



**#GOWITHTHEFLOW**

FREESPACE: 16TH INTERNATIONAL ARCHITECTURE EXHIBITION 2018

# **Project proposal for the Montenegrin pavilion**

# OUR APPROACH TO THE OFFICIAL THEME - FREESPACE

## Understanding the purpose

With the wide range of possibilities to turn to, given by this year's theme 'Freespace' it was a challenge to choose just one side. One idea. One concept.

We came to an understanding that it is important to show how architecture is a lot more than people see on the 'outside'. It is a tool to shape ideas into reality. To work with natural sources, and give people approach to what was before raw nature. It's also a chance to create an environment that supports healthy connection among the society and lets them interact. Share values and grow together in well designed *freespace*.

## Our aim

Given that Montenegro is a true untouched gem, there is a lot to work with - of course, with great consideration not to harm the existing ecosystem. It's a good base for creating spaces that will, hand in hand with nature, last a long time, and serve for years to come. Generations will change, but the purpose will stay the same.

## Concept

Combining the idea of giving a freespace for society to grow culturally together, share values and interact - with the purity and calmness of nature. Using the water resources flow map of Montenegro as a guide and a place of realisations of the concept. Simply - go with the flow.

## Solution

Solution of the project would be represented through the idea of making continuous platforms, situated by the water spots in every chosen point (Piva Lake, Moraca river and Adriatic coast). This way we would infiltrate with nature in a harmless and ecologically acceptable way. These raw voids, now more approachable and easy to use for a big variety of activities can emphasise how the interaction with nature can help reflect a person's connection with his inner self.

## Installation

Through the installation the visitors have a chance to feel all three locations. Each of them represented separately, in order to accent the different virtues they possess. But still having water as the mutual element that connects them, and keeps the 'flow' going.

Starting with the main entrance in the 'Exhibition space A', chosen for the location of Podgorica - we gave visitors a path of the river going between the 3d model of a city segment, that is placed near river Moraca. It is exposed on the floor and continues up the wall vertically. The floor models are made in larger scale, slowly downsizing while going to the wall models.

From this space you can continue to 'Exhibition space B'. There you can find transparent plexiglass info-panels, hanging on strings, circularly arranged through the room. They will serve as a more thorough analysis and explanation for the whole project, for everyone who wants to understand it more deeply. As an introduction to what is waiting behind the next passage, a hint of the following theme is shown in the corners, by using white

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## GO WITH THE FLOW

steel poles, stretched from ceiling to floor.

Coming into the following 'Exhibition space C' is the location of Peninsula Ratac. The forest area is represented in an abstract way, using the previously said poles. The walls are covered with darkened mirrors that combined with the densely arranged poles gives an illusion of depth. At the end of the 'pole forest' you come to sea shore. The water in every room is represented using a wavy (hand 'crushed') foil material on the floor, later covered in transparent plexiglass in order to preserve the foil from constant stepping of feet. The atmosphere is stressed even more with carefully placed lighting.

On the other side, also going from the main 'Exhibition space A', you first come across the small 'Corridor', used to display the catalogs and other advertising goods prepared for the event.

The following 'Office' space showcases the third location: Pluzine, and Piva lake. Again using an abstract approach and simply showing the morphology of chosen terrain of this rural area. Representation of water (in this case lake) is again placed on the floor. The only elements breaking the 'silence' are two traditional chairs, from typical old Montenegrin households, with fishing sticks in front of them - representing the simple life led in these small mountain towns and villages, where people are still in harmony with nature

# ANALYSIS OF THE FIRST POINT:

### Location: Pluzine, Lake Piva

Starting with the north point of Montenegro, Pluzine and the area of Lake Piva are our first choice. Pluzine is a small town, that takes 854m<sup>2</sup> of land, and has a population of 3,286\*. From one side it's embraced with Dormitor, Volujak and Maglic mountains and from the other with the massive canyon Tara ( second deepest in the world ).

Geographically speaking it is made out of three zones: relatively low zone of fields - surrounding the course of Piva river, the high mountain zone East from river Piva and the third, West mountain zone.

The towns' population is mostly situated in the relatively low zones.

The climate of Pluzine is moderately continental with relatively warm summers and cold winters.

The most significant cultural and historical heritage in this area is monastery Piva, built in XVI century. Other than that, there is monastery Zagradje, from XV century and the remains of the medieval church Scepanica.

Speaking about the ecology and the living environment, the quality situation of the air is in the first class quality rank. The towns' biodiversity is very wide. It is estimated that there are over 1,500 species of flora, some of which descent from the far geological history (Ice Age).

Depending on the area, there are a lot of types of ecosystems and habitats. Having elements of the Alps flora and fauna on top of mountains, while the warm air along the canyon and river makes a good zone for the elements of the Mediterranean flora and fauna.

The forests go up to 1,600m of altitude.

Pluzine has a big range of fauna, from which 300 animal species are protected. Mammals that inhabit this area are: bears (*Ursus arctos*), goats (*Rupicapra rupicapra*), wolves (*Canis lupus*), deers, rabbits, wild boars, foxes, etc. The area is also home for around 170 types of birds, among which there are rare kinds, such as: *Tetrao urogallus* L., *Aquila chrysaetos*, falcons, etc.

Lake Piva, other than it's breathtaking beauty, also has an important purpose. It is the biggest natural water 'tank' that originated from the construction of hydroelectric power plant in 1975. It also gives great conditions for calm water sports and fishing. In some spots the depth exceeds 200m, and the length is 45m.

Another gem of this area is River Tara, the longest river in Montenegro, with the length of 158km. As said before, the canyon is taking second place in the world, and first in Europe - for it's depth. For its purity, it earned the name 'Tear of Europe'.

# ANALYSIS OF THE SECOND POINT:

### **Location: Podgorica, Moraca River**

Following the water network, we come to the next point, which is Podgorica, and the area of Moraca River. It is the capital and the largest city of Montenegro. It holds a population of 185,937\*, almost one third of Montenegrin citizens.

Geographically it lays on the biggest plain in Montenegro and rivers: Moraca and Ribnica, while Zeta, Cijevna and Sitnica flow close by. Its central position allows it an easy and quick connection to both sea and the mountains.

The climate is Mediterranean continental. With dry, long and very warm summers, and mild winters, often rainy.

Cultural and historic monuments significant to the heritage of Podgorica are: the clock tower (Sahat-Kula by Adzi-pasa Osmanagic), built in 1667, which is a rare Ottoman landmark left standing after the bombing of Podgorica in WWII; the ruins of Nemanjica Grad; remains of the city Doclea; Stara Varos, Podgorica's oldest neighbourhood.

