METHODOLOGICAL APPROACHES TO LAND USE PLANNING OF RECREATIONAL LAND USE OF WATER PROTECTION ZONES AND COASTAL PROTECTIVE STRIPS

O. Yusypenko, graduate student

Email: infooleg0170@gmail.com

State Ecological Academy of Postgraduate Education and Management

Abstract. Today, in the conditions of transformational transformations, the recreational potential of reservoirs is used only partially, in connection with the priority of development of other branches of activity (health-improving). This is despite the fact that the value of water resources is involved in the processes of all areas of activity. That is why the issue of land management formation of recreational land use of water protection zones and coastal protection strips requires an integrated approach. Which is carried out through the assessment of recreational and tourist potential of territories and settlements to emphasize the characteristics and features that are important in the implementation of recreational activities and have a direct impact on the planning organization of land use.

For the purpose of verifying the set of general intelligence, the author schematically presents the concept of "structural components that form the land use of cultural landscapes ". It has been established that in a city, the assessment of the attractiveness of land use of landscapes for recreational activities should determine the originality of recreational land use in accordance with regional and local specifics and landscape diversity. It has been seen that as a result of using various methodological approaches to assessing the recreational potential of land use of the water protection zone and the coastal protection strips, the following should be established: the recreational capacity of land use of the territory; permissible recreational load; recreational digression. In addition, according to the results of the assessment, it is proposed to divide the recreational land use of the territories of water protection zones and coastal protection strips by popularity rating, in particular, with high, medium and low potential values. As an example, the state of recreational potential in Kyiv was considered and it was established that the land management arrangement of the city needs an immediate solution for further development of recreational land use. Also, the author, due to the lack of established boundaries of water protection zones, presents a characteristic of acute social and environmental problems of land use of water bodies in Kyiv.

It has been established that if there are restrictions on the use of land and other natural resources, but there is no information about them, then there is a possibility of the occurrence of various types of damage to the land use of water protection zones and coastal strips. That is why, it is proposed to allocate functional land use zones of the coastal protection strips by types of development, which will allow more efficient use of the existing potential of recreational land use of water protection zones and coastal protection strips within Kyiv and its greening and generally increase capitalization.

Keywords: recreational land use, water protection zones, coastal protection strips, functional areas.

Relevance. An integral part of the system of land use of any territory is its water bodies, each of which forms a unique ecosystem. For example, the main trademark of Kyiv is the Dnieper, which crosses the city in the middle, dividing it into two distinct parts – left bank and right bank. A large number of public beaches are equipped on the banks of the Dnieper, as a result Kyiv ranks first among European capitals by the area of beaches. Besides that, there are more than 70 small rivers and streams and about 430 reservoirs in Kyiv that played an important role in the life of our ancestors. Water bodies give the capital of Ukraine the features of uniqueness, serve as an important recreational resource and an element of landscape design. However, their long-term economic use has led to the deterioration of all water bodies and even the destruction of entire aquatic ecosystems. Such situation is disturbing for the population because Kyiv citizens want to live in clean environment where water bodies will be marked by low level of pollution and will be suitable for bathing, recreation and fishing. The existing problems have led to the relevance of the development of the water strategy of the city of Kyiv 2018-2025. [1]. It was initiated and developed by the municipal enterprise "Pleso" with the participation of scientific

institutions and public organizations of Kyiv, as well as the author of this article. As noted in the strategy, the capital of Ukraine is characterized by a high recreational potential – more than 2500 enterprises are engaged in tourism activities – about 24% of the total number of businesses in the tourism industry in Ukraine. Concentration of water bodies on the territory of Kyiv greatly contributes to improving the tourist potential of the capital and creates favorable conditions for the water development, educational and ecological tourism. Today the recreational potential of water bodies is used only partially due to the priority development of other sectors of tourism. The value of water resources lies in their impact on the processes of restoration of physical and spiritual forces of man and predetermines their presence in all branches of recreational activity. Despite this, the importance of water resources necessitates a comprehensive approach to the land management of recreational land use of water protection zones and coastal protective strips, that is the subject of this study.

