

Bhutan for Life

Environmental and Social Management Plan for Biological Corridor 2 (2020)

1. Introduction

(A) Project Background

The Bhutan for Life (BFL) project aims to ensure a robust network of protected areas and biological corridors that secures human well-being, biodiversity conservation and increase climate resilience in Bhutan. The project provides a 14-year financial bridge that allows for immediate improvement in the management of Bhutan's protected areas for climate resilience, and the prompt delivery of mitigation, adaptation and biodiversity gains, while the country gradually ratchets up its own financing resources.

BFL seeks to achieve the following objectives:

- Help Bhutan remain carbon neutral by increasing forest and vegetative cover within the Protected Area System (PAS);
- Enhance the socio-economic wellbeing of communities in and in the vicinity of the PAS through climate-informed natural resources management;
- Maintain stable, thriving and diverse populations of key species contributing toward national and global biodiversity goals;
- Strengthen organizational, institutional, and financial capacity for effective management of PAS.

BFL includes five components that reflect these goals, divided into 16 milestones (or outputs) and over 80 detailed activities.

(B) Scope of ESMP

The preparation of this Environmental and Social Management Plan (ESMP) was required in order to manage the environmental and social impacts through and specific mitigation actions required to implement the project in accordance with the requirements of WWF's Social Safeguards Integrated Policies and Procedures (SIPP), the project's Environmental and Social Management Framework (ESMF), and applicable national legislation and regulations.

The ESMP provides an overview of the environmental and social baseline conditions on the routes of the proposed second segment of the project, summarizes the potential impacts associated with the proposed activities and sets out the management measures required to mitigate any potential negative impacts.

This ESMP will be implemented by BFL focal person in each park authority (PA) and biological corridor (BC), and by the contractor to be commissioned by each PA/BC for the project.

(C) Purpose of ESMP

This Site-Specific ESMP is a project-specific source document detailing the environmental and social protection requirements to mitigate and minimize the adverse impacts. The ESMP's primary purpose is to ensure that the environmental requirements and social commitments associated with the project are carried forward into implementation and operational phases of the project and are effectively managed. The specific objectives of this ESMP are as hereunder:

- Minimizing any adverse environmental, social and health impacts resulting from the project activities;
- Conducting all project activities in accordance with the relevant RGoB Laws and WWF's safeguard operational policies and guidelines;

- Preventing environmental degradation as a result of either individual subprojects or their cumulative effects;
- Enhancing the positive environmental and social outcomes of project activities;
- Ensuring that the proposed mitigation measures are feasible and cost-efficient;
- Providing an Action Plan to ensure that the project impact mitigation measures are properly implemented and monitored;
- Ensuring that all stakeholders are engaged in the project activities' preparation and implementation, and their concerns are fully addressed.

(D) Applicable law, policies, and regulation

This ESMP is developed by following the guidelines as set forth in the BFL's ESMF.

Applicable RGoB laws and policies include the Constitution of the Kingdom of Bhutan, 2008; legislation on land and moveable property (Land Act of Bhutan 2007; Land Rules, 2007; The Moveable Cultural Property act of Bhutan, 2005); legislation and regulations on forests and protected areas (National Environment Protection Act, 2007; Forest and Nature Conservation Act of Bhutan, 1995; Forest and Nature Conservation Rules and Regulations of Bhutan, 2017; National Forest Policy, 2011); legislation on water and waste prevention (Water Act of Bhutan, 2011; Waste Prevention and Management Act, 2009); legislative requirements on environmental assessment (Environmental Assessment Act, 2000 and Regulations on the Environmental Clearance of Projects, 2001); and other relevant laws (The Local Government Act of Bhutan, 2009; Livestock Act of Bhutan, 2001; The Biodiversity Act of Bhutan, 2003; The Pesticides Act of Bhutan, 2000; The Penal Code of Bhutan, 2004; National Access and Benefit Sharing (ABS) Policy (Draft), 2014).

WWF's safeguards policies that are relevant to this project are as follows: Policy on Environment and Social Risk Management; Policy on Protection of Natural Habitats; Policy on Involuntary Resettlement; Policy on Indigenous Peoples; Standard on Pest Management; Policy on Accountability and Grievance System; Standard on Physical Cultural Resources; as well as general standards on occupational and community health and safety and on energy efficiency.

In general, RGoB's laws, policies, and guidelines are in line with the WWF's environmental and social safeguards requirements. However, there are a few differences between the two systems. With regard to environmental impacts, there are no direct contradictions between the RGoB laws and regulations and the WWF's SIPP, but the requirements of the latter are more extensive. All project activities should fully comply both with the RGoB's Regulations on the Environmental Clearance of Projects, and with the procedures and mitigation measures prescribed in this ESMF. In case that the WWF's SIPP requirements are more extensive, strict, or detailed than the RGoB legislation and policies, the former will apply to all project activities.

With regard to social impacts, the primary discrepancies between the RGoB laws and regulations and the WWF's SIPP refer to the status of non-title holders and informal land use, and the commitment to participatory decision-making processes. First, according to the WWF's SIPP, all users of land and natural resources (including people that lack any formal legal ownership title or usage rights) are eligible to some form of assistance or compensation if the project adversely affects their livelihoods. The RGoB laws only recognize the eligibility of land owners or formal users to receive compensation in such cases. Second, the WWF's SIPP require extensive community consultations as part of the development of various safeguards documents and during project activities. RGoB legislation does not include similar requirements. For the purposes of the BFL project, the provisions of the WWF's SIPP shall prevail over the RGoB legislation in all cases of discrepancy.