Looking at ecological side of Podgorica according to NIS ( stands for National Inventory of Forests) 50% of its area is under forest vegetation and forest land.

There are around 2,500 plant species, which represents 70% of Montenegro's flora.

Podgorica is inhabited by 43 different types of mammals and 27 of them are on a list of nationally protected species.

Moraca river, 100km long, is considered one of the main symbols of Podgorica, and its the biggest river that flows through the city.

## ANALYSIS OF THE THIRD POINT:

### **Location: Bar, Peninsula Ratac**

The flowing path through our points ends with Peninsula Ratac, conveniently going into the sea. Ratac as a peninsula represents a prominent part of the coast in the Adriatic sea, which separates Spicanski and Sutomorski bay from the anchorage in Bar.

Geographically, Ratac peninsula is characterized by calcareous rocky coastline, with a height of a few meters, with many pebble beaches distributed mainly on the east side of the peninsula. The sea bottom seems to be by slowly lowering from a rocky bottom to a quite flat soft bottom.

The climate is Mediterranean, and it only varies only in the high mountain regions, influenced by the mountain continental climate. What defines this type of climate are long warm summers and mild winters.

A historical ruin located on the peninsula is a monastery complex, from the XI century (Manastir Bogorodice Ratacke)

Biodiversity of Ratac has a wide variety of fauna and flora. There are many tree types found in the given area, such as: *Pinus halepensis*, *Pinus Pinaster*, *Pinus nigra*, *Prunus*, etc

The sea biosystem covers a big number of species, from which an emphasis should be made on the *Poseidona Oceanica*, a sea weed unique for its age, most probably the oldest living system in the Adriatic sea.

Fauna diversity is also very high, especially for insects. From reptile kinds, there are sea turtles, lizards, etc.

## REALISATION MEETS THE GIVEN BUDGET

Materials	Quantity (m2)	Unit price per m2	Total cost
Transparent plexiglass	18	€ 22	€ 376
Wooden boards (OSB)	3	€ 20	€ 60
Steel poles	350	€ 8	€ 2.800
Mirrors	44	€ 15	€ 660
Foil	16	€ 9	€ 144
Plastic	30	€ 8	€ 240
Wooden chair	1	€ 25	€ 25
Small wooden stool	1	€ 10	€ 10
Fishing sticks	2	€ 50	€ 100
<b>Total</b>			<b>€ 4.415</b>



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FREESPACE: 16TH INTERNATIONAL ARCHITECTURE EXHIBITION 2018

EMERGING RESILIENCE: PROJECT PROPOSAL FOR MONTENEGRIN PAVILION



# CONTENT

ANALYSIS OF WATER RESOURCES IN MONTENEGRO	1
ANALYSIS OF THE POINT 1: PLUZINE   PIVA <b>LAKE</b>	2
ANALYSIS OF THE POINT 2: PODGORICA   MORACA <b>RIVER</b>	3
ANALYSIS OF THE POINT 3: RATAC PENINSULA   ADRIATIC <b>SEA</b>	4
CONCEPT OF AN IDEA	5
PROPOSAL OF INTERVENTION   REVALUATION OF URBAN VOIDS	6
TECHNICAL DRAWINGS OF INSTALLATION IN THE PAVILLION	7
VISUAL PREVIEW OF INSTALLATION IN THE PAVILLION	8

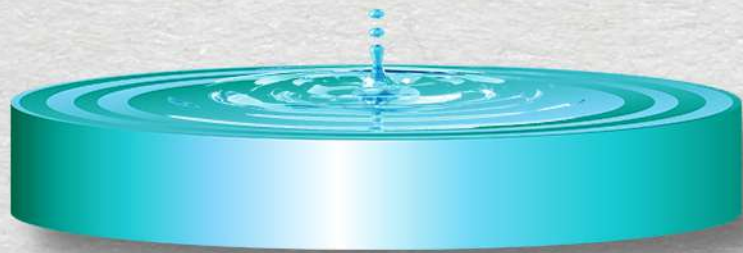
### PIVA LAKE | PLUZINE

PIVA LAKE IS AN ARTIFICIAL LAKE CREATED BY THE CONSTRUCTION OF HYDRO POWER PLANT "PIVA" IN 1975. THE LAKE ITSELF IS DEEP AT SOME PLACES MORE THAN 200 METERS AND 45 KILOMETERS LONG. PIVA LAKE REPRESENTS THE LARGEST RESERVOIR OF FRESH WATER AND IT HAS FANTASTIC CONDITIONS FOR DOING SPORTS ACTIVITIES. IT IS ESPECIALLY ATTRACTIVE FOR FISHING AND SIGHTSEEING RESIDUAL DETAILS OF THE SUBMERGED CANYON OF THE PIVA RIVER.



