

## **Environmental Impact Assessment**

and

## **Environmental Management Plan**

20<sup>th</sup> of January 2020

CEPF Grant 108537

**Albanian Ornithological Society** 



Let's Make Divjaka Natural Again

Albania

## Contents

Grant	Summary	3
9.	Status of area to be impacted:	3
10.	Approach:	4
11.	Description of the actions	4
11.1.	Activity 3.3.2. Protection of flagship species through conservation actions	4
11.1.1	. Rehabilitation of reproductive beds for the breeding Dalmatian Pelicans (Pelecanus crispus)	5
11.1.2	. Creation of suitable breeding habitats for nesting Common Tern and Little Tern	6
11.2. signali	Activity 3.3.3. Rehabilitation of nature tourism trails, construction and provision with relevar ng, markings and building of a birdwatching hide	
	Activity 3.6.6. Planting of 200 native saplings of Stone Pine ( <i>Pinus pinea</i> ) in the National Park ean-up actions with students	
11.3.1	. Planting of 200 native saplings of Stone Pine ( <i>Pinus pinea</i> ) in the National Park	9
11.3.2	. Clean up action in Divjaka-Karavasta National Park (in partnership with local authorities and esses)	
12.	Anticipated impact:1	0
13.	Mitigation measures: Describe measures that will be taken to mitigate negative impacts1	2
14.	Actions to ensure health and safety:1	5
14.1.	Health and safety policy1	5
14.2.	Waste management and/or disposal1	6
15.	Monitoring and Evaluation:1	7
16.	Permission of the landowner:2	1
17.	Consultation:	1
18.	Disclosure:	2
19.	Grievance mechanism:2	3
19.1.	Affected persons	3
19.2.	Avoidance and reduction of restrictions2	3
19.3.	Grievance mechanism2	4
	1. Potential environmental impact of the foreseen activities1	
	2. Proposed mitigation measures	
Table :	3. Foreseen monitoring actions1	/
-	1. Reproductive beds before the breeding season	
-	2. Collection, transport and placement of nesting materials in the reproductive beds	
-	3. Little Tern <i>Sternula albifrons</i> and Common Tern <i>Sterna hirundo</i>	
-	4. Scheme of a raft for breeding terns and other waterbird species (Du Feu 1993, BTO)	
Figure	5. Planting of saplings through dibbling method	9

## **Grant Summary**

1.	Grantee organization	Albanian Ornithological Society (AOS)
2.	Grant title	Let's Make Divjaka Natural Again
3.	Grant number	108537
4.	Grant amount (US dollars)	187,000 USD
5.	Proposed dates of grant	01.01.2019 - 30.06.2020
6.	Countries or territories where project will be undertaken	Divjaka-Karavasta National Park, Albania
7.	Summary of the project	The project "Let's Make Divjaka Natural Again!" aims at preserving and protecting biodiversity as a whole in Divjaka-Karavasta National Park by ensuring sustainability in decision-making through the involvement of local communities in conservation actions and by stimulating alternative local livelihood projects in order to reduce pressure on natural resources.
8.	Date of preparation of this document	15.10.2019

## 9. Status of area to be impacted:

The wetland complex of Divjaka-Karavasta is the epicenter of biodiversity of Albania with a high variety of species and habitats. This site is inhabited by more than 73% of the vertebrates present in Albania. Among them there are 262 bird species, the highest ever figure recorded in a single site in Albania, 8 species of amphibians and 24 reptiles, over 35 mammal species and more than 120 fish species. The site is also rich in invertebrates with at least 1000 species of insects present in the area.

The wetland complex is composed by different types of habitats including sea waters, fresh water reservoirs, brackish lagoons, salt marshes, rivers, sand dunes, arable land, hills covered by orchards and oak forests, riparian forests and Mediterranean Pine Forests.

Divjaka-Karavasta or the <u>National Park of Divjaka-Karavasta</u> is a designated <u>Ramsar Site</u>, <u>Important</u> <u>Bird and Plant Area</u>, <u>Key Biodiversity Area</u>, <u>Officially Nominated Candidate Emerald Site</u> and a Natura 2000 Pilot Site . All the above designations are based on its outstanding biodiversity values and particularly its crucial importance for migrating, wintering and nesting birds.

The network of wetlands of Divjaka-Karavasta is home to up to 84 thousand wintering waterbirds, circa 12 thousand breeding pairs of birds and many more migrating waterbirds. Based on the above, Divjaka-Karavasta is one of the most Important Bird Areas in the Adriatic coast and the major site for birds in Southern Balkans Corridor.

Divjaka forest, the area where the projects foresee planting of pine trees, is located in the northwest of the lagoon. It is based on the old sand dunes system called "sope" by the locals, and its appearance is in the form of parallel forest belts in the north-south direction, bounded east and west by waterways or "struga" filled with salty, brackish and fresh water.

The forest consists mainly of coniferous trees such of *Pinus halepensis* and *Pinus pinea*. while broadleaved trees such as *Ulmus sp., Fraxinus angustifolius, Quercus sp., Alnus glutinosa* etc are rare (Demiri 1962).

The down floor of shrubs is highly developed in those part of the forwst where coniferous trees do not appear with conjoined crowns/umbrella thus allowing light to enter and affecting thus positively the development of bushes of the Mediterranean character such as *Rosa sp., Cercis siliquastrum, Juniperus oxycedrus, Rubus fruticosus, Myrtus communis, Erica napuliflora, Cornus sanguinea* etc. The edges of the forest, where salinity is higher, note also the presence of dense formations of *Tamarix parviflora* (Demiri 1962).