The purpose of the study is to substantiate methodological approaches to land use planning of recreational land use of water protection zones and coastal protective strips as one of the components of the vital activity of the population of cities and the country as a whole.

Materials and methods of research. The theoretical and methodological basis of the article was the fundamental provisions and principles of economic theory, ecology and economics of land use, domestic scientific works and legislative and regulatory documents related to the issue that is solved in the article. At the same time, the data of the Water Strategy of Kyiv for 2018-2025 became the main information base of the study, as well as legislative and normative legal acts of Ukraine regarding the regulation of land use. Generally accepted research methods were used in order to solve the problem, in particular monographic, abstract-logical, analysis and synthesis.

Results and discussion. The "Water strategy of the city of Kyiv 2018-2025", that also provides for the development of the tourist and recreational industry and is one of the essential supporting activities, was developed in Kyiv with the participation of the author. This and other practical experience allows us to formulate a range of tasks and identify common approaches and techniques to solve existing

problems. The most important work on the spatial planning of land use of the city territory in terms of tourist and recreational component is the preparation of specific solutions and proposals for the most efficient use of available resources and landscapes defined for this purpose.

A list of aspects of the assessment of recreational and tourist potential of territories and settlements is given in the special literature and scientific studies concerning the problems of development of recreational land use is given. The purpose of the assessment is to find and emphasize the characteristic features and attributes that are important in terms of recreational activities and have a direct impact on the planning organization of land use. Territorial components that make up the concept of "landscape" come to the fore. In the context of this study refers to the landscape, only as a space to visit (objects of historical and cultural heritage and natural reserve fund), but also the prospects of using its recreational function: (camping, all types of green tourism).

In scientific research abroad, in Germany, where the processing of spatial planning of recreational land use for decades, the term "cultural landscape" is used to define the object of research [6]. It is a definition of landscape as an established, changed or that is under the man influence and that includes various components: natural components and their complexes, material objects and elements of anthropogenic origin, as well as intangible phenomena, that exist in the perception, traditions and man's memory (Fig. 1).



Fig. 1. Logical and substantive scheme of the "structural components that form land uses of cultural landscapes" concept.

Source: Designed by the author

Thus, the properties of land use assessment of the cultural landscape simultaneously aim to assess the potential recreational environment of this land use. This requires an inventory and identification of not only the ownership of land and other natural resources, but also the special natural and cultural uniqueness of anthropogenic elements. The natural elements include land and water resources, topography, climate, flora and fauna. Anthropogenic elements include settlement network and settlements themselves, engineering and transport infrastructure, historical monuments and material culture. The associative elements are the spiritual heritage – the memory of outstanding historical events, traditions, ethnography, and so on.

Assessment of the attractiveness of land use landscapes for recreational activities in urban conditions should determine the uniqueness of recreational land use in accordance with regional and local specifics and landscape diversity (Fig. 2).



Fig. 2. Logical and substantive process of the methodology for the assessment of the recreational potential of the land use of the respective territory

Source: Designed by the author

The strategic task is to find a special form of balance between the problem of nature protection and rational land and nature management. The formation of recreational land use is carried out in the process of planning of territorial and spatial development, which is divided into sectoral and integrated [7]. Sectoral development is considered in relation to the components of natural complexes, integrated – for landscape land use. In sectoral and integrated, spatial development is defined by a combination of types of goals (conservation, improvement of resources and biodiversity) and types of measures for the use of land, water and other natural

resources and landscape components of the territory (abandonment or zero-use option, extensive and intensive use).

The objectives of sectoral and integrated spatial development are determined by combining nature maps with a functional zoning map. As a result, a development type is established for the land use of the assessed cultural landscape or its component, corresponding to the recommended recreational use regime in the functional land use zone of the water protection zone and the coastal protection strip.

