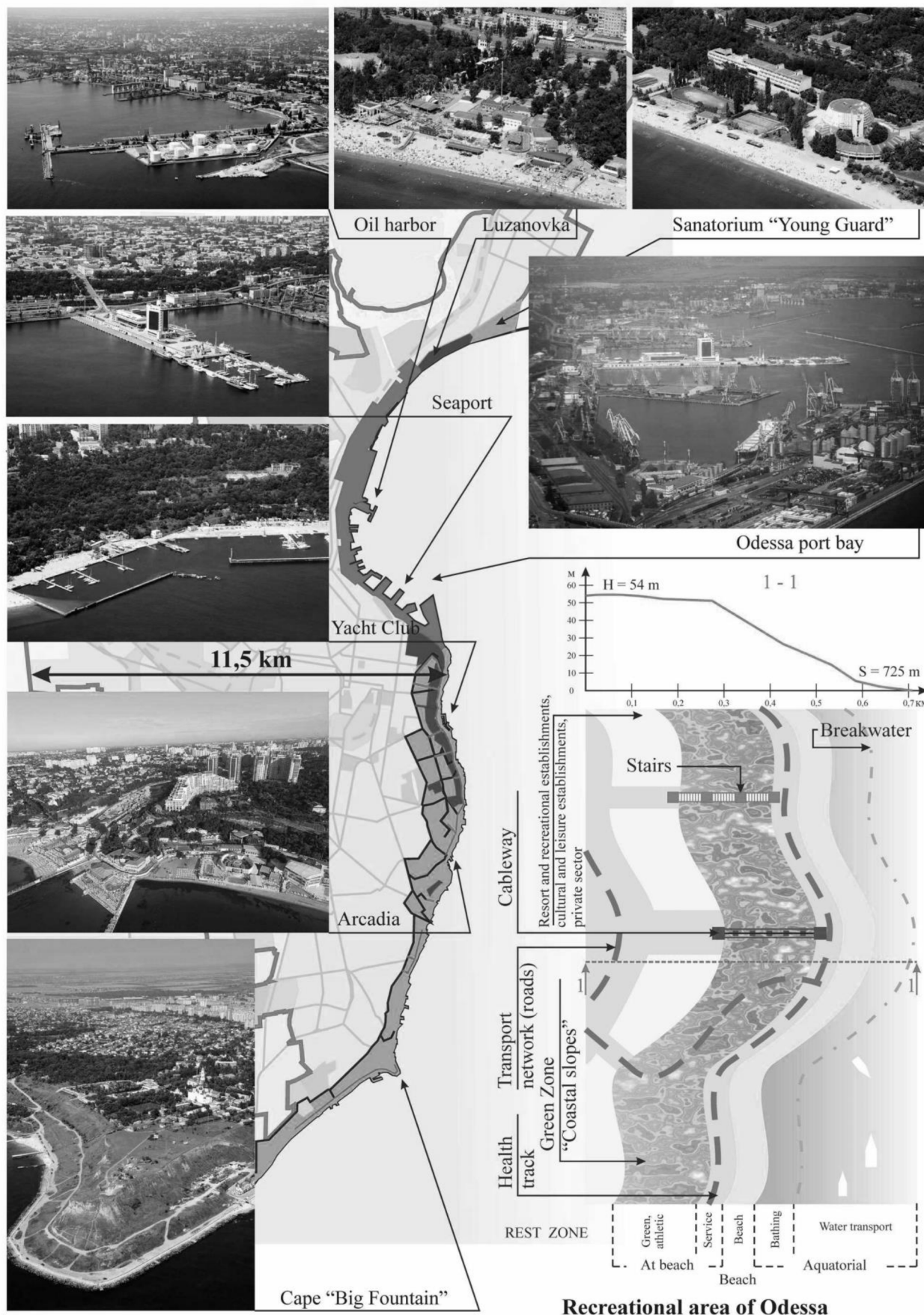


Fig. 3 Coastal territory of Odessa (water area of the city)

Conclusions and prospects for further development. Thus, as a result of assessing the recreational potential of coastal common areas, using the example of the city of Odessa, it was revealed:

- Landscaping of public areas, namely parks, gardens, squares, pedestrian boulevards, etc., located throughout the city is not uniform relative to the general area and administrative districts of the city. This is a prerequisite for the use of other areas, including abandoned economic areas of these areas, for new recreational areas, as well as for the rehabilitation of existing parks in a depressed state. For example, the increase in recreational areas of Malynovsky district provides an opportunity to reproduce and rehabilitate Savitsky and Dyukovsky parks. On the territory of Suvorov district – restoration and modernization of the existing Luzanivka Hydropark; creation of specialized parks on «Irrigation and filtration fields» (landscape, zoological and botanical); on «Zhevahov Mountain» – the organization of an open-air museum of architecture and life, a park of architectural miniatures, a golf course.
- The huge shortage of coastal recreation areas on the coast of Odessa and the lack of free access of the population to the entire coastline makes it possible to reorganize the coastal area using abandoned areas «Irrigation and Filtration Fields» (Hadzhibeysky estuary), «Meat-packing plant» and «ZOR – Odesselmash» for the organization of coastal pedestrian boulevards, embankments and public beaches. It is also possible to create exhibition, sports parks and attractions on the territories of «Meat-packing plant» and «ZOR – Odesselmash» [9].