Special interest in this formation present the endemic species of *Orchis albanica Goelz & Reinhard* as well as a hybrid form *Orchis x paparisti*.

## 10. Approach:

In order to meet the objective of the proposed project adequate and balanced actions are foreseen. These actions will be undertaken in the project area are likely to have some impacts into the environment. The activities/actions with possible environmental implications are:

- a. Activity 3.3.2. Protection of flagship species through conservation actions involving as much as possible the local stakeholders through setting up a team, with members from local community that will deal with the conservation actions or act as environment rangers.
- b. Activity 3.3.3. Rehabilitation of nature tourism trails, construction and provision with relevant signaling, markings and building of a birdwatching hide.
- c. Activity 3.6.6. Planting of 200 native saplings of Stone Pine (*Pinus pinea*) in the National Park and clean-up actions with students.

## 11. Description of the actions

### 11.1. Activity 3.3.2. Protection of flagship species through conservation actions

The Dalmatian Pelican is the flagship species of Divjaka-Karavasta National Park. The site holds 3-5 % of the regional population of the Dalmatian Pelican present in Black Sea and Mediterranean.

The number of breeding pairs has increased during the last 15-20 years to reach the number of 68 breeding pairs (bp) in 20019 compared with 19 bp in 2003. The last years 2014-2019 have been rather prolific with the colony increasing from 33 bp in 2013 to 68 bp in 2019. The increase is

strongly related to several conservation measures undertaken with more efficiency during the last 5-6 years. The conservation measures include:

- night controls of the Pelicans' Island aiming to increase breeding success by preventing human disturbance and intruders in the Pelicans' island *and*
- rehabilitation of reproductive beds aiming to increase breeding success by prevent flooding of the Pelicans colony
- creation of suitable breeding habitats for nesting Common Tern and Little Tern

While the social impact concerns of night control with regards to restriction of fishing rights has been covered in the Process Framework, the last two foreseen interventions could result in potential environmental impact. Such concerns will be analyzed below.

The above will help in involving as much as possible the local stakeholders through setting up a team, with members from local community that will deal with the conservation actions or act as environment rangers.

## **11.1.1.** Rehabilitation of reproductive beds for the breeding Dalmatian Pelicans (*Pelecanus crispus*)

Reproductive beds are breeding platforms built in the Pelicans' island in order to avoid flooding of the breeding colony and saving thus both embryos and chicks from drowning (Fig. 1). The use of reproductive beds has started, in an organized way, since 2014 when flooding events became numerous and were limiting the breeding success of the Pelicans' colony.



Figure 1. Reproductive beds before the breeding season

Reproductive beds are nesting platforms built through branches and twigs of fallen pine trees that are cleared by the Administration of protected areas when blocking access roads for tourism and anti-fire interventions.

Since 2014, the rehabilitation of reproductive beds takes place before the start of the pelicans breeding season. i.e. in December-January of each year. The rehabilitation itself considers some necessary operations with possible environmental impacts such as:

- Collection of fallen Pine tree branches and twigs and dead halophytic vegetation
- Transportation towards the Pelicans' Island
- Placing of branches and twigs and dead halophytic vegetation in the existing breeding platforms (Fig. 2)



Figure 2. Collection, transport and placement of nesting materials in the reproductive beds

## 11.1.2. Creation of suitable breeding habitats for nesting Common Tern and Little Tern

Both species, the Common Tern (*Sterna hirundo*) and Little Tern (*Sternula albifrons*) prefer nesting on islands covered with sand, mud and shell debris and with sparse halophytic vegetation as well as sandy bars (Fig. 3).

Both habitats are present at the Natural Park but during the last 20 years the fragile islands of Karavasta lagoon have become the only reliable nesting place for colonially nesting terns as the other suitable habitats, the sandy bars separating the lagoons from the sea, are very often subject of intense human disturbance or predation from feral dogs, cats and rats.



Figure 3. Little Tern Sternula albifrons and Common Tern Sterna hirundo

On the other hand, sandy islands, suitable for nesting of Terns have disappeared because of erosion and see level rise due to global climate change. As a result of the lack of habitat availability, the number of colonially breeding Little Terns has been reduced now to 60-90 breeding pairs from 250-440 in year 2000 (Bino *pers. comm*).

Interventions undertaken in the past have proven to be successful in maintaining and even increasing the number of colonially breeding Little Terns and Common Terns. The creation of sandy beaches at lagoon islands has provided suitable breeding grounds for nesting birds as they have resolved temporarily both the requirements for the nesting grounds as well as the requirement for reduced human disturbance or predation.

For the future we plan two actions for enhancing the breeding grounds of Little Tern and Common Tern: (i) Rehabilitation of sandy beaches in islands in Karavasta lagoon and (ii) Construction of breeding rafts in Karavasta lagoon.

## (i) <u>Rehabilitation of sandy beaches in islands in Karavasta lagoon</u>

The rehabilitation process will be preceded by the selection of the lagoon isles that are most suitable for nesting of Terns and at the same time ensure the control of potential environmental impacts. This isles to be selected should fulfill the following criteria:

- Reasonable distance from land to avoid terrestrial predators and limit the human disturbance;
- Vicinity to the Pelicans' island to profit from the wardening activity and reduce thus human disturbance;
- Continuous presence of nesting terns in order to make the isles more attractive to terns,
- Presence of limited sandy beaches in order to increase the size of those sandy beaches and
- Limited coverage of the isles by halophytic vegetation.