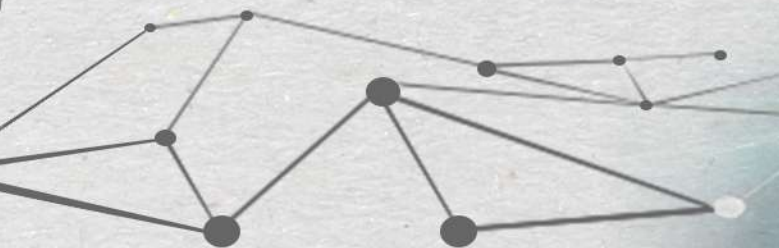
### MORACA RIVER | PODGORICA

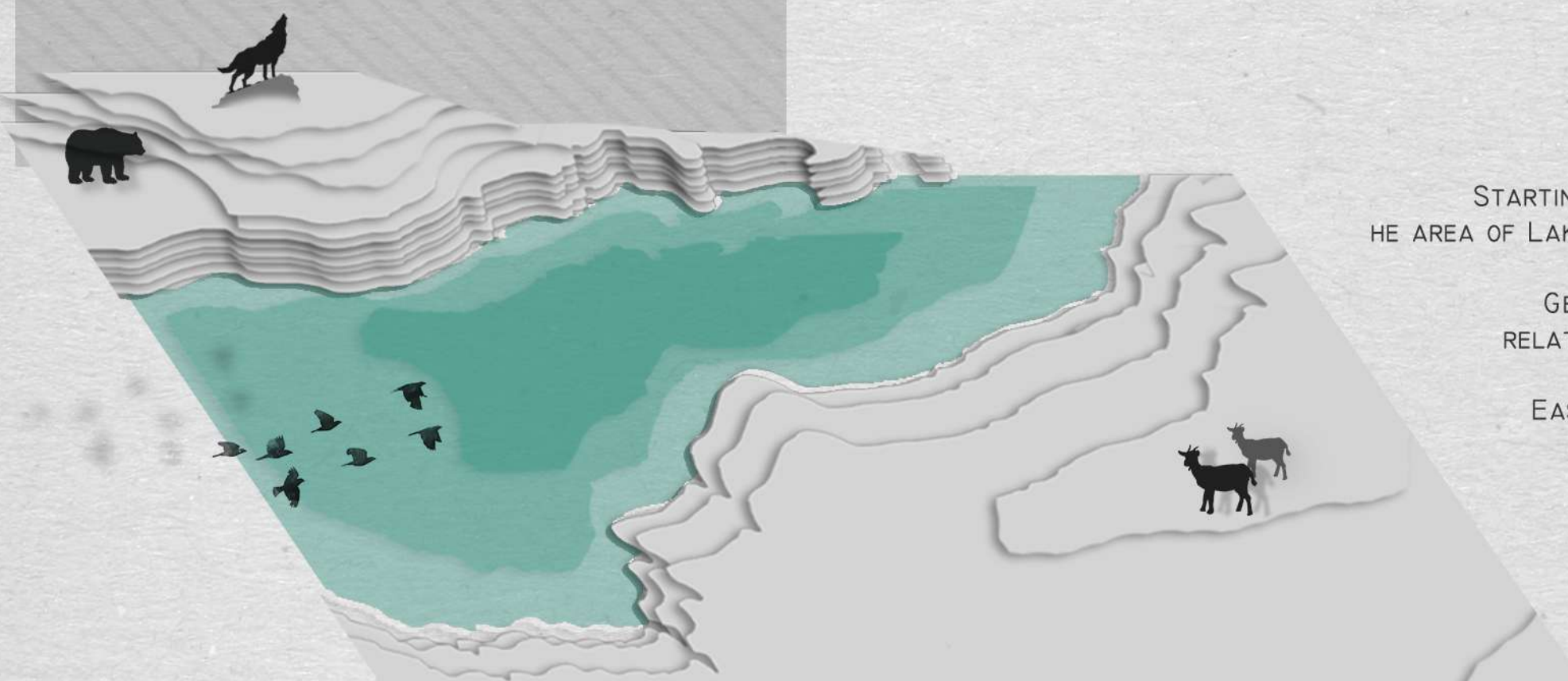
IT ORIGINATES IN NORTHERN MONTENEGRO IT GENERALLY FLOWS SOUTHWARDS FOR SOME 113 KM, BEFORE EMPTYING INTO LAKE SKADAR (NATIONAL PARK). IN ITS NORTHERN PART IS A FAST MOUNTAIN RIVER AND HAS CUT A CANYON NORTH OF PODGORICA. MORACA IS A RELATIVELY SMALL RIVER, RARELY MORE THAN 100M(330 FT)WIDE AND MOSTLY SHALLOW.



### ADRIATIC SEA | RATAC PENINSULA

THE ADRIATIC SEA IS A WARM AND BLUE MEDITERRANEAN SEA. THE SUMMER TEMPERATURES RANGE FROM 23 TO 27°C AND EVEN MORE. THE AREA IS 138 595 KM SQUARE, LENGTH 738 KM, AVERAGE WIDTH 159,3 KM, AVERAGE DEPTH 173 M; BUT ONLY 249KM IS MONTENEGRO'S MAINLAND WITH 11KM OF ALL ISLANDS. RATAC'S NATURAL RESERVE, EXTENDS TO 30 HECTARES, AND INCLUDES A ROCKY AREA UNDER THE FOREST ON THE RATAC PENINSULA, AN UNDISTURBED STEEP ROCKY AND SLIGHTLY LAID STONY COAST WITH NATURAL BEACHES





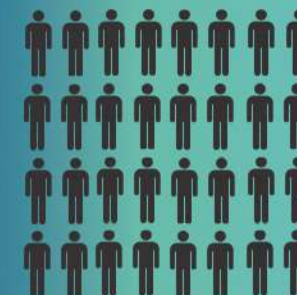
1,500 OF PLANT SPECIES, SOME OF WHICH ARE A PART OF TERTIARY FLORA FROM THE ICE AGE.



300 ANIMAL SPECIES ARE PROTECTED, AMONG THE ONES LIVING IN THIS AREA. THERE ARE AND AROUND 170 TYPES OF BIRDS.

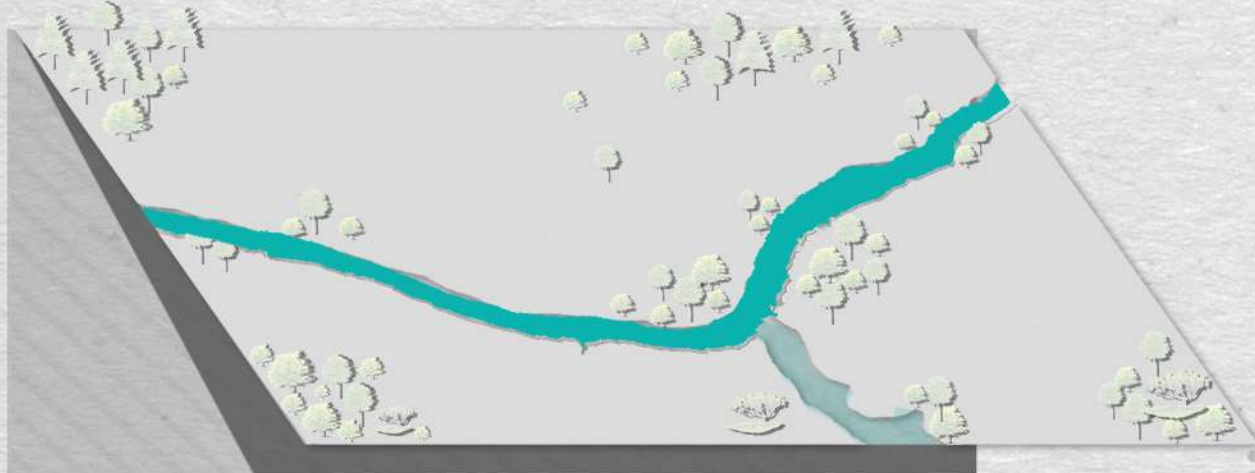


3,286 IS THE TOTAL POPULATION OF THIS SMALL TOWN

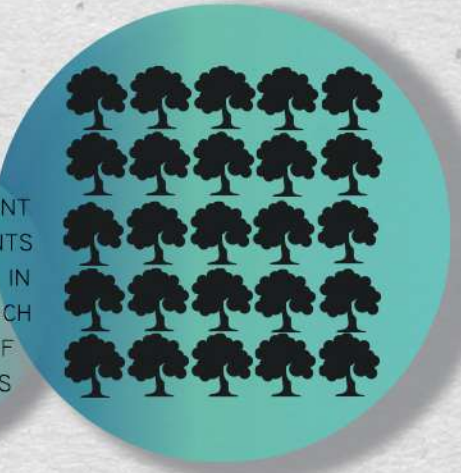


STARTING WITH THE NORTH POINT OF MONTENEGRO, PLUZINE AND THE AREA OF LAKE PIVA ARE OUR FIRST CHOICE. PLUZINE IS A SMALL TOWN, THAT TAKES 854M2.

