

## **Bhutan for Life**

### **Environmental and Social Management Plan for Phrumsengla National Park (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;
- 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:

Phrumsengla National Park (PNP) has been implementing conservation activities for last one and a half decades. Much has been achieved and much has been learnt. The conservation is based on the five-year periodic conservation management plan.

PNP with an area of 905 km<sup>2</sup> is a jewel within the protected area system of Bhutan. With some of the last remaining stands of old growth fir and cool temperate broadleaved forests in the entire Himalayas, it is home to endangered species as Tiger, Red panda, musk deer and the Rufous-Necked hornbills. The park also has some of the most stunning trekking routes in Bhutan and is known to have some of the best bird watching spots in Asia.

Phrumsengla National Park (PNP) was known as Thrumshingla National Park (TNP) ever since it was notified in 1993 with an area of 768 km<sup>2</sup>. In 2000, the area of was extended towards north with inclusion of large track of suitable tiger habitats. The park was renamed as PNP in 2014 and the total area was revised to 905 km<sup>2</sup>. However, the physical features were not altered for a prime reason to signify and interlink the conservation paradigm with inherited local communities' culture.

The purpose of establishment of the park was to conserve the temperate ecosystem of central region in Bhutan's Protected Area (PA) landscape. The park was fully operationalized in 2000 with joint funding support from Royal Government of Bhutan (RGoB) and World Wildlife Bhutan Program. PNP is a 'linchpin' of Bhutan's Biological Corridor Complex (B2C2) landscape. The park is connected to Jigme Singye Wangchuck National Park (JSWNP), Royal Manas National Park (RMNP), Bumdeling Wildlife Sanctuary (BWS) and Wangchuck Centennial National Park (WCNP) through a string of Biological Corridors (Figure 1).

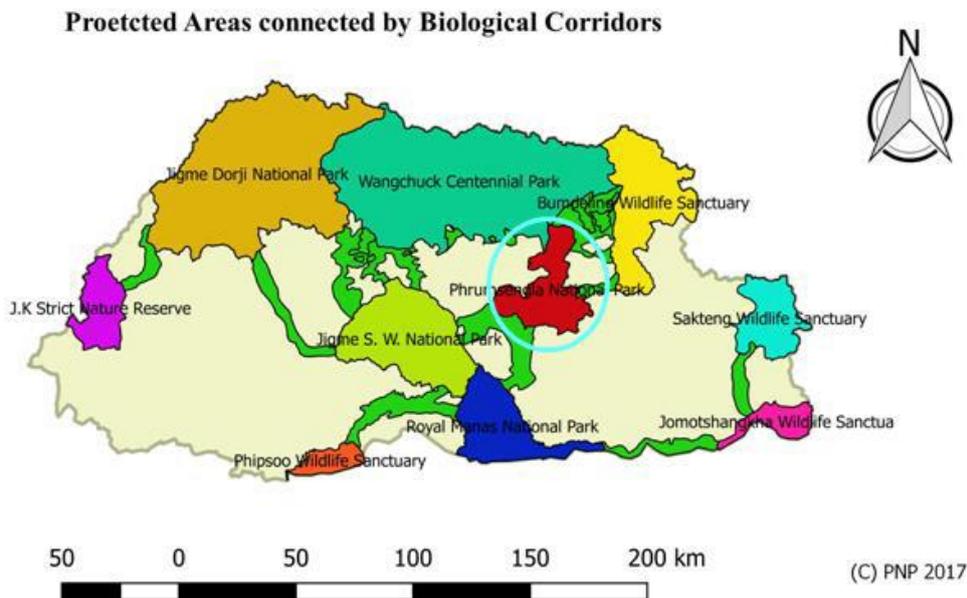


Figure 1 Location of Phrumsengla National Park

## 3. Planned activities in Year 2020

Activities that are planned in PNP in 2020 include the following:

- 1. Construction of range office and staff quarter:** It is a carry-over activity from 2019. It started in October 2019 and is planned for completion in 31<sup>st</sup> December, 2020. The area of the site is 2 acres and the sites were selected because it is relatively plain as shown in Figure

2 and do not require slope cutting. It falls outside the town area. There are 3 nos. of trees on the site and requires felling. The nearest community is a school which is 300 m from the site and is not affected by the construction activities. There are vegetation and forest between the school and the construction site which blocks the noise from the site. There are wetlands opposite to the construction site across the river called Muri chhu. The site already has an approach road as shown in the Figure 3 which will be used just for the construction site. There are no other users using the road and it is an unpaved road. There are 15 numbers of workers including operators who are mix of Indian and local people. They stay in temporary shelters at the construction site. The cost for the activity is USD 95,620.