2. Environmental and Socio-Economic Conditions:

Biological Corridor (BC) 2 connects the two largest national parks in the country; namely Jigme Dorji National Park in the northern part and Jigme Singye Wangchuk National Park towards southern part. The entire area has 2769.32 hectares which can be categorized into 60 km length by 4 km minimum width. More than 90% of the BC 2 falls under the jurisdiction of Wangdue Territorial Division. The Division head office has 7 Sections. There are four range offices, two Forest Management Units (FMU) and two check posts under the Division office.

The BC 2 has one of the richest floral and faunal biodiversity starting from chir pine forest towards southern, cool broadleaved forest in the central, and fir forest towards northern part of the corridor. It is home to all the focal species like tiger, red panda, leopard and musk deer as shown in Figure 1. There are about 40 tree species, 9 understory species, 15 species of mammal and 145 species of birds, as shown in Figure 2, recorded so far.



Figure 1: Wild animals capture within BC 2.



Figure 2: Picture of the bird species

The BC 2 area covers 6 Gewogs under three Dzongkhags (Thimphu, Wangdue, and Punakha) as shown in Figure 3. It has 197 households residing within the area.

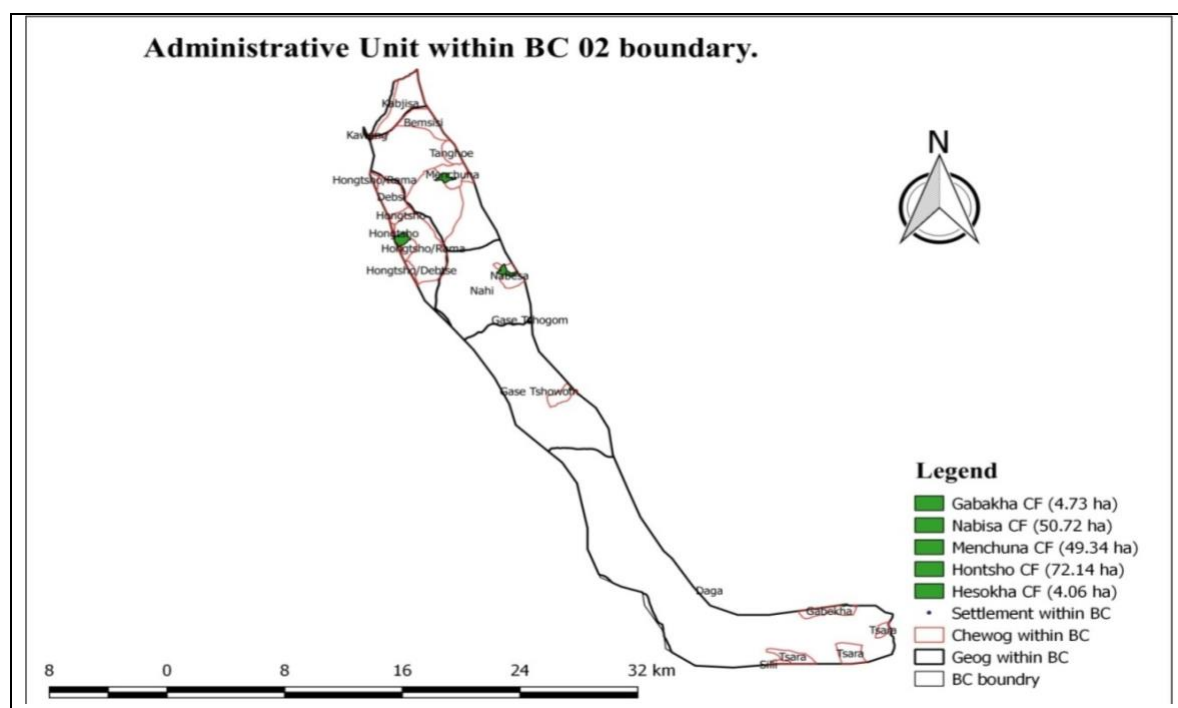


Figure 3: Location of the BC 2- Geographical boundary map

3. Planned activities in Year 2020

The activities implemented by BC 2 that require ESMP are:

1. Construction of range office

The construction of range office is located at Kamichu, Daga Gewog in Wangdue Phodrang Dzongkhag. The site is on an area of 0.402 acres of land which is flat and barren. This is a spillover activity from 2019. The land is located near the national highway. However, the road will not be affected during and after the construction.

There will be 18 to 20 numbers of temporary workers. About 5000 to 6000 liters of quantity of water is expected to be used during construction and operation period. The water will be sourced from river and another camp. There will be solid waste generated from construction materials, sewage sludge and garbage, and food waste from construction workers.

Noise disturbance is expected during the construction period from the plant operations, heavy equipment and with increase in traffic. There are around 70 households in the vicinity, but they will not be impacted by this construction

2. Improvement of waterholes, salt licks, and enrichment plantation

This is a rehabilitation activity to improve existing waterholes and salt licks through clearing dead wood and leaves and others hanging over the wildlife passage route within the BC 2. The sites are located within the BC area of 2769.32 hectares with capital investment of Nu. 0.333 million.

The sites identified are in Gabakha, Pinsa, Sili and Taksha (Daga Gewog), Tongsina (Kabisa Gewog), Toeb Gewog and Nahi and Gase-tshowom and Hontso top under Chang, Daga, Kabisa, Toebisa, Nahi and Gasetshogwom Gewog in Punakha, Wangdue and Thimphu. The sites are located in the dense forest.

Most of the densely forested areas face issues of water scarcity and habitat loss. Within BC areas, there are wild animals such as tigers and other focal species who like moving freely from one place to other without being disturbed. The main reason for the selection is to improve waterholes and to make water available for wild animals at all times.