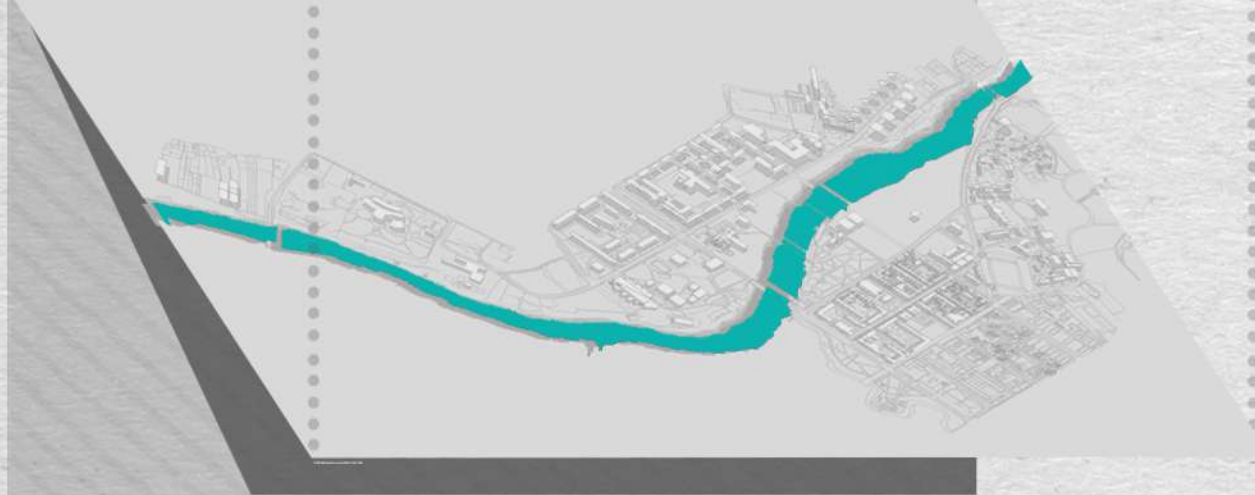
GEOGRAPHICALLY SPEAKING IT IS MADE OUT OF THREE ZONES: RELATIVELY LOW ZONE OF FIELDS - SURROUNDING THE COURSE OF PIVA RIVER, THE HIGH MOUNTAIN ZONE EAST FROM RIVER PIVA AND THE THIRD, WEST MOUNTAIN ZONE. THE TOWNS' POPULATION IS MOSTLY SITUATED IN THE RELATIVELY LOW ZONES. THE CLIMATE OF PLUZINE IS MODERATELY CONTINENTAL WITH RELATIVELY WARM SUMMERS AND COLD WINTERS.



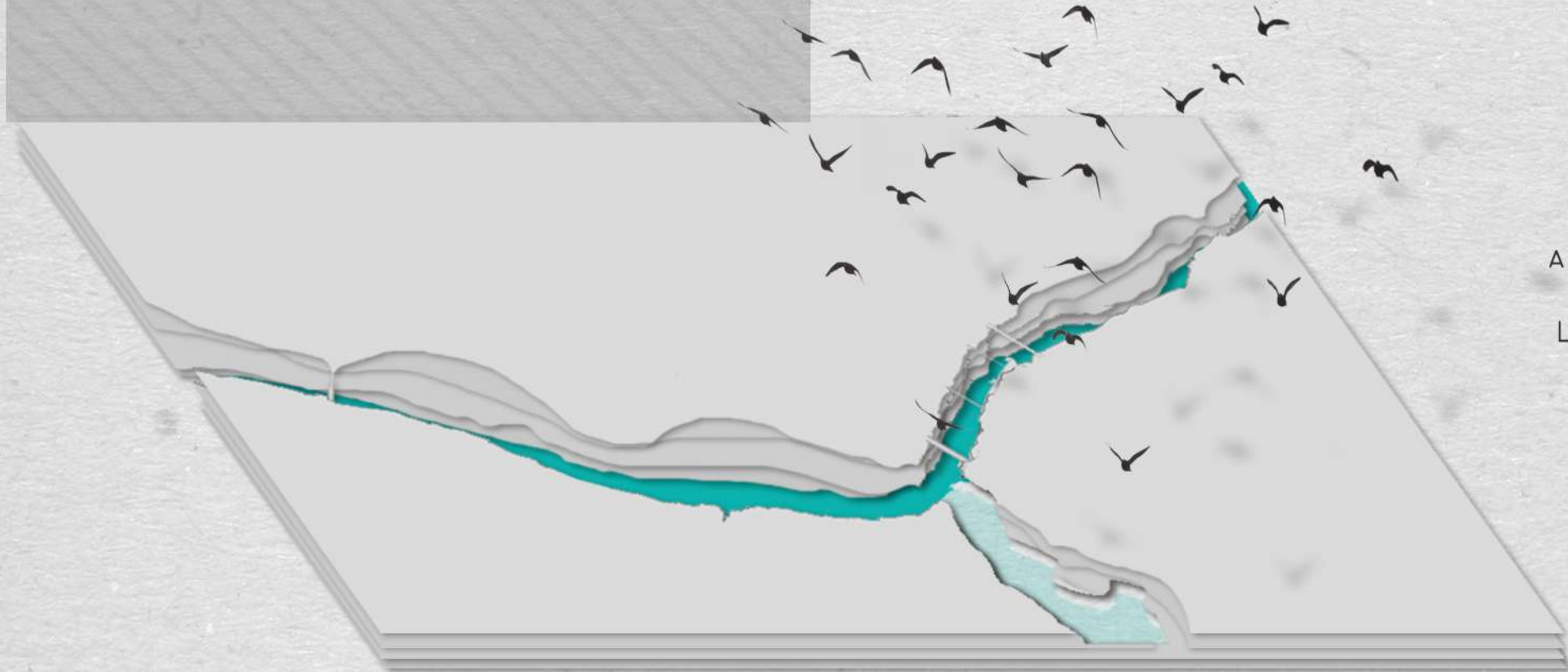
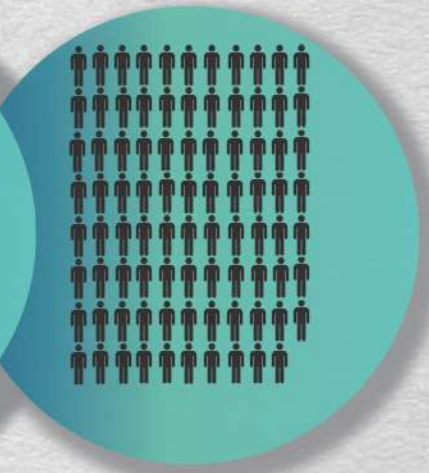
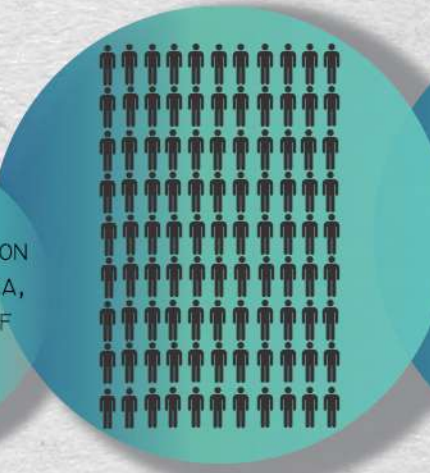
2,500 DIFFERENT TYPES OF PLANTS CAN BE FOUND IN PODGORICA, WHICH MAKES 70% OF MONTENEGRO'S FLORA.