After the selection, the rehabilitation process will continue with the following necessary operations:

- Collection of a mixture of sand, clay and shell debris
- Transportation to a predefined island
- Placement of the mixtures

## (ii) <u>Construction of breeding rafts in Karavasta lagoon.</u>

This would require some necessary operations with possible environmental impacts such as:

Raft construction including construction of frame, platform, floats and fittings, adding of soil/gravel/ballast until the raft floats at the correct level (Fig. 4) and Anchoring.

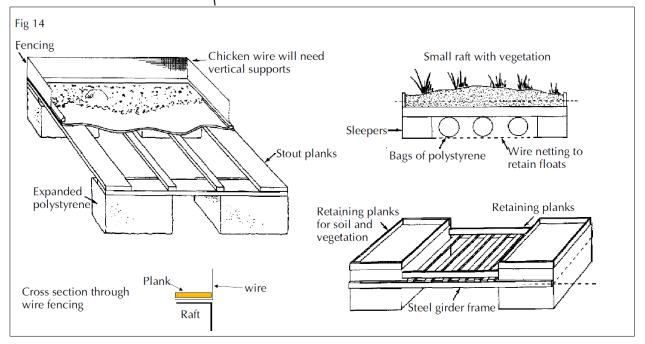


Figure 4. Scheme of a raft for breeding terns and other waterbird species (Du Feu 1993, BTO)

## **11.2.** Activity **3.3.3.** Rehabilitation of nature tourism trails, construction and provision with relevant signaling, markings and building of a birdwatching hide.

The number of tourist in the area of Divjaka Municipality is increasing every year. The estimations for 2019 were circa half a million of tourist compared with circa 350,000 in 2014. The number of foreign tourist has also increased with 55,000 in 2019 from 1,500 in 2014.

The majority of tourists are local beach tourist that come to the area for using the beach facilities managed by private owners as well as the beach line managed by Divjaka Municipality. Nevertheless, a number of tourist are also using the facilities of the National Park Divjaka-Karavasta. This number has steadily increased in the last years reaching 4,500 in 2018. The bulk of this latter group is composed mostly by foreign tourists who spend in average a day or two in the park.

Despite the increasing number of tourist, the park facilities for nature oriented recreation activities are rather limited. The Regional Agency for Protected Areas, NGOs and private entities have built, in recent years, five observation towers that are used for birdwatching purposes.

Nevertheless, access to these observation towers is not well demonstrated and most of the time those facilities are not used by tourist. Furthermore, only one of the observation towers could be consider as birdwatching hide. The rest is quite distanced from water bodies limiting thus the potential for watching birds from a close distance. As a result, the hides are not used by wildlife photographers or bird amateurs. The above is hampering the Park abilities to increase the number of highly specialized and elite tourism activities.

In order to enhance the Park potentials for birdwatching tourism, we have proposed the rehabilitation and construction of five birdwatching trails facilities, provision of them with relevant signaling and marking and finally the building of a birdwatching hide in Godulla e Vogel.

The above would require some necessary operations with possible environmental impacts such as:

- a. Clean-up of tourism trails
- b. Building of a bridge for reaching the hide in Godulla e vogel
- c. Marking of the 5 trails with relevant signaling and marking
- d. Construction of a birdwatching hide in Godulla e Vogel

## **11.3.** Activity **3.6.6.** Planting of **200** native saplings of Stone Pine (*Pinus pinea*) in the National Park and clean-up actions with students.

## 11.3.1. Planting of 200 native saplings of Stone Pine (Pinus pinea) in the National Park

The stone pine (*Pinus pinea* L.) is a medium-sized tree with an umbrella-shaped, large and flat crown, scattered around the Mediterranean basin, mainly in coastal areas, and particularly abundant in south Western Europe. It thrives in dry weather, strong direct sunlight and high temperatures, tolerating light-shaded conditions at the early stages of its growth. It prefers acidic, siliceous soils but also tolerates calcareous ones (Viňas *et al.* 2016).

The stone pine is also present in Divjaka-Karavasta National Park (Demiri 1962) and it gives to the park its characteristic of umbrella like physiognomy. The species is widespread throughout the Park but mostly concentrated in the Pine Forest at the core area of the Park. Nevertheless, a high number of the old pine growths has fallen down during the last years due to strong sea winds. This has left parts of the forest pine barren from trees.

Therefore, the park authorities have engaged during the last years in afforestation activities. Nevertheless, such afforestation efforts have not been sufficient and the Park Authorities have approached NGOs for afforestation support activities. In support to the Park Authorities, we have proposed the implementation of the Activity 3.6.6. which foresees the planting of 200 native saplings of Stone Pine (*Pinus pinea*) in the National Park.

The activity foresees some necessary operations with possible environmental impacts such as:

- Selection together with the park Authorities of the best available area for planting
- Proposal of the planting scheme. Most likely the planting scheme will irregular depending on habitat availability
- Transportation of sapplings
- Planting of 200 saplings of 2 years old (20-30 cm above ground) through dibbling method in a surface of 1500 m<sup>2</sup>.