Should be established by using different methodological approaches to assess the recreational potential of land use of the water protection zone and riparian protection strip:

- recreational capacity of land use of the territory – the maximum permissible level of recreational use of the territory, taking into account urban planning and environmental requirements, which is determined by the density index (the ratio of permanent and temporary population to the area of the territory, taken on the basis of normative indicators for different types of territories (1 person per hectare of park territory; one square meter per visitor in the recreational zone of the park; one square meter for an adult or child on the beaches);

- acceptable recreational load – ensuring the sustainability of the natural complex, which is associated with not exceeding loads that cause irreversible environmental changes in natural complexes (people/ha; people/hr/ha people/day/ha);

- decreational digression – disturbance of the natural environment as a result of anthropogenic impact, characterized by land and soil erosion, trampling and destruction of forest litter, grass cover, damage to trees, etc. [2].

Based on the results of the assessment, it is proposed that recreational land use in water protection zones and coastal protection strips with a high potential should include:

- beach areas within coastal protective strips with unique and distinctive landscapes with natural conditions;

- territories with unique and distinctive landscapes with natural conditions (forestlands, heavily dissected uplands with a branching valley-gorge network in the valleys of large, medium-sized and small rivers, etc.);

– areas of nature protection importance with objects of nature reserve fund (nature reserves, biosphere reserves, national nature parks, regional landscape parks and other nature protection areas).

The land use of water protection zones and coastal protection strips with a medium potential for recreational activity includes landscapes that are attractive due to the presence and combination of various natural and anthropogenic elements that bear landscape diversity. These are surfaces with undulating and hilly terrain combined with a well-developed valley-grove network and valleys of small rivers and streams. Also, land use areas of historical and cultural designation on industrial and built-up land.

Land uses of water protection zones and coastal protection strips with low recreational potential include areas with monotonous, visually unattractive landscapes, poorly dissected and flat plains, predominantly occupied by minor isolated woodland and scrub.

For example, let's consider the state of recreational potential in Kyiv, where all favourable conditions for land use of water protection zones and coastal protective strips in recreational activities are formed, which is due to a number of factors:

- rich historical and cultural heritage of the city, cultural and national significance of some rivers (the Dnieper, the Lybid);

- large number of other water bodies with high transport accessibility to them;

- the developed tourist infrastructure: a large number of tour operators and excursion routes, availability of viewing platforms, berths and boats;

 high level of tourist marketing, provides popularization of water objects not only among the inhabitants of Kyiv, but also among the inhabitants of other regions of Ukraine;

- an opportunity to hold international competitions, including water objects;

- development of active tourism on water bodies;

- development of industrial tourism on the basis of canalized rivers, collector systems and other objects of anthropogenic transformation of water bodies;

a large number of objects located in unpopulated areas, promotes the development of ecological tourism (cascade of water bodies on the Koturka, Holosiivski ponds and Orihuvatski ponds, Almazne lake, etc.)

– small water bodies are less popular among foreign tourists and tourists from other regions of Ukraine, which is caused by insufficient popularization of water bodies. In particular, beach tourism on small lakes (Raduha, Verbne, Zaplavne lake, cascade of water bodies on Koturka river) is popular only among Kyiv residents.

The recreational product of recreational activities on small water bodies is also in demand only among Kyiv inhabitants. This situation actualises the development of tourist marketing and popularisation of informative excursions among schoolchildren and students and local residents. In particular, the Kyiv Water Strategy for 2018-2025 provides for a large number of promising ecological projects. A large number of promising eco-trails are envisaged, examples of some of them are given below (Fig. 3):

- "The Magic of Holosievo": Didorivski Lakes Maple Forest Pokrovska Holosiivska Desert – Hrabovyi Forest – Orihuvatske Lake (Fig. 3 A). The purpose of the tour is to get acquainted with the unique landscapes of the Holosiivskyi National Natural Park and aquatic ecosystems of natural landscapes.
- "Nyvky tourist ecological trail": Nyvky reservoir (Fig. 3 B) the source of the Syrets river – the swamp in the basin – the century-old oak tree.

The purpose of the tour is to get acquainted with the natural aquatic ecosystems on the background of urban development.

- "Picturesque places of Pushcha-Vodytsia" the Sapsaiv stav the Karachun pond the Dvirets pond the magic bridge on the Horashchykha pond (Fig. 3 C) Pushcha-Vodytsia park Kapler`s dacha Saint Seraphim of Sarov Church.
- "Picturesque Theophany": Paladynskyi pond the Saint Michael reservoir
 "Holy Lake" (Fig. 3 "D") The Cathedral of St. Pantaleon –
 "Romantic gazebo" "Beauty Alley".