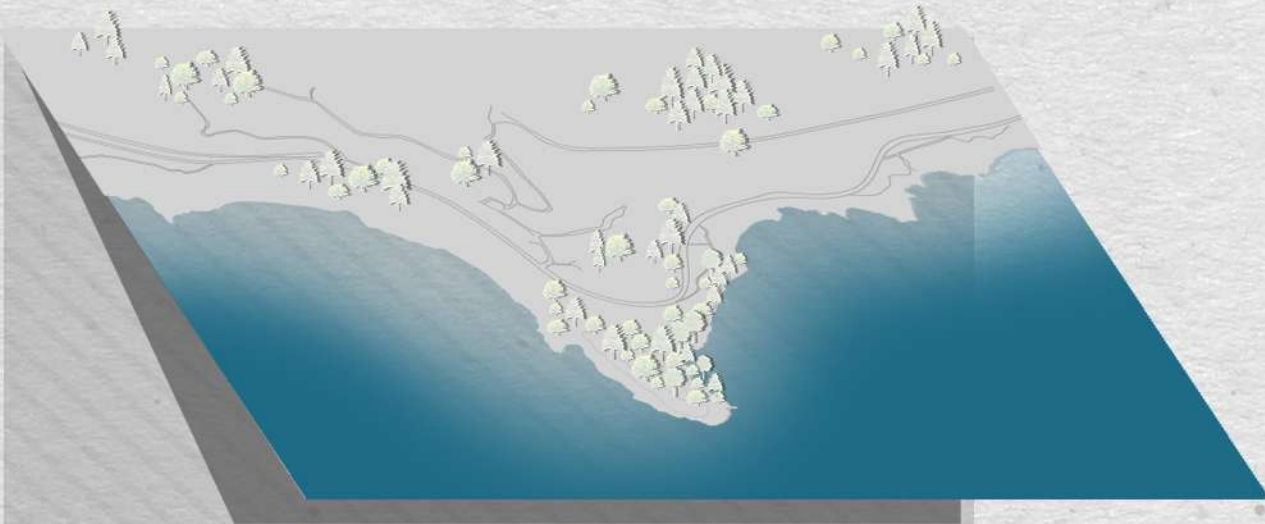
43 TYPES OF MAMMALS INHABIT PODGORICA, FROM WHICH 27 ARE ON AN NATIONAL LIST OF PROTECTED SPECIES.



185,937 IS THE POPULATION THAT PODGORICA, THE CAPITAL OF MONTENEGRO, HOLDS.



FOLLOWING THE WATER NETWORK, WE COME TO THE NEXT POINT, WHICH IS PODGORICA, AND THE AREA OF MORACA RIVER. IT IS THE CAPITAL AND THE LARGEST CITY OF MONTENEGRO. IT HOLDS A POPULATION OF 185,937\*, ALMOST ONE THIRD OF MONTENEGRIN CITIZENS. LOOKING AT ECOLOGICAL SIDE OF PODGORICA ACCORDING TO NIS ( STANDS FOR NATIONAL INVENTORY OF FORESTS) 50% OF ITS AREA IS UNDER FOREST VEGETATION AND FOREST LAND. THERE ARE AROUND 2,500 PLANT SPECIES, WHICH REPRESENTS 70% OF MONTENEGRO'S FLORA.