3. Management of RAMSAR sites

There are three activities under RAMSAR sites.

i. Waste Management Program (Khotokha)

This is a new activity and the site is located in Khotokha under Bjena and Rubesa Gewog in Wangdue Dzongkhag. The Khotokha RAMSAR has been already designated as a wetland of international importance. This suggested activity will not restrict access to natural resources or sacred sites, and instead help in maintaining clean wetlands/habitat. There are 200 households who depend on agriculture farming. There are roads, educational facility, health centre, small-scale industries, commercial areas and other infrastructures in the area.

This activity will involve installation of waste bins, waste awareness programs, formation of wetland group, waste cleaning programs at strategic locations. The site is selected because of its strategic locations where humongous waste is thrown anywhere by several people/visitors passing through. The waste bins are expected to reduce the environmental pollution and help in proposal disposal of wastes at the RAMSAR site.

The waste bins will be installed in Shedra, RAMSAR area, shops and schools, as these places are more commonly used as pathway/routes by public /tourists/pilgrims. And, these areas are close to social or religious facilities and waste pollution needs to be managed by identifying proper waste disposal bins. Hence, for durability, the steel closed type of waste bins will be installed.

ii. Campsite development (Khotokha)

This is a new activity and the site is located in Jigchona under Subesa in Khotokha under Bjena Gewog in Wangdue Dzongkhag. The area is of 2 acres. This activity will involve construction of camp site with restroom and view point, office compound development, wooden fencing posts and barbed wire.

The identified location is ideal view point for RAMSAR site, and office compound development is proposed for better functioning of the office that manages all the wetland related programs. **The works will involve around 10 labourers at the site who will mostly be from the community.** The local workers will be engaged in construction of water supply and toilet facilities in designated camp sites. Waste such as papers, plastic and bottles will be managed by the RAMSAR waste management group.

There are 150 households who depend on agriculture farming, livestock and forestry. They will be benefitted from the indirect income from the arrival of visitors/tourists due to campsite development. The water supply and toilet facilities construction for camp site may generate noise pollution.

iii. Campsite development in Gangtey and Phobji

• Gangtey

The is a new activity to develop campsite including toilet and water facility It is to be located in Eusa, Tabading in Gangtey Gewog under Wangdue Phodrang Dzongkhag in an area of 0.43 acres. This site is selected as its feasible for camping on a plain area and requires digging for the construction.

- **Phobji**

The is a new activity to develop campsite including toilet and water facility It is to be located in Dazijab, in Khemdro Gewog under Wangdue Phodrang Dzongkhag in an area of 1.35 acres. This site is selected as its feasible for camping on a plain area and requires digging for the construction.

iv. Nature trail

This is a new activity at Gangtey and Phobji in Wangdue Phodrang to develop nature trail from Gangtey Goenpa to Khewang Lhakhang. At present this trail is as used as routes by the public/tourists and pilgrims. This is located close to social/religious site and facilities such as schools, parks, and playground and community facilities. The nature eco-trail in Gangtey Phobji is a track with total length of around 3 km with width of 1m to 1.5 m which falls under the Phobji and Gangtey Gewogs under Wangduephodrang Dzongkhag.

The trail starts from Gangtey Goenpa and ends at Khewang Lhakhang. The eco-trail is popular amongst local, national and international tourists who are interested in short hikes and exploring nature. However, other than establishment of simple trail nothing much has been done for the development of the trail since its initial initiation due to which maintenance and value addition of the eco-trail is required. The trail will be developed manually by involving local communities and labours. Supervision and planning with be carried out by Forest Office.

The Division also plans to construct resting benches, viewing desk/canopies and building simple bridges made of planks wherever required. Information signages/signboards and waste bins will also be installed.

4. Environmental and Social Impacts and Mitigation Measures

1. Construction of Range Office

The construction of the range office has followed relevant acts and rules and regulations of the Kingdom of Bhutan in obtaining clearances from the competent authorities. Some of the adverse environmental and social impacts for the activity are described below.

Environmental Impacts: The negative environmental impacts from the project are anticipated to be minimal. These are impacts, which are likely to be site-specific and could potentially include:

- Construction-related impacts arising from excavation, waste and material management at site;
- Noise pollution during construction phase
- Extraction (excessive) of water and forest resources;
- Occupational health and safety hazards, especially for construction workers and local communities.

Social Risks/Impacts: Although most of the measures have been taken into account prior to construction, some of the measures that may have to be considered as the project is just at the beginning phase includes:

- Conflict between construction workers and local communities: As the construction is just at the beginning phase, there is a possibility of conflict between the workers and local communities for which the focal from the park has be made responsible.

2. Improvement of waterhole, salt licks, and enrichment plantation

The activity of improvement of alpine meadow include plantation of native species for the yak habitat management which the potential environmental and social impacts could include, but

not limited to the disturbance of the wild life habitat. For the improvement of waterholes, some of the potential environmental and social impacts could be the following:

- Wastes: Soil from excavation activities and waste from construction activities
- Workers' health and safety
- Increase poaching as it is a gathering area for animals

3. Management of RAMSAR sites

i. Waste management (waste bins installation)

- Animals may look for food in the waste bins and may get poisoned or spread waste

However, given the scale of the project, these risks are expected to be minimal, site-specific and those for which mitigation measures can easily be developed through standard and applicable regulations. These impacts are again site-specific, reversible and can be minimized/mitigated by developing appropriate measures. Specifically, to address these concerns, the project will comply with the relevant Acts and Rules and Regulations of the Kingdom of Bhutan. ESMP is prepared as per requirement based on ESMF to ensure adequate mitigation measures.

ii. Construction of campsites

- Waste: generation of waste as a result of construction activities
- Workers' health and safety
- Local community's health and safety
- Conflict between temporary workers and local communities

iii. Nature trail development

There is no significant risk in development of the eco-trail as it was already established years ago. However, there are chances of littering by the hikers/tourist but with the installation of proper waste bins and signages on waste management, the littering problem could be solved. Other impacts are on workers' health and safety including human wildlife conflict.