Fig. 3. Prospective ecological routes in Kyiv

However, despite the fact that the range of existing environmental problems of land use of water protection zones and coastal protective strips within the city of Kyiv is extremely broad, their land development requires immediate solutions for further development of recreational land use. First of all, a large number of water bodies in the city differ in origin, status and recreational purpose. Secondly, water bodies have different degrees of anthropogenic load in particular due to location to sources of impact (highways, industrial enterprises, residential areas, etc.) due to lack of established boundaries of water protection zones.

Table 1 provides a list of the most pressing land use and environmental problems.

As the analysis of Table 1 shows, the acute sociological and environmental problems of land use of water bodies in Kyiv include:

- Pollution of the shores and water areas of water bodies by garbage;

- Unauthorized construction and various types of economic activities on the banks of water bodies, without compliance with the requirements of the regime of coastal protective strips;

- The formation by the local population of spontaneous beaches on bodies of water for decorative and technical purposes, where elevated concentrations of pollutants have been detected, etc.

Table 1: Characteristics of acute social and environmental problems of land use

 of water bodies in Kyiv due to the lack of established boundaries of water

 protection zones:

N⁰	Environmental problems	A brief description of the problems	In which bodies of water are traced
1	Pollution of water bodies by wastewater from enterprises, sewage and collector systems by surface runoff	Increasing concentrations of nutrients (nitrites, nitrates, phosphates, ammonium nitrogen), petroleum products, phenols, synthetic surfactants in water;	Most often in the reservoirs of the Opechen system, The Lower Telbin Lake.
2	Accumulation of heavy metals in bottom sediments, higher aquatic vegetation and ichthyofauna	Gradual increase in the concentration of heavy metals in bottom sediments over time, uptake by plants of heavy metals and their further accumulation together with dead residues, secondary pollution by heavy metals;	In water bodies that are located in industrial areas, near major transport routes. (Water bodies of the Opechen system, The Lower Telbin Lake, Darnytskyi meliorative canal, water bodies on Bazhana street).
3	Pollution of the water area and coastal zones with solid domestic waste, organization of unauthorized dumps on the shores of water bodies	Debris contamination of the shores and water areas of water bodies, infiltration of toxic substances into aquifers, dispersal of animals carrying pathogenic bacteria, reducing the aesthetic appeal of hydro-ecosystems;	Shores of technical reservoirs and water bodies on the periphery of Kyiv: Osokorkovskivski reservoir, Almazne Lake, Sovski ponds, etc.
4	Crashes of sewer and collector systems	Pollution of surface and ground water with nutrients, petroleum products, synthetic surfactants in water, etc;	Most often in the right- bank part of Kyiv, where sewage systems are outdated and emergency. (Lugove Lake)
5	Siltation of water bodies	Accumulation of silt particles in the water area of water bodies, an increase in the area of aquatic vegetation, increased water turbidity and deterioration of living conditions of organisms;	In nonflowing reservoirs (on the Koturka River, Holosiivski and Sovski ponds), floodplain lakes (Zhandarka Lake).
6	Non-compliance with the coastal protective strips on the banks of water bodies	Unauthorized construction and carrying out various types of economic activities on the banks of water bodies, without observing the coastal protective strips;	At the reservoirs in the historic part of city and in dacha areas, on the Vygurivski lakes, Blue Lake, Glynka Lake, Vyrlytsia Lake.
7	Backfilling of water	Unauthorized backfilling of a large	Kachyne Lake, Vyrlytsia

