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Creating Conception of Recreational Areas Development on The Example of Small Urban Settlements

Danila Aleksandrovich Lonshakov, Margarita Viktorovna Perkova,
Andrey Gennadievich Bolshakov and Kseniya Mihailovna Tribuntseva
Belgorod State Technological University Named after V.G. Shukhov,
Str. 46 Kostyukov, 308012 Belgorod, Russia

Abstarct: The problem of preserving natural environment and transition to sustainable development of territories are by far one of the most important problems nowadays. This is a very complex and multifaceted problem that requires consolidation of local, regional and national efforts. To date, the process of urbanization is reflected in the growth of urban population, concentration of population around the cities, towns greater integration and uptake of resources countryside. In Belgorod region as well as in other regions of the country, there is the process of continuously increasing population of large cities but at the same time the number of rural residents are also experiencing growth. Small and medium-sized cities are not degrading, they develop innovative production, build housing, bring up children. We justify the appropriateness of recreational areas development through diversification of nature and introduction of new standard solutions of spatial development. In the framework of recreational land development laid the creation of cultural and educational recreational areas which combine functions of conservation and recreation systems and examined from the standpoint of imperatives of effective socio-economic development.

Key words: Recreational system, urbanization, spatial development, diversification of nature-use, Russia

INTRODUCTION

The main feature of the current phase of resettlement process-urbanization. It is expressed in the growth of urban population, population concentration around cities, greater integration of cities and rural areas the absorption of resources (Perkova and Rodyashina, 2014). In Belgorod region continuously observed the process of city-population increasing but at the same time the number of rural residents is significantly higher than in other regions of the country and it is still growing. The results of today's population distribution processes-new settlements and convert old villages suburbs have and will have a stronger property of inertia. Therefore, early stages of suburbs formation need a deep understanding of these processes, modeling possible urban situation in view of the modern landscape and urban planning knowledge to solve a number of problems. One of such problems is organization of public recreation.

The success of strategy for individual residential development (SGF) depends dominantly on the organization of public recreational space. The study examines, the peculiarities of recreational areas at complex topography on the example of Maisky urban settlement.

To make effective recreation, we need conditions for recreational diversity, accessibility, environmental justification anthropogenic impacts (anthropogenic interference) on the subject of recreation and planning restrictions on development of the territory (Bolshakov, 2010; Bolshakov and Lonshakov, 2014).

THE MAIN PART

Maisky urban settlement is situated 12 km south-west from Belgorod and is located in the dissected relief. Part of the village settlements scattered natural landscape borders beamed with three tracts formed there in pond and river bed. Pond dam formed the bulk. Forest territory in the slope of the beam connects the ponds with projected theme park "Russian Forest".

Because of the natural conditions of these territories they are influenced by erosion and soil erosion. Steep slopes of the pond have a weak ground and susceptible to damage due to soil erosion, blurring some areas offshore. There are also sites with swamps at springs. The settlement has a unique natural resources for urban development organization of recreational area which are essential in view of the current state of the landscape. The

Corresponding Author: Danila Aleksandrovich Lonshakov, Belgorod State Technological University Named after V.G. Shukhov, Str. 46 Kostyukov, 308012 Belgorod, Russia

problem of recreational organization is a complex set of adverse conditions: brokenness relief with a significant percentage of steep slopes. Geodynamic processes at gully and coastal-slope areas and damage caused by them, determine the need for purposeful, systematic control of hazardous geological processes, design and implementation of complex measures of anti-erosion and landslide character.

Maisky settlement the administrative center of Belgorod region, located on the federal highway and is actually a remote part of Belgorod. Conditional settlement can be divided into three urban planning education: the central main part of the village; Agricultural Academy belonging to her dorms, private housing construction sectors, the spatial dependence of the center infrastructure. Modern urban situation is characterized by active growth of individual residential development to the south-west of the pond.

Thus, the pond is located in the center of territorial and should act recreational space for connecting disparate parts of built-up settlements. Acute problem of accessibility of the central infrastructure of the village population SGF. Problems of organization of recreational space is also unfortunate location of utilities and facilities (overhead power line, high-pressure gas distribution station., highway, etc.) (Fig. 1).

Thus, the pond is unfavorable planning conditions. Worsens the situation private individual buildings which comes close to the slopes and can dramatically in the foreseeable future impact on the ecological status of ponds territory. Storm sewage is not organized. As a result, the slope is subjected to aggressive human impact and prone to erosion and destruction.