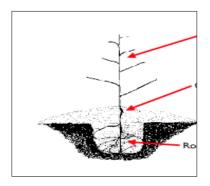


Figure 5. Planting of saplings through dibbling method



- Planting activity will involve local school kids as well as junior rangers, a group of kids attached to the park and deeply involved in conservation activities.

## **11.3.2.** Clean up action in Divjaka-Karavasta National Park (in partnership with local authorities and businesses)

Two clean up actions will be undertaken in the project area along the tourism trails. Such actions will be organized with the participation of the local stakeholders, such as schools, local governing institutions and the National Association of Waste Recyclers. They will provide the necessary equipment and logistic for the waste cleanup and final disposal.

Recyclable waste streams will be used from the recycling industry meanwhile other fractions will be safely disposed at the municipality landfill.

Necessary operations with possible environmental impacts include:

- Access in the waste clean-up areas;
- Collection and transport of the waste out of the project area;

In addition, the implementation team will consider potential Health and Safety impacts that might result from the clean-up activity such as potential hazardous waste presence and contamination. The related risk and mitigation measures are covered in section 14.1. Health and safety policy.

### **12.** Anticipated impact:

The above proposed activities and sub-activities are likely to provide only minor environmental impacts. Nevertheless, the impacts are foreseen to be short term and will not bring any remaining adverse effect into habitats and the ecosystem of the project area. Potential environmental impacts in each action are explained below.

	Proposed action	Environmental Implications	Environmental impacts	Comments
1	Rehabilitation of reproductive beds for the breeding Dalmatian Pelicans ( <i>Pelecanus crispus</i> )	<ul> <li>Collection of fallen branches and twigs;</li> <li>Transport (vehicles and engine boats) to the transfer point and the Pelicans Island.</li> </ul>	<ul> <li>Temporary environmental perturbation due to the collection of fallen branches and twigs;</li> <li>Temporary noises, gases and liquid fuel from the vehicles and engine boats;</li> <li>Temporary disturbance of the species during the</li> </ul>	Minor/short -term impacts

Table 1.	Potential	environmental	impact	of the	foreseen	activities
TUDIC I.	- I Otentiai	Chivitoninchicultur	mpace		101CSCCII	activities

		FARTNERSHIFTOND		
			operations.	
2	Creation of suitable breeding habitats for nesting Common Tern and Little Tern	<ul> <li>Collection of a mixture of sand, clay and shell debris;</li> <li>Potential contamination of the sand;</li> <li>Transport (vehicles and engine boats) to a predefined island;</li> <li>Placement of the mixture;</li> <li>Potential damage of halophytic vegetation</li> <li>Raft construction;</li> <li>Anchoring.</li> </ul>	<ul> <li>Temporary environmental perturbation due to the collection of sand, clay and shell debris;</li> <li>Temporary noises, gases and liquid fuel from the vehicles and engine boats;</li> <li>Temporary disturbance of the species during the operations;</li> <li>Temporary coverage of halophytic vegetation with sand and shell debris.</li> </ul>	Minor/short -term impacts
3	Rehabilitation of nature tourism trails, construction and provision with relevant signaling, markings and building of a birdwatching hide	<ul> <li>Clean-up of tourism trails;</li> <li>Transportation of materials (vehicles);</li> <li>Building of a bridge for reaching the hide in Godulla e vogel;</li> <li>Marking of the 5 trails with relevant signaling and marking;</li> <li>Construction of a birdwatching hide in Godulla e Vogel.</li> </ul>	<ul> <li>Cutting of shrub trees branches to open the trails corridor;</li> <li>Temporary noises, and gases from the vehicles;</li> <li>Temporary disturbance of the species during the operations.</li> </ul>	Minor/short - term impacts
4	Planting of 200 native saplings of Stone Pine ( <i>Pinus</i> <i>pinea</i> ) in the National Park	<ul> <li>Transportation of saplings;</li> <li>Planting of 200 saplings.</li> </ul>	<ul> <li>Temporary noises, and gases from the vehicles;</li> <li>Temporary disturbance of the species during the operations.</li> </ul>	Minor/short - term impacts
5	Clean up action in Divjaka- Karavasta National Park	<ul> <li>Access in the waste cleanup areas;</li> <li>Collection and transport of the waste out of the project area;</li> <li>Potential presence of hazardous waste.</li> </ul>	<ul> <li>Temporary human disturbance of species during the clean-up activities;</li> <li>Temporary noises and gases from the vehicles.</li> </ul>	Minor/short - term impacts

The above actions are in line with the project area protection status and complement with it.



13. <u>Mitigation measures</u>: Describe measures that will be taken to mitigate negative impacts.