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ВИЯВЛЕННЯ РЕКРЕАЦІЙНОГО ПОТЕНЦІАЛУ МІСТА ОДЕСИ**С.С. Сторожук,**

mesvet@ukr.net, ORCID: 0000-0001-8390-7190

Одеська державна академія будівництва та архітектури, Україна

Анотація. Стаття присвячена виявленню рекреаційного потенціалу міста Одеси для розвитку туризму. Для цього здійснено аналіз існуючих ландшафтно-рекреаційних територій міста з використанням генерального плану Одеси. Встановлено, що результати оцінки рекреаційного потенціалу Одеси становлять 20% від загальної території міста, це говорить про те, що дефіцитними та не упорядкованими є практично всі види ландшафтно-рекреаційних територій, особливо у прибережній зоні.

Місткість прибережних зон відпочинку на узбережжі морів (припляжна і акваторіальна зони) встановлюється, виходячи з розмірів площі пляжів і довжини берегової смуги. За результатами видно, що на приморському узбережжі Одеси одночасно на пляжі можуть знаходитися більше 53 тис. відпочиваючих, хоча кожний сезон пляжну зону відпочинку відвідує понад 75 тис. чоловік (жителів міста і туристів), що не достатньо для розвитку туризму в місті. Все це свідчить про величезний дефіцит прибережних зон відпочинку на приморському узбережжі м. Одеси.

Таким чином, в результаті оцінки рекреаційного потенціалу приморських територій загального користування, на прикладі міста Одеси, було виявлено: Озеленення територій загального користування, а саме парки, сади, сквери, пішохідні бульвари, розміщені по всій території міста не рівномірно щодо загальної території і адміністративних районів міста. Це є передумовою для використання інших територій, в тому числі занедбаних господарських ділянок цих районів, під нові рекреаційні зони, а також для реабілітації існуючих парків, що знаходяться в депресивному стані. Так, наприклад, збільшення рекреаційних територій Малиновського району дає можливість реабілітація Савицького і Дюковського парків. На території Суворовського району – відновлення і модернізація існуючого Гідропарку Лузанівка; створення спеціалізованих парків на «Полях зрошення і фільтрації» (ландшафтних, зоологічних і ботанічних) на «Жеваховій горі» – організацію музею архітектури і побуту під відкритим небом, парку архітектурних мініатюр, гольф-поля. Величезний дефіцит прибережних зон відпочинку на приморському узбережжі Одеси і відсутність вільного доступу населення до всієї берегової лінії дає можливість здійснити реорганізацію прибережної території з використанням занедбаних територій «Полів зрошення і фільтрації» (Хаджибейський лиман), «М'ясокомбінату» і «Одессільмаш» для організації приморських пішохідних бульварів, набережних і пляжів загального користування. Також на території «М'ясокомбінату» і «Одессільмаш» можливе створення виставкових, спортивних парків та атракціонів.

Ключові слова: ландшафтно-рекреаційні території, озеленені території, прибережні зони, приморське узбережжя, туризм.

ВЫЯВЛЕНИЕ РЕКРЕАЦИОННОГО ПОТЕНЦИАЛА ГОРОДА ОДЕССЫ**С.С. Сторожук,**

mesvet@ukr.net, ORCID: 0000-0001-8390-7190

Одесская государственная академия строительства и архитектуры, Украина

Аннотация: Статья посвящена выявлению рекреационного потенциала города Одессы для развития туризма. Для этого осуществлен анализ существующих ландшафтно-рекреационных территорий города с использованием генерального плана Одессы. Установлено, что результаты оценки рекреационного потенциала Одессы составляют 20% от общей

территории города, это говорит о том, что дефицитными и не упорядоченными являются практически все виды ландшафтно-рекреационных территорий, особенно в прибрежной зоне.

Вместимость прибрежных зон отдыха на побережье морей (припляжной и акваториальной зоны) устанавливается, исходя из размеров площади пляжей и длины береговой полосы. По результатам видно, что на приморском побережье Одессы одновременно на пляже могут находиться более 53 тыс. отдыхающих, хотя каждый сезон пляжную зону отдыха посещает более 75 тыс. человек (жителей города и туристов), что недостаточно для развития туризма в городе. Все это свидетельствует об огромном дефиците прибрежных зон отдыха на приморском побережье Одессы.

Таким образом, в результате оценки рекреационного потенциала приморских территорий общего пользования, на примере города Одессы, было выявлено: Озеленение территории общего пользования, а именно парки, сады, скверы, пешеходные бульвары, размещены по всей территории города не равномерно относительно общей территории и административных районов города. Это является предпосылкой для использования других территорий, в том числе заброшенных хозяйственных участков этих районов, под новые рекреационные зоны, а также для реабилитации существующих парков, находящихся в депрессивном состоянии. Так, например, увеличение рекреационных территорий Малиновского района дает возможность реабилитации Савицкого и Дюковского парков. На территории Суворовского района – восстановление и модернизация существующего Гидропарка Лузановка; создание специализированных парков на «Полях орошения и фильтрации» (ландшафтных, зоологических и ботанических) на «Жеваховой горе» – организацию музея архитектуры и быта под открытым небом, парка архитектурных миниатюр, гольф-поля. Огромный дефицит прибрежных зон отдыха на приморском побережье Одессы и отсутствие свободного доступа населения ко всей береговой линии дает возможность осуществить реорганизацию прибрежной территории с использованием заброшенных территорий «Полей орошения и фильтрации» (Хаджибейский лиман), «Мясокомбината» и «Одессильмаш» для организации приморских пешеходных бульваров, набережных и пляжей общего пользования. Также на территории «Мясокомбината» и «Одессильмаш» возможно создание выставочных, спортивных парков и аттракционов.

Ключевые слова: ландшафтно-рекреационные территории, озелененные территории, прибрежные зоны, приморское побережье, туризм.