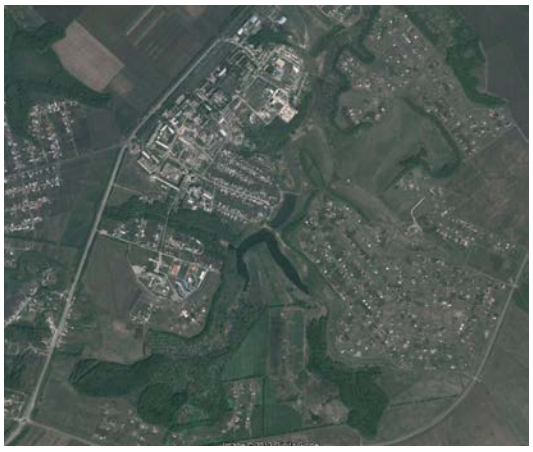

Fig. 1: Situation plan of the projected recreational zone on the basis of gullies and pond landscape of Maisky settlement in Belgorod region

Based on the analysis of urban planning situation and planning restrictions developed two variants of ecological and urban concept development of recreational areas on the basis of gullies and pond landscape urban Maisky settlement: conversion and inertia.

CONVERSION OPTION

Organizes territory of the pond which becomes the central settlement of recreational space (Fig. 2). The basis of conversion is the principle of adaptation planning urban planning organization for recreation landscape conditions.

Based on the analysis of consumer demand, proposed the creation of a unique complex of recreational areas of settlement where the main focus will be a recreational component (recreation, children's beach, fishing) with elements of cultural, historical (park "Russian Forest", chestnut, oak and linden alley) and sports (upper and lower path, ringed ponds) segments (Perkova and Krushelnitskaya, 2014). Externally, it will be a separate recreational minimally urbanized cluster consisting of several functional areas and supporting infrastructure.

Recreational area is proposed to divide into several functional areas:

- Cultural and educational and historical segment: the theme park "Russian Forest"; chestnut, oak and linden alley; theme park in the watershed of the upper and middle of the pond
- The recreational component: coastal recreation area designed primarily for outdoor recreation and fishing (hiking reinforced embankments, walking paths with gravel, children's well-maintained beach with white sand, sports and children's village, pier for boats and catamarans); capital houses with the services of the Russian bath and support infrastructure; sports segment (path, sizhy for fishermen, sports fields, trails for sledding, skiing)
- Transport infrastructure: parking places equipped with 80 seats

Main planning change is the transfer of the road with the top (center) at the bottom of the dam. Town planning premise of the proposed solution:

The integrity of recreational space: Thanks to the allotment of traffic from the geometric center of recreation in the direction tangential achieved a significant increase in recreational properties landscape and reduction of anthropogenic impact. After the construction of a new

Fig. 2: General Plan. Concept. Conversion option (Comp. D. Lonshakov, A.G. Bolshakov, M.V. Perkova)

neighborhood with houses high-rise density of traffic on existing roads can be greatly enhanced, leading to a sharp deterioration in the environmental performance of recreational area.

Delineation of pedestrian and traffic flows, providing a safe environment. In the case of the organization of pedestrian traffic along the existing highway will need expansion of the existing dam (i.e., additional investment funds).

The territory allotted currently granted individual housing is designed as a park zone saturated with recreational area, giving an opportunity for active and passive recreation, educational cultural and educational activities for young people and children. Complete park on the territory of the watershed can be filled with various objects of landscape art and pedestrian access will allow to organize extracurricular activities of students with the withdrawal of children on nature. In general, this area is represented as a children's park which corresponds to the demand and promotes the development of settlements (in sec, may the high birth rate and the administration planned to create an avenue of newborns).

Central (upper) dam is organized as a central recreation area which corresponds to the landscape and the spatial conditions of the area (the geometric center of the settlement and the main pedestrian promenade-axis).

Economic attractiveness for transport also is the possibility of organizing a comfortable cafe on for this site (the image in this case) in place of the existing dam near the bottom of the pit. At this site, the best spatial characteristics (the best value in terms of the proximity of a body of water/proximity to the highway/proximity to the most urban environment and consequently, an increase in demand), among other potential sites.

Organized dense pedestrian network and path around the pond with the Waterfront Revitalization. According to the project the pond is closed at the top and bottom of the ring with downhill paths intervals within 50-200 m. Slopes being forested and terraced diverting edge slope inland from the water's edge. The most visited place the embankments around the ponds. The capacity of the coastal strip in the case of an accomplishment as of village waterfront can reach 300 campers. However, it is provided that the concentration of visitors on the slopes and on the touchline will be minimal compliance.