N⁰	Environmental problems	A brief description of the problems	In which bodies of water are traced
	bodies for the purpose of construction	area of water bodies with construction debris or rocks for the purpose of building houses;	Lake, Zhandarka Lake, Kovtun Lake etc
8	Sand extraction by hydraulic washing	Extraction of minerals from water reservoirs, formerly sand pits;	Water bodies on the site of the quarries: Osokorivski lakes, Almazne Lake, Zaplavne Lake etc.
9	Organization of spontaneous beaches on bodies of water not intended for recreational activities	The formation of the local population spontaneous beaches on the bodies of water for decorative and technical purposes, where increased concentrations of pollutants have been detected;	Water bodies within industrial zones and residential development: the Opecehen system of reservoirs, Vyrlytsia Lake, Almazne Lake, Zaplavne Lake, Soniachene Lake etc.
10	Unfavorable geomorphological processes on the shores of water bodies	Activation of the processes of abrasion, planar and linear washout, landslides, suffosion on the shores of water bodies under the influence of natural and anthropogenic factors;	The right bank of the Dnieper River, the shore of the Glynka Lake, Sovski ponds, Almazne Lake, he banks of the Lybid River, etc.

Source: Developed by the author with the usage of the source [1].

So, land use planning measures for establishing boundaries of water protection zones and coastal protective strips, as well as territorial restrictions (encumbrances) on the use of land and other natural resources and their impact on the value of land plots that are fully or partially located in zones with special land use conditions are of great importance. According to the Land and Water Code, these also include water protection zones [8; 9]. If restrictions on economic activity are not reflected in the state land cadastre, that is, if restrictions on the use of land and other natural resources exist, but there is no information about them, the possibility of the emergence of various types of damage to land users. Restrictions and encumbrances on the objects of economic activity located in the water protection zone and coastal protection strip of water bodies are an integral part of the implementation of the Water Code of Ukraine, focused on the use of water resources with the condition of preserving their quality and quantity.

It is necessary to allocate functional zones of use and infrastructure for increase of ecological and economic efficiency of land use of water protection zone and coastal protective strip at organics of beaches and water body itself. Functional zoning of recreational land use is important in terms of its ecologization and capitalization. The division is typical:

- active recreation area;

- quiet recreation zone;

- recovery zone, which, for a large-sized body of water, is divided sectorally, and for a small-sized body of water, around it.

Another division is traced parallel to the line of the river bank. Here we should distinguish the first lane, adjacent to the cut of the water and filled with functions that provide for interaction with it, and the second lane - containing associated facilities. Land areas are characterized as accessible and equipped for children, people with disabilities, cyclists, as well as with a permission for animals or not.

Taking this into account, each recreational zone, depending on the nature of the water body and its development, can meet the needs of residents. The following types of development of the coastal protective strip are possible (Table 2):

- reservoir-recreation-communication-recreation;

- reservoir-recreation-communication-nature;
- reservoir-recreation-communication-city;
- reservoir-nature-communication-nature.

Thus, it is necessary to implement for more effective use of the existing potential of the recreational land use of water protection zones and coastal protective strips within the city of Kyiv and its ecologization and capitalization:

- establishment of land use boundaries of water protection zones and coastal protective strips;

 Table 2. Functional land use zones of the coastal protective zone by type of development

Beach "Venice" on Dolobetskyi Island, Kyiv	ПРИРОДА РЕКРЕАЦІЯ	Coastal protective strip for recreation is developed narrowly, the presence of passive recreation on the beach, organized fishing
The Holy Lake" in Theophany, Kyiv	ПРИРОДА	Coastal protective strip for recreation, recreation occurs through point and link elements
Obolonska Naberezhna, Kyiv	МІСТО РЕКРЕАЦІЯ	Coastal protective strip is narrowly developed, the presence of yacht clubs, piers, an emphasis on contemplation
Fountains in the Rusanivskyi Channel, Kyiv	РЕКРЕАЦІЯ РЕКРЕАЦІЯ	Significant areas of coastal protection strip and water protection zone, recreational activities of entertainment and sports, passive recreation on the beach, infrastructure, playgrounds and sports, campsites

Source: Developed by the author with the usage of the source [1].

- assessment of the recreational potential of land use in water protection zones and coastal protective strips according to the proposed procedure; - determination of recreational capacity, permissible recreational load and recreational degradation of land use of water protection zones and coastal protective strips according to existing norms and methodological approaches;

- land use functional zoning of land use of water protection zones and coastal protective strips in the presence of high, medium and low levels of recreational potential;

- establish acute land use and environmental problems within the functional zones that require immediate solutions;

- identify types of recreational land use development of water protection zones and coastal protective strips.