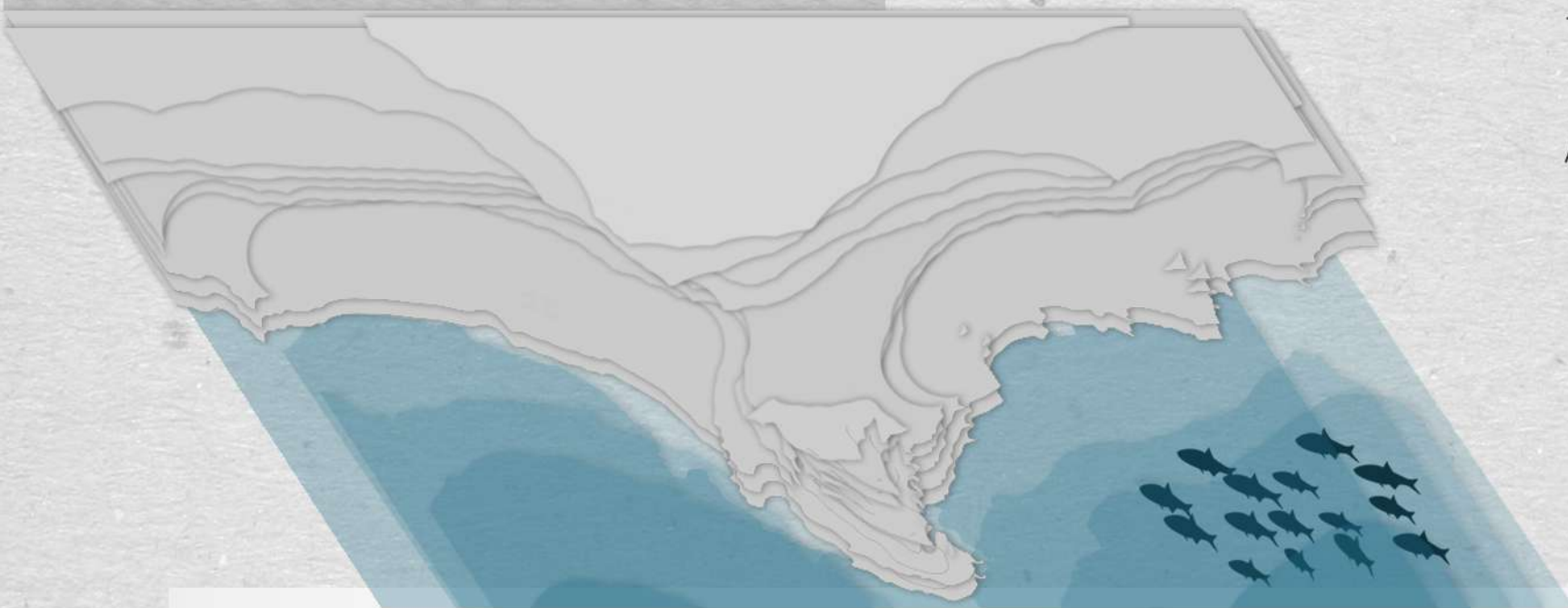
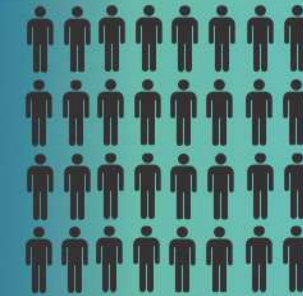
IT HAS A WIDE VARIETY OF FLORA, LIVES THE OLDEST PLANT IN ADRIATIC SEA-POSEIDONA OCEANICA.



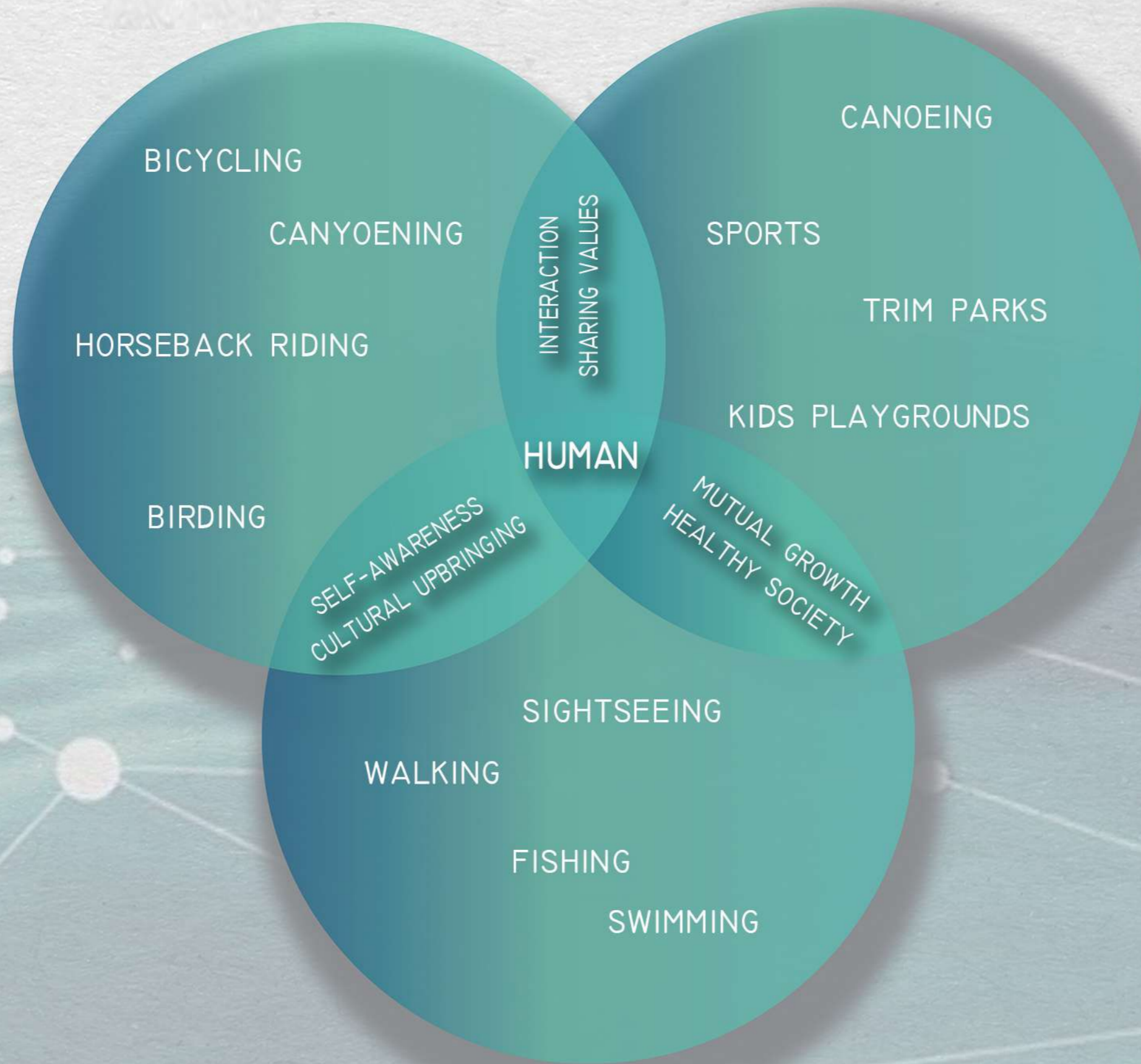
FAUNA DIVERSITY IS ALSO VERY HIGH, ESPECIALLY FOR INSECTS. REPTILE KINDS, THERE ARE SEA TURTLES, LIZARDS,ETC



THIS AREA CONSIST CITIZENS OF COMMUNITY OF BAR, BUT ALSO OF SUTOMORE.