The maximum degree of protection engineering of existing and projected landscape to reduce the risk of destruction of the ecosystem and recreational space. Consolidation gabions is aimed at long-term operation of a recreational facility provides the ability to widespread arbitrary placement fishing SIW (Yuskevich and Luntz, 1986). Allotted currently granted IHC site on the South-Eastern slope of the upper pool, proposed to organize as tourist and recreational area with a seasonal stay vacationers.

Converter (restructuring existing planning system) approach to recreational space is seen most costly to perform but also the most investment attractive and

environmentally sustainable (Novikov, 1998). Maximum extraction site recreational resources relevant for actively urbanizing environment, emerging suburbs.

INERTIAL VERSION

Based on the identification of functional areas and limitations of nature is organized network of footpaths linking the major functional centers. In areas of active influence on soil slope engineering provides reinforcement. Planning structure remains the same and all project activities have already adjusted to the current situation and seeks to minimize the negative impact on the existing site of the ravine and on the waters of the pond by means of engineering and biological defense landscape. Central (upper) dam continues its functioning as a transit asphalt road linking disparate residential areas (Perkova, 2014). However to ensure the safety of pedestrian flow is proposed to expand the dam to isolate the band walking.

Strategically, important territory for the proper functioning of recreation facilities the divide between the upper and middle pond territory near the bottom of the pond remains allotted granted only 1/3 of the area next to the existing buildings SGF. However, this creates a greater risk to the unstable soils of slopes, creates difficulties in the organization of the network loopback casual pond on top of the brow. In the inertial variant ignores the principle of integrity and recreational space that is forced to take on human impacts are not binding on the transit route.

Cafe with a gravel parking lot adjacent coverage offered to place adjacent to the street opposite the Alexander Nevsky territory organized beach. This requires research and analysis, the structure of the soil slope engineering load calculation and system engineering slope stabilization.

Reduced length of coast-line technological methods that reduce the number of equipped quays and lowers mandatory recreational function of the water walking along the water activities and recreation near the water. Actively apply biological methods to protect slopes and banks (Fig. 3).

In general, the inertial scenario recreational space is the most easy to implement and the least costly to the first short forecast period. However, available at the moment inertia of urban planning development of the territory of the pond is negative and not consistent with the principles of town planning organization of recreation has the highest risk of destruction of the landscape in the foreseeable future (5-15 years).

Reduced recreational potential of the space and recreational functions. Principle short as possible transport accessibility is at odds with the landscape values of the area and is unfounded (Perkova and Krushelnitskaya, 2014). This situation indicates the consumer attitude toward difficult for use lowland areas of the pond while the urban background require careful natural and landscape relationship.

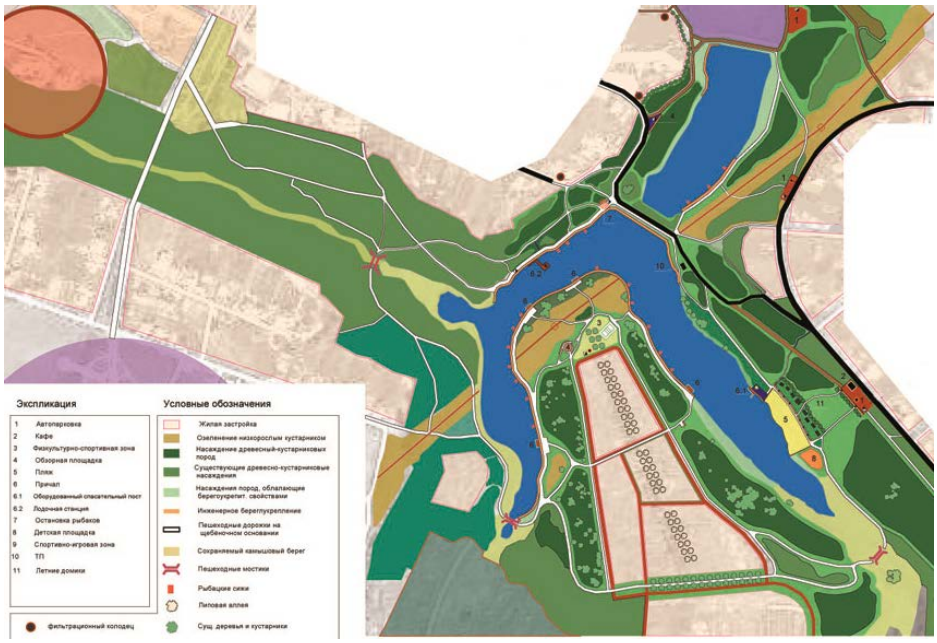

Fig. 3: General Plan. Concept. Inertial version (Comp. D. Lonshakov, A.G. Bolshakov, M.V. Perkova)

DISCUSSION

Thus, formulated principles of landscape planning organization based recreation pond landscape of gullies and the example of Maisky urban settlement.