Conclusions and prospects for further research. Established that the need for "inventory" and "identification" in the context of the components of the natural (attractiveness of the landscape, water bodies, climate, flora, fauna, etc.), the presence of cultural heritage (monuments of folk architecture, landmarks, etc.), land management (land improvements, property rights to land and other natural resources) and associative identity (traditions, folklore, ethnography) for the development of recreational land use of water protection zones and coastal protective strips in Kyiv. The result of the assessment of these components should be to determine the recreational capacity of land use of water protection zones and coastal protective strips, which is studied; the number of temporary population (vacationers) allowable recreational loads (people per 1 ha) risks of recreational degradation (land erosion, water pollution, etc.).

As a result of the assessment of recreational resources of land use of water protection zones and coastal protective strips is defined "attractiveness rating" of it for the development of these functions: high – uniqueness of natural and cultural resources; presence of preserved objects of water and forest funds; medium – diversity of landscape; presence of small river networks; individual monuments and ethnographic objects; presence of woodlands; low – monotony of landscape; lack of cultural heritage objects; high specific weight of urban landscapes; high proportion of the urban landscape in the urban environment.

The proposed methodological approaches constitute the content of land use planning and in practice provide the input of differentiation for calculations of recreational capacity of land use of water protection zones and coastal protective strips and accordingly – the adoption of weighted and optimal design decisions on land use development and development of recreational land use of water protection zones and coastal protective strips separately.

Reference

- 1. PLESO (2019). Vodna stratehiia mista Kyieva 2018-2025 rr. [Water strategy of the city of Kyiv 2018-2025.]. Kyiv: KP PLESO.
- Beidyk, O. (2001). Rekreatsiino-turystski resursy Ukrainy: Metodolohiia ta metodyka analizu, terminolohiia, raionuvannia [Recreational and tourist resources of Ukraine: Methodology and methods of analysis, terminology, zoning]. Kyiv: Kyivskyi universytet.
- 3. Peresoliak, V.Iu. Malakhova, S.O. (2013). Osoblyvosti vstanovlennia pryberezhnykh zakhysnykh smuh malykh richok i strumkiv u naselenykh punktakh (na prykladi Zakarpatskoi oblasti) [Features of establishment of offshore defences zonal of the small rivers and brooks are in settlements (on the example of the Zakarpattia region)]. Naukovyi visnyk NLTU Ukrainy. Vyp. 23.18, 67-71.
- Klieshch, A. A., Samoilova, Yu. V. (2019). Development of water protection zones in an UA city: methodical problems and ways of their solution through landscape-ecological planning. Man and Environment. Issues of Neoecology, 31, 26-39. https://doi.org/10.26565/1992-4224-2019-31-03.
- 5. Bohak, L. M., Tymofieiev, M. V. (2007). Do pytannia uporiadkuvannia zabudovy pryberezhnykh terytorii v mezhakh miskykh naselenykh punktiv [To the question of organization of tuning of off shore territories within bounds of city settlements]. Suchasne promyslove ta tsyvilne budivnytstvo, Vol. 1, 47-51.
- Popovych S. (1996). Turystychno-ekskursiini resursy Ukrainy: vstup do problemy [Tourist and excursion resources of Ukraine: introduction to the problem]. Kyiv: Instytut turyzmu federatsii profspilok Ukrainy, pp. 7-15.