## Table 2. Proposed mitigation measures

	Proposed action	Environmental implications	Environmental impacts	Proposed mitigation measures	Responsibility	Costs of mitigations (in US\$)
1	Rehabilitation of reproductive beds for the breeding Dalmatian Pelicans ( <i>Pelecanus</i> <i>crispus</i> )	<ul> <li>Collection of fallen branches and twigs;</li> <li>Transport (vehicles and engine boats) to the transfer point and the Pelicans Island.</li> </ul>	<ul> <li>Temporary environmental perturbation due to the collection of fallen branches and twigs;</li> <li>Temporary noises, gases and liquid fuel from the vehicles and engine boats;</li> <li>Temporary disturbance of the species during the operations.</li> </ul>	<ul> <li>Transport to be undertaken by relatively small engines and new transport vehicles;</li> <li>Water transport to be undertaken by boat without engines or relatively small engines;</li> <li>Potential disturbance reduced by undertaking activities in those months that the lagoon, the isles and the Pelicans' island is not extensively used by birds;</li> <li>Better planning of the transport within the protected area.</li> </ul>	Project developer organization Regional Administration for Protected Areas	No costs
2	Creation of suitable breeding habitats for nesting Common Tern and Little Tern	<ul> <li>Collection of a mixture of sand, clay and shell debris;</li> <li>Potential contamination of the sand;</li> <li>Transport (vehicles and engine boats) to a predefined island;</li> </ul>	<ul> <li>Temporary environmental perturbation due to the collection of sand, clay and shell debris;</li> <li>Temporary noises, gases and liquid fuel</li> </ul>	<ul> <li>Collection of sand and shell debris at the shore line where such resource is very common and it's not contaminated;</li> <li>Transport to be undertaken by relatively small engines and new transport vehicles;</li> </ul>	Project developer organization Regional Administration for Protected	No costs

		<ul> <li>Placement of the mixture;</li> </ul>	from the vehicles and	<ul> <li>Water transport to be</li> </ul>	Areas	
		<ul> <li>Potential damage of</li> </ul>	engine boats;	undertaken by boat without		
		halophytic vegetation;	<ul> <li>Temporary</li> </ul>	engines or relatively small		
		<ul> <li>Raft construction;</li> </ul>	disturbance of the	engines;		
		Anchoring.	species during the	• Sand and shell debris spread in a		
			operations;	thin layer to not harm the		
			<ul> <li>Temporary coverage</li> </ul>	halophytic vegetation;		
			of halophytic	• Potential disturbance reduced by		
			vegetation with sand	undertaking activities in those		
			and shell debris.	month the lagoon and the		
				Pelicans' island is not extensively		
				used by birds;		
				• Better planning of the transport		
				within the protected area.		
3	Rehabilitation of	• Clean-up of tourism trails;	<ul> <li>Cutting of shrub trees</li> </ul>	Well planned trails and	Project	
	nature tourism trails,	<ul> <li>Transportation of</li> </ul>	branches to open the	interventions to avoid	developer	
	construction and	materials (vehicles);	trails corridor;	unnecessary cuttings and	organization	
	provision with relevant	<ul> <li>Building of a bridge for</li> </ul>	• Temporary noises, and	disturbance;		
	signaling, markings and	reaching the hide in	gases from the	<ul> <li>Site supervision and guiding</li> </ul>	Regional	
	building of a	Godulla e vogel;	vehicles used for	during the trails improvement	Administration	
	birdwatching hide	<ul> <li>Marking of the 5 trails</li> </ul>	transport;	actions;	for Protected	No costs
		with relevant signals and	<ul> <li>Temporary</li> </ul>	• Potential disturbance reduced by	Areas	
		markings;	disturbance of the	undertaking activities in those		
		<ul> <li>Construction of a</li> </ul>	species during the	month the lagoon and the		
		birdwatching hide in	operations.	Pelicans' island is not extensively		
		Godulla e Vogel.		used by birds.		
4	Planting of 200 native	• Transportation of saplings	• Temporary noises, and	• Transport to be undertaken by	Project	
	saplings of Stone Pine	<ul> <li>Planting of 200 saplings</li> </ul>	gases from the	relatively small engines and new	developer	No costs
	1		l		1	

	(Pinus pinea) in the		vehicles;	transport vehicles;	organization	
	National Park		Temporary	• Potential disturbance reduced by		
			disturbance of the	undertaking activities in winter,	Regional	
			species during the	a period when wildlife activity is	Administration	
			operations.	limited;	for Protected	
				• Better planning of the transport	Areas	
				within the protected area.		
5	Clean up action in	Access in the waste clean-	Temporary human	Well planned clean-up activities;	Project	
	Divjaka-Karavasta	up areas;	disturbance of species	<ul> <li>Preliminary training of</li> </ul>	developer	
	National Park	Collection and transport of	during the clean-up	participants to avoid	organization	
		the waste out of the	activities;	unnecessary habitat disturbance;		
		project area;	<ul> <li>Temporary noises and</li> </ul>	<ul> <li>Preliminary training of</li> </ul>	Regional	
		<ul> <li>Potential presence of</li> </ul>	gases from the	participants to avoid risk of	Administration	
		hazardous waste.	vehicles;	contamination;	for Protected	
				<ul> <li>Site supervision and guiding</li> </ul>	Areas	
				during the clean-up actions;		No costs
				<ul> <li>Separate collection and</li> </ul>		
				transport of hazardous waste;		
				• Transport to be undertaken by		
				relatively small engines and new		
				transport vehicles;		
				Potential disturbance reduced by		
				undertaking activities in winter,		
				a period when wildlife activity is		
				limited.		

### 14. Actions to ensure health and safety:

#### 14.1. Health and safety policy

In terms of health and safety rules and procedures, AOS has its own policy that is in accordance with the national legislation as well as CEPF health and safety requirements.

All the activities under the project are undertaken by personnel insured in accordance with the respective Albanian legislation, being either members of AOS or contractors working for AOS in the frame of this project.