The principle of urban development planning adaptation to the conditions of the landscape: Town-planning approach is long-term transformative effects on the pond. Required margin flat surface behind the line of the edge of the pond to ensure the safety and in particular its slopes and the provision of recreational opportunities territory terracing. In these conditions, the landscape must be simple, functional zoning of the territory with a number of restrictions on the use of the relief, the delimitation of recreation.

The principle of engineering and planning landscape protection heavily used recreational areas: Planning methods necessary to achieve the minimization of anthropogenic impact on the ecosystem of the landscape. For this recreation area should be to have clear boundaries and natural landscapes that delineate areas of recreation must be continuous and be holistic in nature. Lots of recreation should not coalesce across the landscape. Differentiation of active and passive recreation an indispensable element of the proper functioning of recreational space. Planning methods are used to achieve:

- The integrity of the recreational area, connection of its disparate parts of the natural
- Increase its capacity, including environmental and hygienic due to the increase of green cover, different in composition (from herbs to large trees)
- Careful operation and sufficient communicative properties. Due to planning tools necessary to try the most geographically expand the territory of recreational space, link it to other recreational sites. All this should lead to the result of fixing the object of a certain status park with the organization of the care of his territory

The organizing principle for water protection zone for ponds: The current trend of dynamic changes in the legal instruments in particular reflected in the Water Code of Russia. Required to monitor the relevance of applicable standards for the protection of water bodies in accordance with applicable law. As a solution to this problem may be the organization planning means and means zoning permitted activities reserves and stocks waterproof territory in order to prevent the harmful effects of human activities on water bodies. The minimum width of the coastal shelterbelts should be set depending on the types of land and steep slopes areas adjacent to water bodies. Water protection zone is defined on the basis of physical geographical, soil, hydrological conditions, taking into account the forecast change in the shoreline waters. The establishment of water protection zones is aimed at ensuring the prevention of pollution, contamination, siltation and depletion of water bodies as well as habitat conservation of flora and fauna reservoirs. The ban on construction in the coastal protection zone.

The principle of identifying and defining the boundaries of recreational sites and organizations holistic functional space: The problem of development and use of natural areas for recreational activities the problem of the entire regional settlement system. An integrated approach to the study of architectural design floodplains. Isolation of clear boundaries recreational floodplain Dingle lowlands, providing the legislative acts of the special status and protection regime territory, determine the level and extent of human intervention, tax incentives to potential investors.

The organization of space is achieved by a holistic development of natural recreational areas on the principle of a single integrated system of anthropogenic landscape spatial surfaces (elements of landforms) and volumes (plantation, construction, space pronounced relief). Landscape planning should be based on the urban development planning structure prediction territory. Require continuous monitoring of the state of natural recreational area a survey of state and structure of soils, forests, water bodies.

The principle of integration of natural and anthropogenic landscape in order to maintain and improve the ecological balance of the recreational area: Lowlands often remain long largely untapped due to their inaccessibility. Junk into the territory have strong recreational potential and without any prior environmental protection measures are not prepared to take the load which carries the urbanization. With a low degree of urbanization adjacent environment this valuable dynamic landscape is often used with consumer attitude (capture slopes, communications, unorganized leisure). But with the active urban settlements with the formation of new residential areas watershed near the pond, this area should carry recreational functions for which the organization requires careful approach to the development of the landscape.

The more urbanized environment, the higher the operational load gets hard to reach lowlands. In this case, it requires landshaftosoobraznaya organization.

The principle of rational transformation of the planning structure: Not only the geometrical properties of the existing landscape designer, urban planners suggest how should be organized and developed the area but hydrogeological, soil-plant quality of the landscape. All these qualities mastered environment give background to the definition of core and support functions of the designed space which is especially important to mention the need to meet the recreational needs of the population. Potentially, the greatest ability to have recreational complicated lowland landscapes which often undergo negligent human attitude because of a violation of the principles of urban ecological and recreational spaces ordering.

CONCLUSION

Researchers believe that for sustainable development of the recreational areas of small cities and their suburbs (suburbs) require a comprehensive system of observations on recreational areas assessment and prediction of changes in their status under the influence of natural and anthropogenic factors.

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