- Tretiak, A., Tretiak, V., Priadka, T., Skliar, Yu. and Kapinos, N. (2021), Territorial-spatial planning of land use in Ukraine: conceptual basis in the context of vital activity security. Agrosvit, vol. 15, pp. 3–13.
- 8. Vodnyi kodeks Ukrainy [Water Code of Ukraine]: http://zakon0.rada.gov.ua/laws/show/213/95-vr.
- 9. Zemelnyi kodeks Ukrainy [Land Code of Ukraine]. URL: http://zakon2.rada.gov.ua/laws/show/2874%D0%B0-07.
- 10. PLESO (2019). Vodna stratehiia mista Kyieva 2018-2025 rr. [Water strategy of the city of Kyiv 2018-2025.]. Kyiv: KP PLESO.
- Beidyk, O. (2001). Rekreatsiino-turystski resursy Ukrainy: Metodolohiia ta metodyka analizu, terminolohiia, raionuvannia [Recreational and tourist resources of Ukraine: Methodology and methods of analysis, terminology, zoning]. Kyiv: Kyivskyi universytet.
- 12. Peresoliak, V.Iu. Malakhova, S.O. (2013). Osoblyvosti vstanovlennia pryberezhnykh zakhysnykh smuh malykh richok i strumkiv u naselenykh punktakh (na prykladi Zakarpatskoi oblasti) [Features of establishment of off-shore defences zonal of the small rivers and brooks are in settlements (on the example ofthe Zakarpattia region)]. Naukovyi visnyk NLTU Ukrainy. Vyp. 23.18, 67-71.
- Klieshch, A. A., Samoilova, Yu. V. (2019). Development of water protection zones in an UA city: methodical problems and ways of their solution through landscape-ecological planning. Man and Environment. Issues of Neoecology, 31, 26-39. https://doi.org/10.26565/1992-4224-2019-31-03.
- 14. Bohak, L. M., Tymofieiev, M. V. (2007). Do pytannia uporiadkuvannia zabudovy pryberezhnykh terytorii v mezhakh miskykh naselenykh punktiv [To the question of organization of tuning of off shore territories within bounds of city settlements]. Suchasne promyslove ta tsyvilne budivnytstvo, Vol. 1, 47-51.
- 15. Popovych S. (1996). Turystychno-ekskursiini resursy Ukrainy: vstup do problemy [Tourist and excursion resources of Ukraine: introduction to the problem]. Kyiv: Instytut turyzmu federatsii profspilok Ukrainy, pp. 7-15.
- 16. Tretiak, A., Tretiak, V., Priadka, T., Skliar, Yu. and Kapinos, N. (2021),

Territorial-spatial planning of land use in Ukraine: conceptual basis in the context of vital activity security. Agrosvit, vol. 15, pp. 3–13.

- 17. Vodnyi kodeks Ukrainy [Water Code of Ukraine]: http://zakon0.rada.gov.ua/laws/show/213/95-vr.
- 18. Zemelnyi kodeks Ukrainy [Land Code of Ukraine]. URL: http://zakon2.rada.gov.ua/laws/show/2874%D0%B0-07.

МЕТОДИЧНІ ПІДХОДИ ЗЕМЛЕВПОРЯДНОГО ФОРМУВАННЯ РЕКРЕАЦІЙНОГО ЗЕМЛЕКОРИСТУВАННЯ ВОДООХОРОННИХ ЗОН ТА ПРИБЕРЕЖНИХ ЗАХИСНИХ СМУГ

О. М. Юсипенко, аспірант¹

E-mail: infooleg0170@gmail.com

Державна екологічна академія післядипломної освіти та управління

Анотація. Сьогодні. трансформаційних в умовах перетворень, рекреаційний потенціал водойм використовується лише частково, у зв'язку із пріоритетністю розвитку інших галузей діяльності (оздоровчої). Це при тому, що цінність водних ресурсів полягає в їх задіяні у процесах усіх галузях діяльності. Саме тому, питання землевпорядного формування рекреаційного землекористування водоохоронних зон та прибережних захисних смуг Яке потребує комплексного nidxody. здійснюється через оцінювання рекреаційно-туристичного потенціалу територій та населених пунктів для акцентування характерних особливостей та ознак, що важливі при здійсненні рекреаційної діяльності та мають безпосередній вплив на планувальну організацію землекористування.

Для вирішення поставленої мети та повного розуміння автором схематично наведено поняття «структурні компоненти, що формують землекористування культурних ландшафтів». Встановлено, що в умовах міста, оцінювання привабливості землекористування ландшафтів для рекреаційної діяльності повинно визначати своєрідність рекреаційного землекористування

¹ Науковий керівник – А.М. Третяк, доктор економічних наук, професор, членкореспондент НААН України.