Water for construction as well as for the workers consumption are used from the river as there are no alternative for water sources. Machineries used in the area are excavator, mixer, trucks for transportation.

The adverse impacts from the project are anticipated to be minimal. These are impacts, which are site-specific include:

- Change in vegetation by cutting down of trees;
- Extraction of Water resources for construction from Mori chhu;
- Water quality contamination that will occur due to waste water and sewage from construction sites;
- Wastes: generation of waste as a result of construction activities and from the worker;
- Occupational health and safety hazards, especially for construction workers and local communities.



Figure 2 Site for range office and staff quarter.



Figure 3 Approach road to the site

**2. Improvement of salt licks and waterholes:** It is restoration of waterholes and salt licks which includes clearing of trails for the wildlife around the salt licks and waterholes. It will also include removal of debris and snags from the water holes and salt lick sites as shown in Figure 4 and 5. The activity will be on the existing sites so the nature of the activity is of small scale.

The location has gentle slope covered by forest and there are no households settled at the identified sites for water holes and salt lick improvement activity. However, there are trails of yak herders who are aware of the sites and also support the forest officials in locating the sites for restoration of salt lick and water holes.

The activity planned date is from July 2020 to December 2020. There will be 5 numbers of workers (mainly forest officials and local yak herders who knows about the sites) and the duration will be 20 days including the travel to the sites and working at the sites. The budget proposed for the activity is USD 1510.

For the improvement of salt licks, waterholes, some of the potential environmental and social impacts are the following:

- Wastes from workers
- Increased poaching



Figure 4 and 5 waterholes location

**3. River protection wall:** It includes construction of wall along Muri chhu near Lingmethang range office at Saling in Mongar which is the site identified for construction. The site is below a highway and there will be no major disturbances to the natural habitat as there are no fish in the river. The length of the wall is 50m with approximately 1m breadth. The protection wall is built for protecting against flood occurrence. There will be use of 3000 litres of water per day from the river. Other materials used will be stones of approximately 100 MT, aggregates of 120 MT, sand of 120 MT and will be procured from Natural Resource Development Corporation Limited and 80 MT of cement from agent. There will be 15 numbers of workers for 60 days. The workers will be mix of Indian and local people and there will be a temporary shelter for the Indian workers. The proposed budget is USD 3565. The planned date of activity is October 2020-December 2020.

The river protection wall includes construction activities of the wall which have the following adverse impacts:

- Waste management during construction
- Water contamination as a result of construction
- Workers' health and safety

**4. Combined zonation:** It includes a total area of 905 km<sup>2</sup>. PNP will have four different zones - core zone, multiple-use zone, buffer zone and enclave zone. The boundary of respective zone will be demarcated clearly and peg will be fixed as per the National guidelines. The areas for zonation are Ura, Chumey, Shingkar, Tsamang, Saling, Jaray, Metsho which are part of Bumthang, Zhemgang, Mongar and Lhuntse. Planned date is from July 2020 to December 2020. The zonation area includes mix of settlements and conserved areas. The number of households included in the zonation are 25 in Sengor, 7 households in Bhim (within the boundary).

The activity includes two phases. First phase is consultation with the community for making zones of park area where the community have access to the natural resources and their user rights. All the settlements who are within the administrative boundary will also be consulted as they use the natural resources from the park. The second phase includes peg fixation as per the National guideline issued by National Land Commission. The proposed budget is USD 11,116.

There will be 8 number of workers who will be mainly forest officials for the duration of 1 month. The forest officials will be camping at the sites for the activity which is mainly eco-friendly.

The following is the impact for the activity:

- Wastes during the consultation meeting and peg fixation at the sites

**5. Maintenance of in-situ Rhododendron Garden at Thrumshingla:** The area for this activity is 22 hectares and the planned date is from July 2020 to December 2020. There will be 15 workers for 15 days and there is an existing camp belonging to PNP where the workers will stay during the working period. The proposed budget is USD 21769. The area is a Rhododendron garden and it belongs to the Department of Forests under PNP. The area is not used by the community but the garden has various species of rhododendrons and a walking trail of 1 km inside the garden. The garden is surrounded by the natural forest with the natural habitat of barking deer, wild boar, sambar etc. Since there will be workers working for 15 days, it is expected that there will be disturbance to the habitat of the animals which is expected to be minimal. The work will be carried out manually but due to the presence of workers, it is expected that the animals will be disturbed especially migration and breeding during the activities.