- Waste: generation of waste as a result of construction activities
- Workers' health and safety
- Human wildlife conflict

However, given the scale of the project, these risks are expected to be minimal, site-specific and those for which mitigation measures can easily be developed through standard and applicable regulations. These impacts are again site-specific, reversible and can be minimized/mitigated by developing appropriate measures. Specifically, to address these concerns, the project will comply with the relevant Acts and Rules and Regulations of the Kingdom of Bhutan. ESMP is prepared as per requirement based on ESMF to ensure adequate mitigation measures.

Therefore, for all the potential adverse impacts of environment and social related to each activity, mitigation measures have been prepared as shown in Table below:

1. Construction of beat office

Potential impact	Impact scale	Proposed mitigation measures	Responsible party	Costs
Construction of beat office				US\$ 71,600
Waste: generation of waste as a result of construction activities	Short term Minor	<ul style="list-style-type: none"> • Identification of the different waste types at the project site (soil, asphalt, food, etc.); 	BFL focal person in BC 2 Contractor	Wastes collection: Nu. 10,000 = USD 141.84

		<ul style="list-style-type: none"> • Ensure that camps are located away from existing stream, river, or water sources, and that no discharge from camps is made into nearby water bodies; • Proper containers/waste bins should be provided at the project site; • Dumping of waste on the sides of the road, on private land, or in other non-designated places should be prohibited; • Dumping waste shall be prohibited on fragile slopes, forests, religious or other culturally sensitive areas or areas where livelihood is derived; • Collection, transportation and final disposal of all waste should be undertaken regularly on a weekly basis; • Possible hazardous waste (motor oils, vehicle fuels, etc.) should be collected separately and authorized collector and transporter should be sub-contracted to transport and finally dispose; • All construction materials should be covered during the transportation to avoid waste dispersion; • The options for reuse/recycling of the generated waste streams should be taking into consideration (e.g. excavated soil, etc.); • Burning of construction waste should be prohibited. <p><i>After construction:</i></p> <ul style="list-style-type: none"> • All waste shall be removed from the project site. 		
Conflict between construction workers and local communities????	Long term Minor	<ul style="list-style-type: none"> • Carry out consultations with affected communities and local government before and during construction activities to mitigate any adverse impacts on the community • Avoid sites that are in close proximity to dzongs, monasteries or other sacred sites • Ensure that sites identified for construction are located beyond 500 meters from a monastery, Dzong or any cultural monument 	BFL focal person in BC 2 Contractor	To be incorporated in the bidding document.

		<ul style="list-style-type: none"> Redesign construction plans as needed to avoid obstruction (e.g., to avoid view disturbance of a monastery) 		
Exploitation and extraction of resources including water????		<ul style="list-style-type: none"> Prepare water management plan in consultation with local community to ensure that community's access to water sources is not disturbed, and usage of water sources is fairly allocated between local communities and construction workers (e.g., by specifying water usage times for workers). 	BFL focal person in BC 2 Contractor	Consultation cost same as above
Workers' health and safety	Short term Minor	<ul style="list-style-type: none"> Comply with the BFL's occupational health and safety guidelines; Ensure regular health screening for the workers pre and during construction activities; Ensure that no underage workers, or children are engaged; Ensure decent work conditions, including an appropriate salary, working hours, accommodation and food for workers shall be provided to all workers; Ensure that workers are employed on the principle of equal opportunity and fair treatment, and there is no discrimination with respect to any aspects of the employment relationship, such as recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, job assignment, promotion, termination of employment or retirement, and disciplinary practices; Implement a grievance mechanism for workers (and their organizations, where they exist) to raise workplace concerns. 	BFL focal person in BC 2 Contractor	To be incorporated in the bidding document.
Local community's health and safety	Short term Minor	<ul style="list-style-type: none"> Ensure the safety of all project-related equipment, in line with the requirements above Minimize the use of hazardous materials, and ensure that community members are not exposed to them. In case that the use of such materials is necessary, provide sufficient notice to local community members and inform them on safety and protection measures. 	BFL focal person in BC 2 Contractor	<p>To be incorporated in the bidding document. From the activity cost.</p> <p>For the local communities from the above</p>

		<ul style="list-style-type: none"> • Avoid dumping any waste or otherwise contaminating community sources of water supply and water quality. • Provide information to local communities on construction activities and plans 		consultation cost.
<i>Conflict between temporary workers and local</i>	Short term Minor	<ul style="list-style-type: none"> • Workers shall be made aware of local culture and traditions, as well as the legal consequences of harassment and intimidation, especially with regards to sexual harassment and gender-based violence. • Local communities shall be made aware of the engagement of temporary workers in project sites. • Strict monitoring shall be carried out to ensure conflicts are minimized 	BFL focal person in BC 2 Contractor	To be incorporated in the bidding document. From the activity cost. For the local communities from the above consultation cost.

Activity 2: Improvement of water holes and salt licks

Potential impact	Impact scale	Proposed mitigation measures	Responsible party	Cost
<i>Improvement of waterholes</i>				US\$4,761.9
Waste: soil from excavation activities and waste from construction activities	Short term Minor	<ul style="list-style-type: none"> • Proper containers/waste bins should be provided at the project site; • Dumping of waste in the waterholes, on the sides of the road, on private land, or in other non-designated places should be strictly prohibited; • Dumping of waste shall be prohibited on fragile slopes, forests, religious or other culturally sensitive areas or areas where livelihood is derived; • Collection, transportation and final disposal of all waste should be carried out on a daily basis and not left in the protected areas; • Burning of construction waste should be prohibited. 	BFL focal person in BC 2 Contractor	To be incorporated in the bidding document/workers contract agreement. From the activity cost.
Workers' health and safety	Short term Minor	<ul style="list-style-type: none"> • Comply with the workers' health and safety guidelines; • Ensure regular health screening for the workers pre and during construction activities; • Ensure that no underage workers, or children are engaged; • Ensure decent work conditions, including an appropriate salary, working hours, accommodation and food for workers shall be provided to all workers; 	BFL focal person in BC 2 Contractor	To be incorporated in the bidding document. From the activity cost.