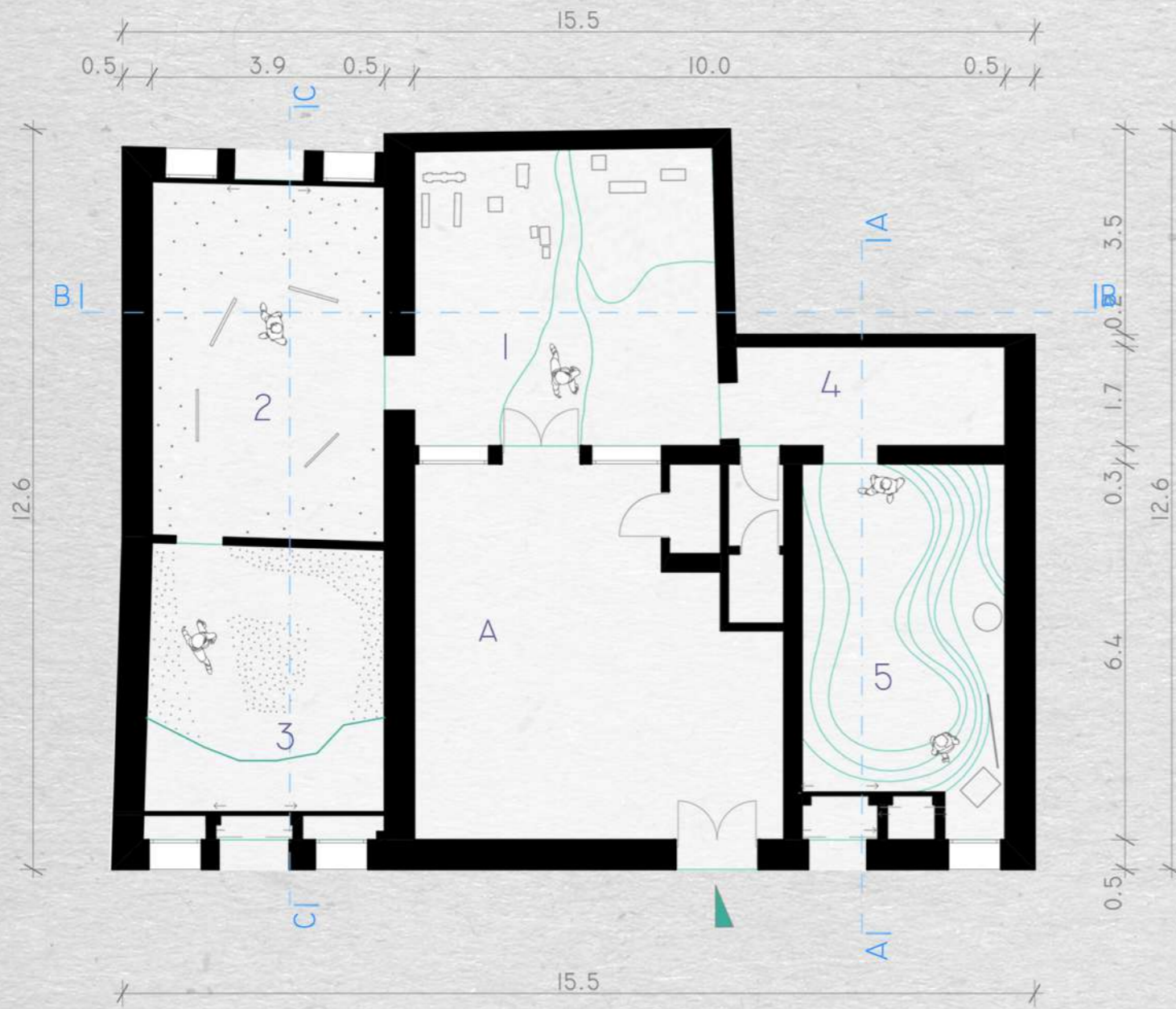
THE FLOWING PATH THROUGH OUR POINTS ENDS WITH PENINSULA RATAĆ CONVENIENTLY GOING INTO THE SEA. RATAĆ AS A PENINSULA REPRESENTS A PROMINENT PART OF THE COAST IN THE ADRIATIC SEA, WHICH SEPARATES SPICANSKI AND SUTOMORSKI BAY FROM THE ANCHORAGE IN BAR. GEOGRAPHICALLY, RATAĆ PENINSULA IS CHARACTERIZED BY CALCAREOUS ROCKY COASTLINE, WITH A HIGHT OF A FEW METERS, WITH MANY PEBBLE BEACHES DISTRIBUTED MAINLY ON THE EAST SIDE OF THE PENINSULA. THE SEA BOTTOM SEEMS TO BE BY SLOWLY LOWERING FROM A ROCKY BOTTOM TO A QUITE FLAT SOFT BOTTOM.



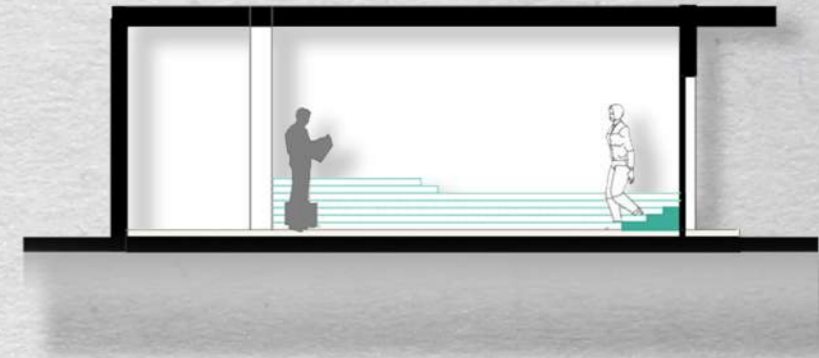


GIVEN THAT MONTENEGRO IS A TRUE UNTOUCHED GEM, THERE IS A LOT TO WORK WITH - OF COURSE, WITH GREAT CONSIDERATION NOT TO HARM THE EXISTING ECOSYSTEM. IT'S A GOOD BASE FOR CREATING SPACES THAT WILL, HAND IN HAND WITH NATURE, LAST A LONG TIME, AND SERVE FOR YEARS TO COME. GENERATIONS WILL CHANGE, BUT THE PURPOSE WILL STAY THE SAME. COMBINING THE IDEA OF GIVING A FREESPACE FOR SOCIETY TO GROW CULTURALLY TOGETHER, SHARE VALUES AND INTERACT - WITH THE PURITY AND CALMNESS OF NATURE. USING THE WATER RESOURCES FLOW MAP OF MONTENEGRO AS A GUIDE AND A PLACE OF REALISATIONS OF THE CONCEPT. SIMPLY - GO WITH THE FLOW.