In accordance with the national legislation and CEPF requirements on health and safety:

- AOS has regular individual contracts and pay health and social services for its working staff.
- AOS does not allow workers to carry out compulsory labor as defined by ILO Convention.
- AOS observes the daily working hours (8 hours)

In case AOS staff and contractors are undertaking construction works

- The workers are required to have special clothing while they enter premises where they work, such as vests or yellow jackets, plastic head protective caps, plastic protective glasses, uniform working suits for all workers, thick-soled shoes etc.

In case AOS and its volunteers are undertaking activities with potential health and safety implications, such as the clean-up action, the following measures will be compulsory before the start of any activity:

- Participant will have proper training for the specific jobs they will perform.
- Participants will have safe protective equipment (gloves), appropriate means and machinery for their clean-up action.

In the case of our construction works in Divjaka-Karavasta National Park, the company/physical person implementing the work will also apply Health and Safety Regulations in the working place. The rules are as follows:

- The company should have a special first aid facility near the site.
- The company should have proper tools for the safe transport of workers
- A plan of measures should be in place for the timely evacuation of workers in an adequately supplied medical unit in case of serious accidents.
- The company should have a health insurance scheme for the workers to be affected by accidents in the working place.
- The company should appoint a person to have the overall responsibility for implementing "Rules of Health and Safety at Work".
- Workers should have proper training for the specific jobs they will perform.
- Workers should have safe protective equipment, appropriate means and machinery for their work.

The company should have in place a policy of "Health and Safety at Work", to be regularly documented, implemented and updated. The company to deal with the project implementation should meet the standards on living conditions of workers in conformity with rules provided by the International Labor Organization (ILO) and the national legal framework.

The activities foreseen in **10.1 Description of the actions** are likely to have very limited health and safety risks as the above rules and procedures on health and safety will be enforced prior to the initiation of the rehabilitation/construction and clean up works.

### 14.2. Waste management and/or disposal

Waste management is related here with activities having potential environmental implications, i.e. those cited in **10.1 Description of the actions**. Among them only the following might produce waste:

- a. Activity 3.3.2. Creation of suitable breeding habitats for nesting Common Tern and Little Tern
- b. Activity 3.3.3. Rehabilitation of nature tourism trails, construction and provision with relevant signaling, markings and building of a birdwatching hide.
- c. Activity 3.6.6. Planting of 200 native saplings of Stone Pine (*Pinus pinea*) in the National Park and clean-up actions with students.

The activities could generate and dispose different types of waste including wood debris and plastic debris.

Wood waste could be generated by the creation of suitable breeding habitats for terns and the rehabilitation of nature tourism trails, construction and provision with relevant signaling, markings and building of a birdwatching hide. It will be disposed through energy (heating) recovery process at the premises of the Visitors Center. The center has been equipped during the last year with a new wood based central heating system.

The production of plastic waste, although very minimal might be generated by plastic packaging and other plastic materials used during the construction of trails, nesting rafts and the birdwatching hide. Besides some plastic waste will be collected during the clean-up activities.

A specific waste cleanup plan will be drafted in the project due course and ensure adequate management of the waste. Both the generated plastic as well as the plastic collected during clean-up will be first re-used or recycled. Reuse and recycling operations will be conducted by the recycling facilities located nearby (Kavaja, Berat or Vora).

Disposal of the end-of-life waste generated during the above activities will be ensured through recycling companies and authorities operating the waste disposal sites. All the above waste management operations will be conducted in accordance with the principle of proximity.

## 15. Monitoring and Evaluation:

## Table 3. Foreseen monitoring actions

	Proposed action	Environmental impacts	Proposed mitigation measures	Monitoring action	Responsibility	Costs of mitigations (in US\$)
1	Rehabilitation of reproductive beds for the breeding Dalmatian Pelicans ( <i>Pelecanus</i> <i>crispus</i> )	<ul> <li>Temporary environmental perturbation due to the collection of fallen branches and twigs;</li> <li>Temporary noises, gases and liquid fuel from the vehicles and engine boats</li> <li>Temporary disturbance of the species during the operations</li> </ul>	<ul> <li>Transport to be undertaken by relatively small engines and new transport vehicles;</li> <li>Water transport to be undertaken by boat without engines or relatively small engines;</li> <li>Potential disturbance reduced by undertaking activities in those month the lagoon and the Pelicans' island is not extensively used by birds;</li> <li>Better planning of the transport within the protected area;</li> </ul>	<ul> <li>Develop a timetable of activities and implement it correctly;</li> <li>Checking of the vehicle parameters and conditions before use;</li> <li>Supervision of the field operations by qualified ornithological staff;</li> </ul>	Project developer organization	No costs
2	Creation of suitable breeding habitats for nesting Common Tern and Little Tern	<ul> <li>Temporary environmental perturbation due to the collection of sand, clay and shell debris;</li> <li>Temporary noises, gases and liquid fuel from the</li> </ul>	<ul> <li>Collection of sand and shell debris at the shore line where such resource is very common and it's not contaminated;</li> <li>Transport to be</li> </ul>	<ul> <li>Develop a timetable of activities and implement it correctly;</li> <li>Checking the vehicle parameters and</li> </ul>	Project developer organization	No costs