		<ul style="list-style-type: none"> Ensure that workers are employed on the principle of equal opportunity and fair treatment, and there is no discrimination with respect to any aspects of the employment relationship, such as recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, job assignment, and promotion, termination of employment or retirement, and disciplinary practices; Provide workers with an incident report book and ensure that they are aware of the project's grievance redress mechanism and can use it to raise workplace concerns. 		
Increase poaching (because there will be more animals gathered in one spot so it becomes high risk for poaching)	Short term Minor	<ul style="list-style-type: none"> Construct waterholes in areas where poaching is limited BC authorities shall carry out increased patrolling during and after the waterhole construction 	BFL focal person in BC 2 Contractor	To be incorporated in the regular patrolling.
Improvement of salt licks				
Increase poaching because there will be more animals gathered in one spot so it becomes high risk for poaching)	Short term Minor	<ul style="list-style-type: none"> Saltlick shall be constructed in areas where poaching is limited Increased patrolling of BC authorities should be carried out during and after the waterhole construction 	BFL focal person in BC 2	To be incorporated in the regular patrolling budget.

3. Management of RAMSAR sites

Potential impact	Impact scale	Proposed mitigation measures	Responsible party	Costs
Waste management (waste bin installation)				US\$ 9,500
Animals may look for food in the waste bins, get poisoned and spread waste	Long term Minor	<ul style="list-style-type: none"> Ensure that waste bins are well covered Ensure waste bins do not negatively impact wildlife or the environment 	BFL focal person in BC 2	To be incorporated in the bidding document. From the activity cost.
Construction of campsites				US\$ 30,000
Waste: generation of waste as a result of construction activities	Short term Minor	<ul style="list-style-type: none"> Identification of the different waste types at the project site (soil, asphalt, food, etc.); Ensure that camps are located away from existing stream, river, or water 	BFL focal person in BC 2 Contractor	To be incorporated in the bidding document.

		<p>sources, and that no discharge from camps is made into nearby water bodies;</p> <ul style="list-style-type: none"> • Proper containers/waste bins should be provided at the project site; • Dumping of waste on the sides of the road, on private land, or in other non-designated places should be prohibited; • Dumping waste shall be prohibited on fragile slopes, forests, religious or other culturally sensitive areas or areas where livelihood is derived; • Collection, transportation and final disposal of all waste should be undertaken regularly on a weekly basis; • Possible hazardous waste (motor oils, vehicle fuels, etc.) should be collected separately and authorized collector and transporter should be sub-contracted to transport and finally dispose; • All construction materials should be covered during the transportation to avoid waste dispersion; • The options for reuse/recycling of the generated waste streams should be taking into consideration (e.g. excavated soil, etc.). • Burning of construction waste should be prohibited. <p><i>After construction:</i></p> <ul style="list-style-type: none"> • All waste shall be removed from the project site. 	<p>BFL focal person in BC 2 Contractor</p>	<p>From the activity cost.</p>
Workers' health and safety	Short term Minor	<ul style="list-style-type: none"> • Comply with the BFL's occupational health and safety guidelines; • Ensure regular health screening for the workers pre and during construction activities; • Ensure that no underage workers, or children are engaged; • Ensure decent work conditions, including an appropriate salary, working hours, accommodation and food for workers shall be provided to all workers; • Ensure that workers are employed on the principle of equal opportunity and fair treatment, and there is no discrimination with respect to any aspects of the employment 	<p>BFL focal person in BC 2 Contractor</p>	<p>To be incorporated in the bidding document.</p>

		<p>relationship, such as recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, job assignment, promotion, termination of employment or retirement, and disciplinary practices;</p> <ul style="list-style-type: none"> • Implement a grievance mechanism for workers (and their organizations, where they exist) to raise workplace concerns. 		
<i>Local community's health and safety</i>	Short term Minor	<ul style="list-style-type: none"> • Ensure the safety of all project-related equipment, in line with the requirements above • Minimize the use of hazardous materials, and ensure that community members are not exposed to them. In case that the use of such materials is necessary, provide sufficient notice to local community members and inform them on safety and protection measures. • Avoid dumping any waste or otherwise contaminating community sources of water supply and water quality. • Provide information to local communities on construction activities and plans 	BFL focal person in BC 2 Contractor	<p>To be incorporated in the bidding document. From the activity cost.</p> <p>For the local communities from the above consultation cost.</p>
<i>Conflict between temporary workers and local</i>	Short term Minor	<ul style="list-style-type: none"> • Workers shall be made aware of local culture and traditions, as well as the legal consequences of harassment and intimidation, especially with regards to sexual harassment and gender-based violence. • Local communities shall be made aware of the engagement of temporary workers in project sites. • Strict monitoring shall be carried out to ensure conflicts are minimized 	BFL focal person in BC 2 Contractor	<p>To be incorporated in the bidding document. From the activity cost.</p> <p>For the local communities from the above consultation cost.</p>
Development of nature trails				US\$ 4,000
<i>Waste:</i> generation of waste as a result of construction activities	Short term Minor	<ul style="list-style-type: none"> • Identification of the different waste types at the project site (soil, asphalt, food, etc.); • Ensure that camps are located away from existing stream, river, or water sources, and that no discharge from camps is made into nearby water bodies; 	BFL focal person in BC 2 Contractor	<p>To be incorporated in the bidding document. From the activity cost.</p>