відповідно регіональної та місцевої специфіки до i ландшафтного різноманіття. Висвітлено, що у результаті використання різних методичних підходів до оцінки рекреаційного потенціалу землекористування водоохоронної зони та прибережної захисної смуги повинно бути встановлено: рекреаційну ємність землекористування території; допустиме рекреаційне навантаження; рекреаційну дигресію. Крім того, за результатами оцінки пропонується рекреаційне землекористування територій водоохоронних зон та прибережних захисних смуг поділити за рейтингом популярності, зокрема з високим, середнім та низьким значенням потенціалу. Як приклад розглянуто стан рекреаційного потенціалу у місті Києві та встановлено, що землевпорядне облаштування міста потребує негайного вирішення для подальшого розвитку саме рекреаційного землекористування. Також автором із-за відсутності водоохоронних встановлених меж 30H представлено характеристику найгостріших соціальних та екологічних проблем землекористування водойм міста Києва.

Встановлено, що якщо обмеження у використанні земель та інших природних ресурсів існують, але інформації про них немає, то з'являється ймовірність появи різних видів шкоди для землекористування водоохоронних зон та прибережних смуг. Саме тому, пропонуються виділити функціональні зони землекористування прибережної захисної смуги за типами розвитку, що дозволить більш ефективному використанню наявного потенціалу рекреаційного землекористування водоохоронних зон та прибережних захисних смуг в межах м. Київ і його екологізації та загалом підвищенню капіталізації.

Ключові слова: рекреаційне землекористування, водоохоронні зони, прибережні захисні смуги, функціональні зони.

19

О. М. Юсипенко

Методические подходы землеустроительного формирования рекреационного землепользования водоохранных зон и прибрежных защитных полос

Аннотация. Сегодня, в условиях трансформационных преобразований, рекреационный потенциал водоемов используется лишь частично, в связи с приоритетностью развития других отраслей деятельности (оздоровительной). Это притом, что ценность водных ресурсов задействованы в процессах всех сферах Именно поэтому, вопрос землеустроительного деятельности. формирования рекреационного землепользования водоохранных 30H И прибрежных защитных полос требует комплексного Какое подхода. осуществляется оцениванием рекреационно-туристического потенциала территорий И населенных пунктов для акцентирования характерных особенностей признаков, осуществлении И важны при рекреационной непосредственное деятельности И имеют влияние на планировочную организацию землепользования.

Для решения поставленной цели и полного понимания, автором схематично приведено понятие «структурные компоненты, формирующие землепользования культурных ландшафтов». Установлено, что в условиях привлекательности землепользования ландшафтов города, оценка ЛЛЯ рекреационной деятельности должно определять своеобразие рекреационного землепользования в соответствии с региональной и местной спецификой и ландшафтного разнообразия. Освещено, что в результате использования различных методических подходов к оценке рекреационного потенциала землепользования водоохранной зоны и прибрежной защитной полосы должно быть установлено: рекреационную емкость землепользования территории; допустимая рекреационная нагрузка; рекреационную дигрессия. Кроме того, по результатам оценки предлагается рекреационное землепользования территорий водоохранных зон и прибрежных защитных полос разделить по рейтингу популярности, в частности с высоким, средним и низким значением

20

потенциала. В качестве примера рассмотрено состояние рекреационного потенциала в Киеве и установлено, что землеустроительное обустройство города требует немедленного решения для дальнейшего развития именно рекреационного землепользования. Также автором из-за отсутствия установленных границ водоохранных зон представлена характеристика острых социальных и экологических проблем землепользования водоемов Киева.

Установлено, что если ограничения в использовании земель и других природных ресурсов существуют, но информации о них нет, то появляется вероятность появления различных видов ущерба для землепользования водоохранных зон и прибрежных полос. Именно поэтому, предлагаются выделить функциональные зоны землепользования прибрежной защитной полосы по типам развития, что позволит более эффективному использованию имеющегося потенциала рекреационного землепользования водоохранных зон и прибрежных защитных полос в пределах г. Киев и его экологизации и вообще повышению капитализации.

Ключевые слова: рекреационное землепользования, водоохранные зоны, прибрежные защитные полосы, функциональные зоны.