		<ul> <li>vehicles and engine boats;</li> <li>Temporary disturbance of the species during the operations;</li> <li>Temporary coverage of halophytic vegetation with sand and shell debris.</li> </ul>	<ul> <li>undertaken by relatively small engines and new transport vehicles;</li> <li>Water transport to be undertaken by boat without engines or relatively small engines;</li> <li>Sand and shell debris spread in a thin layer to not harm the halophytic vegetation;</li> <li>Potential disturbance reduced by undertaking activities in those month the lagoon and the Pelicans' island is not extensively used by birds;</li> <li>Better planning of the transport within the protected area;</li> </ul>	<ul> <li>conditions before use;</li> <li>Supervising the field operations by qualified ornithological staff;</li> </ul>		
3	Rehabilitation of nature tourism trails, construction and provision with relevant signaling, markings and building of a birdwatching hide	<ul> <li>Cutting of shrub trees branches to open the trails corridor;</li> <li>Temporary noises, and gases from the vehicles used for transport;</li> <li>Temporary disturbance of the species during the operations.</li> </ul>	<ul> <li>Well planned trails and interventions to avoid unnecessary cuttings and disturbance;</li> <li>Site supervision and guiding during the trails improvement actions;</li> <li>Potential disturbance reduced by undertaking</li> </ul>	<ul> <li>Develop a timetable of activities and implement it correctly;</li> <li>Checking the vehicle parameters and conditions before use;</li> <li>Supervising the field operations by qualified</li> </ul>	Project developer organization	No costs

4	Planting of 200 native saplings of Stone Pine ( <i>Pinus pinea</i> ) in the National Park	<ul> <li>Temporary noises, and gases from the vehicles;</li> <li>Temporary disturbance of the species during the operations.</li> </ul>	<ul> <li>activities in those month the lagoon and the Pelicans' island is not extensively used by birds;</li> <li>Transport to be undertaken by relatively small engines and new transport vehicles;</li> <li>Potential disturbance reduced by undertaking activities in winter, a period when wildlife activity is limited;</li> <li>Better planning of the transport within the</li> </ul>	<ul> <li>staff;</li> <li>Checking the vehicle parameters and conditions before use;</li> <li>Supervising the field operations by qualified forestry staff;</li> </ul>	Project developer organization	No costs
5	Clean-up action in Divjaka-Karavasta National Park	<ul> <li>Temporary human disturbance of species during the clean-up activities;</li> <li>Temporary noises and gases from the vehicles</li> </ul>	<ul> <li>protected area;</li> <li>Well planned clean-up activities</li> <li>Preliminary training of participants to avoid unnecessary habitat disturbance;</li> <li>Site supervision and guiding during the clean- up actions;</li> <li>Separate collection and transport of hazardous waste;</li> <li>Transport to be</li> </ul>	<ul> <li>Develop a timetable of activities and implement it correctly;</li> <li>Checking the vehicle parameters and conditions before use;</li> <li>Supervising the field operations by qualified ornithological staff;</li> </ul>	Project developer organization	No costs

	undertaken by relatively	
	small engines and new	
	transport vehicles;	
	Potential disturbance	
	reduced by undertaking	
	activities in winter, a	
	period when wildlife	
	activity is limited;	

## 16. Permission of the landowner:

There are no private landowners implicated on the actions foreseen by the project. The land and lagoon waters are state owned property. Therefore, local state authorities, in our case the Regional Authority for the Protected Areas of Fieri Region, are entitled to provide permitting for the project actions to be undertaken. On that purpose, a memorandum of understanding has been signed between the Regional Authority and AOS on behalf of the project team. The memorandum of understanding defines the activities of the project and tasks for both the project consortium and the regional authorities. It also allows for the project activities to be undertaken in close cooperation with the regional authorities

## 17. Consultation:

Stakeholders	Subject of consultation	Date of consultations
Regional Agency for Protected	Rehabilitation of the reproductive	29.08.2019
Area (Fier)	beds	27.10.2019
	• Creation of suitable breeding habitats	01.12.2019
	for nesting Common Tern and Little	07.12.2019
	Tern	
	Rehabilitation of nature tourism	
	trails, construction and provision with	
	relevant signaling, markings and	
	building of a birdwatching hide	
	Planting of 200 native saplings of	
	Stone Pine ( <i>Pinus pinea</i> ) in the	
	National Park	
	Clean-up action in Divjaka-Karavasta	
	National Park	
Experts	Rehabilitation of the reproductive	29.08.2019
	beds	27.10.2019
	• Creation of suitable breeding habitats	01.12.2019
	for nesting Common Tern and Little	07.12.2019
	Tern	
	Rehabilitation of nature tourism	
	trails, construction and provision with	
	relevant signaling, markings and	
	building of a birdwatching hide	
	<ul> <li>Planting of 200 native saplings of</li> </ul>	
	Stone Pine ( <i>Pinus pinea</i> ) in the	
	National Park	
	Clean-up action in Divjaka-Karavasta	

The project team has held several meetings with the authorities, local NGOs and local stakeholders.

	National Park	
Divjaka Municipality	<ul> <li>Rehabilitation of the reproductive beds</li> <li>Planting of 200 native saplings of Stone Pine (<i>Pinus pinea</i>) in the National Park</li> <li>Clean-up action in Divjaka-Karavasta National Park</li> </ul>	27.10.2019
Local stakeholders	<ul> <li>Rehabilitation of the reproductive beds</li> <li>Creation of suitable breeding habitats for nesting Common Tern and Little Tern</li> <li>Planting of 200 native saplings of Stone Pine (<i>Pinus pinea</i>) in the National Park</li> <li>Clean-up action in Divjaka-Karavasta National Park</li> </ul>	29.08.2019 27.10.2019 01.12.2019 07.12.2019

#### 18. Disclosure:

Social safeguard aspects were already elaborated in the Process Framework where particular attention was paid for consultation meetings with those stakeholders affected by the restricted access to the surrounding waters of the Pelicans' Island. Several non-formal meetings were organized with fishermen from the neighboring Divjaka and the village of Miza as those are the two fishing communities crossing in the Pelicans' non intruder area. The team explained the need to protect the Pelicans island from intruders and the need for restriction through gardening of the Pelicans' island. In addition, the wardens are local and they have been all selected from the members of those communities.