		<ul style="list-style-type: none"> • Proper containers/waste bins should be provided at the project site; • Dumping of waste on the sides of the road, on private land, or in other non-designated places should be prohibited; • Dumping waste shall be prohibited on fragile slopes, forests, religious or other culturally sensitive areas or areas where livelihood is derived; • Collection, transportation and final disposal of all waste should be undertaken regularly on a weekly basis; • Possible hazardous waste (motor oils, vehicle fuels, etc.) should be collected separately and authorized collector and transporter should be sub-contracted to transport and finally dispose; • All construction materials should be covered during the transportation to avoid waste dispersion; • The options for reuse/recycling of the generated waste streams should be taking into consideration (e.g. excavated soil, etc.). • Burning of construction waste should be prohibited. <p><i>After construction:</i></p> <ul style="list-style-type: none"> • All waste shall be removed from the project site. 	BFL focal person in BC 2 Contractor	
Workers' health and safety	Short term Minor	<ul style="list-style-type: none"> • Comply with the BFL's occupational health and safety guidelines; • Ensure regular health screening for the workers pre and during construction activities; • Ensure that no underage workers, or children are engaged; • Ensure decent work conditions, including an appropriate salary, working hours, accommodation and food for workers shall be provided to all workers; • Ensure that workers are employed on the principle of equal opportunity and fair treatment, and there is no discrimination with respect to any aspects of the employment relationship, such as recruitment and hiring, compensation (including wages and benefits), working 	BFL focal person in BC 2 Contractor	To be incorporated in the bidding document.

		conditions and terms of employment, access to training, job assignment, promotion, termination of employment or retirement, and disciplinary practices; <ul style="list-style-type: none"> • Implement a grievance mechanism for workers (and their organizations, where they exist) to raise workplace concerns. 		
Human Wildlife Conflict	Long term Minor	<ul style="list-style-type: none"> • Construct trails in a way that minimizes any disturbance to wildlife • Provide proper signs along the trails to warn tourists regarding wildlife • Touristic activities should be adjusted to the natural time cycle of wildlife (e.g., restricted by time of the day) 		To be incorporated in the bidding document. From the activity cost.

5. ESMP Implementation arrangements

The implementation of project activities will be carried out by the BFL focal person in BC 2. The focal person will be responsible for compliance with all procedures outlined in this ESMP, as well as compliance with any requirements to obtain clearances, permits, approvals, or consent documents from relevant authorities and stakeholders.

This ESMP should be part of the contract that the PA will sign with the Contractor(s) for implementation of the planned activities in BC 2 in 2020. The Contractor is obligated to perform all proposed preventive or mitigation environmental and social measures in this plan and to keep the evidence of any documents related to applying these measures (e.g., letter asking the municipality for disposal of inert waste, records on OHS information session performed for all workers before start of activities, all developed EHS plans, etc.). An OHS information session should be organized by the Contractor for all workers prior start the project activities and prior any specific tasks with high health risks.

The BC 2 Supervising Engineer needs to monitor the implementation of proposed measures by the Contractor and Contractor's subcontractors with visual checking, reviewing the records of evidence that the measures have been applied and ask the Contractor to apply the measures as soon as possible. Non-compliances should be recorded and the Report on any non-compliances should be reported to the ESS consultants immediately, and the ESS consultants will report it to the PCU (M&E Officer). Each non-compliance should be closed with appropriate measure/s and the evidence should be kept.

Disbursement of project funds to the PA will be contingent upon their full compliance with the safeguards requirements.

6. ESMP monitoring arrangements

The BFL focal person in BC 2 will closely monitor the implementation of all planned activities and the required mitigation measures, and ensure that they fully comply with this ESMP and with the terms and conditions included in the environment clearances issued by RGoB's national authorities.

BC 2 is also fully responsible for the compliance of all external contractors and service providers working in the BC 2 with the safeguards requirements outlined in the ESMP.

The monitoring of activities under this ESMP will be carried out in the following manner:

1. Construction of range office

- Monitoring by implementing entities:
 - At least weekly field visits - January 2020 until completion
 - Monthly reports prepared by implementing entities and submitted to ESS consultants - July 2020 until completion
- Monitoring by ESS consultants:
 - At least quarterly field visits by ESS consultants - January 2020
 - Quarterly reports by ESS consultants to the PCU (M&E officer) - June 2020, October 2020, APR 2020
- Bi-annual reports by PCU (M&E officer) to Secretariat- July 15, 2020, January 15, 2021
- Bi-annual reports by the Secretariat to WWF US (as part of mid-year and final APRs)- July 30, 2020, January 30, 2021

2. Waterhole management:

- Monitoring by implementing entities: September 2020
 - Field visits at least twice - during the intervention and then monthly as part of the “SMART patrolling” activity (please adapt based on field conditions, and also based on the availability of SMART patrolling activities) - August 2020, September 2020
 - Reports by the implementing entities submitted to ESS consultants weekly during the intervention and then monthly after the intervention completion- August 2020, September 2020
- Monitoring by ESS consultants:
 - Field visits by ESS consultants - at least once during the intervention - August 2020
 - Reports by ESS consultants to the PCU (M&E officer) - within two weeks after the field visit including annual reporting - September 2020 and December 2020
- Annual report by PCU (M&E officer) to Secretariat - January 15, 2020
- Annual report by the Secretariat to WWF US (as part of mid-year and final APRs) - 30 January 2021

3. Management of RAMSAR sites (waste management, campsites development and nature trails development)

- Monitoring by implementing entities:
 - At least weekly field visits - January 2020 until completion
 - Monthly reports prepared by implementing entities and submitted to ESS consultants - July 2020 until completion
- Monitoring by ESS consultants:
 - At least quarterly field visits by ESS consultants - January 2020
 - Quarterly reports by ESS consultants to the PCU (M&E officer) - June 2020, October 2020, APR 2020
- Bi-annual reports by PCU (M&E officer) to Secretariat- July 15, 2020, January 15, 2021
- Bi-annual reports by the Secretariat to WWF US (as part of mid-year and final APRs)- July 30, 2020, January 30, 2021

7. Capacity Need and Budget

Activities under this ESMP will be implemented by the BFL focal person, supervising engineer, and a contractor.