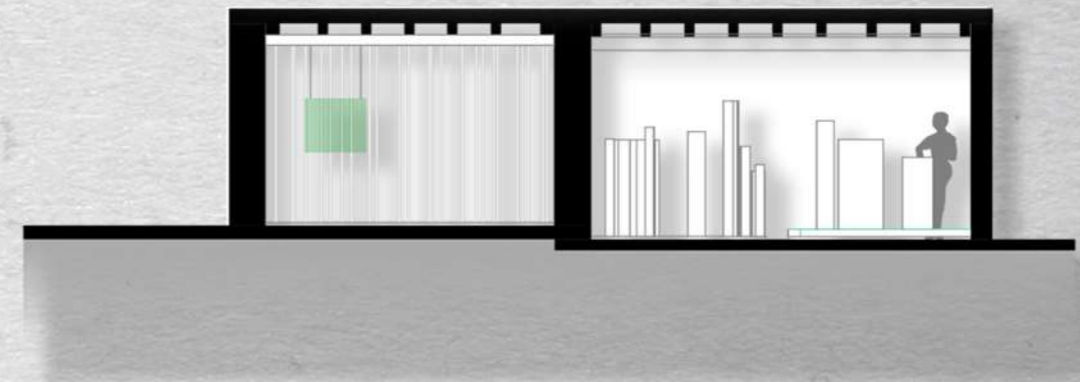
PLAN OF INSTALLATION IN THE PAVILLION



SECTION A-A



SECTION B-B

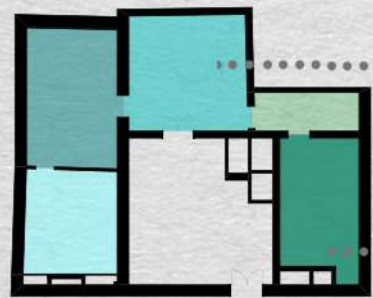


SECTION C-C



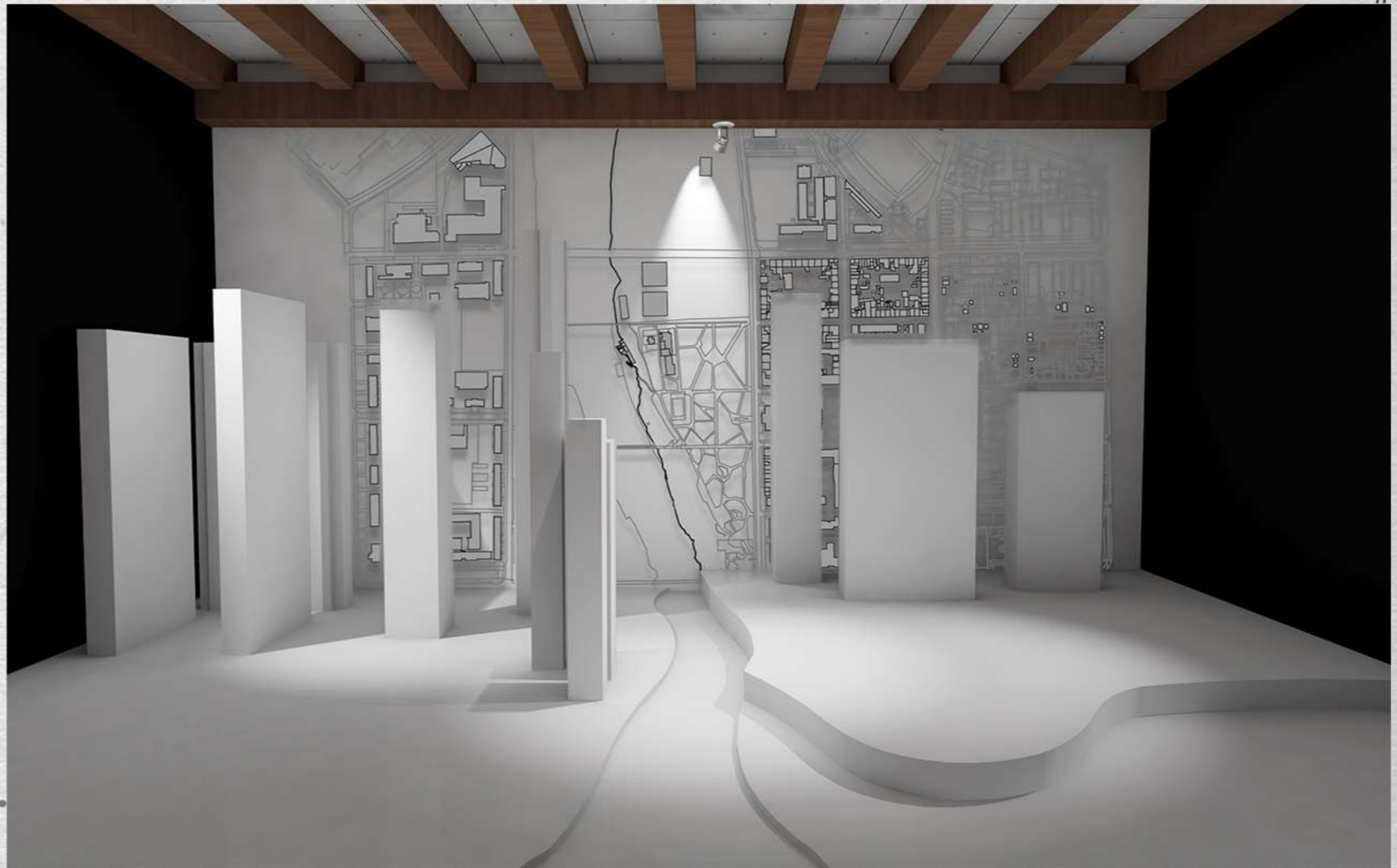
- A | ATRIUM
- 1 | PODGORICA ROOM\_\_RIVER REPRESENTATION
- 2 | INFO ROOM
- 3 | RATAC ROOM\_\_SEA REPRESENTATION
- 4 | ROOM FOR EXHIBITION MATERIAL/CATALOG
- 5 | PLUZINE ROOM\_\_LAKE REPRESENTATION

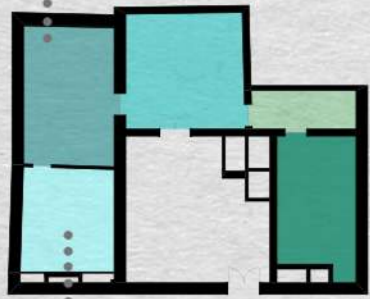




PODGORICA ROOM

PLUZINE ROOM





INFO ROOM

RATAC ROOM