Fishing communities explained in the meetings that they were not interested to fish in the Pelicans' nonintruder zone. They just use the area as bridge for fishing grounds situated at the communication channels. We were promised that they will not use the area as the Pelicans are an important symbol and flagship species for the area.

In addition, the team has paid visit at the school of Miza and kids of this community were involved in conservation activities such as bird ringing, observation of pelicans and other birds.

As a result, there have been no problems in the non-intruder zone as the local fishing community generally respects the signs showing the restricted access in the area around the Pelicans' colony. In some cases, occurring usually by night time, few fishermen have missed the non-intruder signs due to the low visibility. In such cases, the wardens of the pelicans given preventive light signals and the fishermen have changed the course of fishing without any complains.

Other issues of social safeguard are usually related to health and safety issues. Those topics are discussed above on **13.1. Health and safety policy**.

## **19.** Grievance mechanism:

### 19.1. Affected persons

Activities to be implemented in the frame of the project include restricted access in an area surrounding the Pelicans' island for circa 6 months per year. The area is indeed designated as such since 2014 and it highly respected by legal fisherman.

Furthermore, the surrounding community is well informed about the restricted access area and the public respects this restriction as they understand the importance of such a conservation action.

Despite the above, illegal fishing is still undergoing in the restricted access area although in very limited scale. As a result, any further restriction is expected to impact the current livelihood of the illegal fisherman.

## **19.2.** Avoidance and reduction of restrictions

In order to first reduce and finally avoid the impact of restrictions, the project foresees the following activities:

- Involve affected stakeholders in the revision of the Management Plan for Divjaka-Karavasta National Park;
- Involve affected stakeholders in the consultations for the production of the guide manifest for the diversification of the tourism sector;
- Involve affected stakeholders in the consultations for designing packages that combine Nature tourism, Agro-tourism and Cultural tourism *and*
- Train affected stakeholders in Nature Tourism, Agro-tourism and Cultural tourism.

By implementing the above activities, the affected persons, represented in our case by illegal fishermen, will improve their capacities in undertaking alternative tourism activities through the foreseen training,

In addition, the guidance on alternative livelihood practices will be concentrated mainly on different tourism opportunities including ecotourism, agro tourism, wildlife photography, cultural and historical tourism.

As such, the project will offer to the affected persons new jobs opportunities for nature guides, bird watching tours and various types of services such as agricultural tourisms Besides, the affected persons will benefit indirectly through the community incomes financed through the project funded pilot activities, such as bird watching tours, offer of branded domestic products.

All the above activities will be supported by expertise and private actors in the supply chain who would be invited so that all individuals involved have the opportunity to make better livelihoods, without undergoing illegal activities.

#### **19.3.** Grievance mechanism

Potential conflicts at the local level look pretty limited as the project is restricting access in areas already respected by the local community. Nevertheless, in order to appease any conflict, AOS will provide to the local community with conflict resolution mechanisms.

This grievance mechanism will include the following elements:

#### • Email and telephone contact information for AOS

AOS has established excellent contacts with the local community. Besides AOS social networks accept and try to resolve immediately any type of compliance regarding its activities.

Project partners would undertake their activities in close contact with the administration for protected areas. This public institution, in accordance with the legal framework on public institutions recognizes both the administrative and the judiciary complain forms.

One important institution over the local administration for protected areas is the Management Committee of the National Park, a body responsible for the supervision of the implementation of the protected area's management plan. If a project activity would be in conflict with the existing management plan, the Management Committee could intervene nearby the local administration to ensure the correct implementation of the management plan.

- Email and telephone contact information for the CEPF Regional Implementation Team.
- Email and telephone contact information for the local World Bank office.
- The email of the CEPF Executive Director: <u>cepfexecutive@conservation.org</u>

In addition, contact information of AOS and project partners, the Regional Implementation Team for CEPF (Birdlife International) and the CEPF Grant Director will be provided to the local population. The dedicated email account for CEPF (cepfexecutive@conservation.org) will be mentioned, for grievances sent by email.

Furthermore, AOS and the consortium will share all grievances – and a proposed response – with the Regional Implementation Team and the CEPF Grant Director within 15 days. If the claimant is not satisfied following the response, they may submit the grievance directly to the CEPF Executive Director at <u>cepfexecutive@conservation.org</u> or by surface mail. If the claimant is not satisfied with the response from the CEPF Executive Director, they may submit the grievance to the World Bank at the local World Bank office."

## • A statement describing how you will inform stakeholders of the objectives of the project and the existence of the grievance mechanism.

Stakeholder groups have been informed on the project objectives and the existence of the grievance mechanism through the consultations mentioned above.

In addition, the memorandum of understanding between ASO (on behalf of the consortium) and the Regional Administration for Protected Areas (RAPA Fier) is public and could be consulted by all the interested stakeholders that would like to understand the project objectives and activities.