The budget for each of the activities is:

- (i) Construction of beat office: US\$71600
- (ii) Improvement of waterhole, salt licks, and enrichment plantation: US\$ 4761.9
- (iii) Management of RAMSAR sites: US\$ 43,500
 - Waste Management: US\$ 9,500
 - Campsite: US\$ 30,000
 - Nature trail: US\$ 4000

8. Consultation and Disclosure Mechanisms

This ESMP has been prepared in a participatory manner, and a consultation was carried out on December 12, 2019 in Wangdue Phodrang Dzongkhag to inform and get clearance from the Dzongkhag regarding the planned project activities, solicit their opinions, and enable them to question proposed mitigation measures.

The BC 2 informed the Dzongkhag about the construction, and sought their clearance. The Dzongkhag office provided clearance for construction on December 12, 2019. The Dzongkhag office did not have any issues and concerns regards to this construction so they provided clearance to construct.

The clearance is attached to this ESMP. The full English version of this ESMP, as well as an executive summary in Bhutanese, shall be disclosed on the website of MoAF, BFL and WWF, Bhutan Program. Hard copies of the ESMP should also be available at the PA Management Office and at the PCU Office.

9. Stakeholder engagement plan

The local community that resides in the vicinity of the planned BFL activities in BC 2 will be engaged throughout the implementation of these activities.

- For all construction activities (construction of offices and campsites) - one consultation meeting has to be organized during the intervention period, and subsequent consultations have to be held annually (these can be combined with consultations for other BFL or non-BFL activities).
- For activities that have no direct impact on communities (waste management and waterhole rehabilitation) - consultation meetings have to be organized once a year (can be combined with consultations for other BFL or non-BFL activities).
 1. Management of RAMSAR sites (campsite, waste management, nature trails) - August 2020, Gewog, but waste management consultation may depend on the COVID 19 situation
 2. Range office construction - December 12, 2019, and next consultation in December 2020
 3. Waterhole management - August 2020, Gewog

The BFL focal person has to submit the official minutes of consultation meetings (along with a list of participants, disaggregated by gender and age) to ESS consultants within one week after the completion of the consultation. The ESS consultants will submit the consultation reports to the PCU (M&E officer) one week after their receipt. The PCU (M&E officer) will report to the Secretariat on a semi-annual basis.



དཔལ་ལྷན་འབྲུག་གཞུང་།
 རྫོང་ཁག་བདག་སྐྱོང་། དབང་འདུས་ཡོན་ཏན་
 ས་འཇུག་དང་ ས་ཁྲིམས་སྡེ་ཚན།
 ROYAL GOVERNMENT OF BHUTAN
 DZONGKHAG ADMINISTRATION: WANGDUEPHODRANG
 Survey & Land Record Sector

ཡིག་ཡང་ དབུ་ལོ་བཟང་/ས་ཁྲིམས་(ཨེ-33)2074-76/4468

ཟླ་ཚེས་ 72/72/2076

3 དར་དགའ་ཚེས་ལྷོ།

ཆེད་འོག་ཡིག་ཚང་ལྷོ་བ་ དར་དགའ་།

དོན་ཅུ་ ཁྲིམས་དང་ས་ཁྲིམས་འཛིན་ བཅོ་བསྐྱུན་གྱི་དོན་ལུ་ ས་མཚམས་བཀའ་ལྟེ་ ས་ཁྲིམས་བཅུག་སྟོན་མི་དང་འབྲེལ་ བྱིན་ཆུ་བཅོག་ པའི་གནང་བ་སྟོན་དགོས་པའི་སྟེན་

དོན་འབྲས་ དེ་ནི་ དར་ནས་ ཡིག་ཡང་ ཨེ་ཟླ་ཨེ་ཟླ་72/2076-2020/732 ཟླ་ཚེས་ 26/70/2076 ཚན་མ་འབྱོར་ བའི་ནང་གསལ་ རྫོང་ཁག་ དབང་འདུས་ ཆེད་འོག་ དར་དགའ་ གཞུགས་ ཀ་མི་ཚུ་ ཁྲིམས་ཡང་ 494 རོ་སྟོན་ལག་ཁྱེར་ཡང་ - སའི་ རྩི་མིང་ རྒྱལ་སྡེ་ལས་ཁྲིམས་ཀྱི་ཡན་ལག་ཡིག་ཚང་ བདག་དབང་གི་དབྱེ་བ་ གཞུང་གཞུང་གི་ བཅོ་བསྐྱུན་གྱི་དབྱེ་བ་ སྤྱིང་ཁྲིམས་ རོག་2(RCC) ཀྱི་དོན་ལུ་ས་ཆ་ལྷན་ཚོགས་ཀྱི་བྱུང་བསྐྱུགས་ཡང་ 2666 ཟླ་ཚེས་ 73/04/2074 དང་ རྫོང་ཁག་ནས་ཡིག་ཡང་ 2020 ཚན་མ་ལྷན་ ས་ཚུ་དང་ ཆེད་འོག་གི་འགོ་འཁྲིད་པ་ཚུ་འཛིན་སྟེ་ རྫོང་ཁག་ས་ཁྲིམས་སྡེ་ཚན་ནས་གཞུགས་པ་བཀོད་པའི་ ས་ ཆ་དེའི་ ས་མཚམས་དོ་མཚམས་ཚུ་ ཚུལ་མཐུན་བཏོན་བྱེད་པ་མ་ཆད་ བཅོ་བསྐྱུན་གྱི་ས་ཁྲིམས་ཡང་འཇུག་ ས་འཇུག་གི་ས་ཁྲིམས་ལུ་ ཁྲིམས་མཐུན་བཅུག་སྟོན་མི་དེ་ ས་ཚུ་ དང་ མི་སྡེའི་འགོ་འཁྲིད་པ་ཚུ་གིས་ ལེགས་ཤོམ་སྟེ་ཕྱོགས་ལོ་ བདེན་ཉག་བཀོད་པའི་ལས་ བཏོན་ ས་ཚུའི་ཁྲུག་ལས་ རྫོང་ཁག་བཅོ་བསྐྱུན་གྱི་ཆ་ལས་ སྤྱིང་ཁྲིམས་ཀྱི་ས་ཁྲིམས་ཀྱི་གནང་བ་ (Technical sanction for drawing) ལེན་ཞིན་པ་ལས་ ཆེད་འོག་ནས་ ལམ་ལུགས་དང་འབྲེལ་ བཅོ་བསྐྱུན་འབད་ཆོག་པའི་གནང་བ་ཚུ་ སྟོན་དགོས་མ་ཆད་ ཁྲིམས་མཐུན་ བཅོ་བསྐྱུན་འབད་ མི་འབད་ བཟླ་ཉིན་འབད་ཞིན་པ་ལས་དང་ལེན་འབད་དགོས་ཡིན།

སའི་ཡང་	སའི་དབྱེ་བ་	ས་ཆའི་མིང་	ས་ཆུ་ ཨེ་ཟླ་
DGA-2597	གཞུགས་སྡེའི་ས་ཆ་	བཟང་ཁ་ཕར་བཟླ་	0-002

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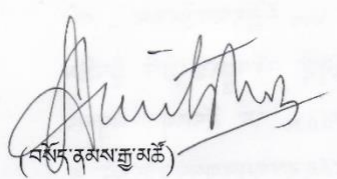
དཔལ་ལྷན་འབྲུག་གཞུང་།
 རྫོང་ཁག་པད་གསྐྱོང་། དབང་འདུས་ཡོ་བྲང་།
 ས་འཇུག་དང་ ས་ཁྲུལ་སྡེ་ཚན་།



ROYAL GOVERNMENT OF BHUTAN
 DZONGKHAG ADMINISTRATION: WANGDUEPHODRANG
 Survey & Land Record Sector

ས་ཇོའི་འགན་འཁུགས།

བཅོ་བརྒྱུན་ ག་ཅི་ར་འབད་རུང་ འབྲུག་གི་ས་ཇོ་བཅའ་ཁྲིམས་སྤྱི་ལོ་ ༢༠༠༢ ཅན་མར་དང་སྤྱི་གཞི་དང་འབྲེལ་ཏེ་ ས་ཇོ་ཁོ་ / མོ་ གི་རང་དབང་
 ཁྲུལ་ནང་ལུ་བཀོད་ཡོད་མི་དང་འབྲེལ་ཏེ་ ས་མཚམས་བཏོན་ཡོད་པའི་ས་ཁྲུལ་ནང་ལུ་བཀོད་ཡོད་མི་ནང་འཁོད་མ་གཏོགས་ གཞན་འབད་མ་ཆོག་པའི་ས་
 ཁོངས་ཚུ་དང་ གཞུང་ས་སྤྱོད་ས་ཚུ་ནང་ལུ་ཉ་མ་འཇུག་ ལྷ་ལས་མི་འབད་ཟེར་བའི་ཁས་བླངས་དང་འབྲེལ་ རྒྱལ་ལཱ་འབད་དགོཔ་དང་ གཞུང་གི་
 གནད་དོན་དེ་དང་མ་འབྲེལ་བར་ གཞན་གྱི་ས་ཆ་དང་ གཞུང་ས་ནང་ཉ་མ་འཇུག་འབད་སོང་པ་ཅིན་ འབྲུག་གི་ནགས་ཚལ་དང་ ས་ཇོ་བཅའ་བཅའ་
 ཁྲིམས་གཉིས་ཀྱི་དགོངས་དོན་དང་འབྲེལ་ཏེ་ ཉེས་ཚུ་དང་ཉེས་ཁྲིམས་ཚུ་ལྷག་ལྷག་དགོཔ་མ་ཆོད་ བཅོ་བརྒྱུན་ཚུ་ཡང་ཉོག་ས་བཤད་མེད་པར་བདེལ་བཤུབ་
 འབད་དགོཔ་འདི་ཅན་གསོ།


 (བཅོ་བརྒྱུན་ཚུ་མཆོད་)

རྫོང་པད་གསྐྱོང་།

- ༡༽ རྫོང་ཁག་པད་གསྐྱོང་འགོ་དཔོན་ དབང་འདུས་ཡོ་བྲང་། །སྤྱི་ཚུ་མཆོག་པའི་གནད་བསྐྱོད་དོན་ལུ་༽
- ༢༽ བཅོ་བརྒྱུན་གྱི་ལུ་པ་ལུ་མེད་ས་ཇོ་ ནགས་ཚལ་ལས་ཁུངས་ཀྱི་ཡན་ལག་ཡིག་ཆ་དང་ ལུ་
 །གོང་དོན་ལྟར་རྒྱལ་ལཱ་འབད་ཅི་དོན་ལུ་༽