This activity has the following components:

- Maintenance of short walking trail which will be clearing and cleaning with no digging;
- Small wooden bridges (3 numbers of bridge- 5 to 8 meters length) from the locally available materials which will be pre-fabricated outside the park areas;
- Canopy (3 numbers of wooden canopy on 1 decimal land each);
- 1 number eco- friendly toilet;
- Replace of name tag for rhodo-dendron species (more than 15 species, paper material with glass cover); and
- Repair gate with wooden materials and signboards

The adverse impacts are the following:

- Wastes from construction activities and from workers.
- Disturbance to wildlife habitat, migration, breeding arising from construction (machines like saw should not be carried out inside the area).
- Occupational health and safety hazards, especially for construction workers and local communities.

#### 4. Environmental and Social Impacts and Mitigation Measures

##### 1. Construction of range office and staff quarter

Potential Impact	Impact scale	Proposed Mitigation measures	Responsible party	Cost (1 USD=70.5)
<b>Activity: Construction of range office and staff quarter</b>				<b>USD 995,620</b>
Cutting down of trees (3 big trees cut down)	Long term Major	<p><i>Pre-construction</i></p> <ul style="list-style-type: none"> <li>• Mark the trees which need to be cut down to ensure that damage to the vegetation is minimized.</li> </ul> <p><i>During construction:</i></p> <ul style="list-style-type: none"> <li>• Ensure that no accidental damage is caused to local vegetation.</li> </ul>	BFL focal person in [PNP] Engineer	No of saplings= 10 Costs Nu. 10 per saplings. Labour costs: Nu. 700 Total cost: Nu. 800 = USD 11.35

		<ul style="list-style-type: none"> <li>Major trees that are supposed to be cut shall be clearly marked, and only marked trees will be cut;</li> </ul> <p><i>After construction:</i></p> <ul style="list-style-type: none"> <li>Replant trees after construction. For 3 trees cut down, plant 5 – 6 trees will be planted in the area.</li> </ul>		
Extraction of Water resources for construction from Muri chhu including water quality contamination that will occur due to waste water and sewage from construction sites	Long term Minor	<p><i>Pre-construction:</i> requirements for appropriate measures to prevent water contamination should be included in the bidding documents, as a precondition for the contractor’s selection</p> <p><i>During construction:</i></p> <ul style="list-style-type: none"> <li>An environment-friendly toilet (e.g., pit toilet) and washing facilities should be made available, built with locally available materials</li> <li>Open defecation in the vicinity of project sites should be prohibited</li> <li>Throwing waste in water sources should be prohibited</li> <li>Possible hazardous waste (motor oils, vehicle fuels, lubricants) should be collected separately and authorized entity should be transporting and disposing the hazardous waste;</li> </ul> <p><i>After construction</i></p> <ul style="list-style-type: none"> <li>Pit toilets are dismantled and pits are covered</li> <li>Any waste is removed from the project site</li> </ul>	BFL focal (PNP)	Included in the bidding documents in the activity budget
<i>Waste:</i> generation of waste as a result of construction activities and from the workers	Short term Minor	<p><i>Pre-construction:</i> requirements for appropriate waste management should be included in the bidding documents, as a precondition for the contractor’s selection</p> <p><i>During construction:</i></p> <ul style="list-style-type: none"> <li>Identification of the different waste types at the project site (soil, food wastes from the workers, etc.);</li> </ul>	BFL focal person in [PNP] Contractor	Wastes collection: Nu. 10,000 = USD 141.84

		<ul style="list-style-type: none"> <li>• 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.</li> <li>• Proper containers/waste bins should be provided at the project site;</li> <li>• Dumping of waste on the sides of the road, on private land, or in other non-designated places should be prohibited.</li> <li>• Dumping waste shall be prohibited on fragile slopes, forests, religious or other culturally sensitive areas or areas where livelihood is derived;</li> <li>• Collection, transportation and final disposal of all waste should be undertaken regularly [Weekly]</li> <li>• Possible hazardous waste (motor oils, vehicle fuels, etc.) should be collected separately and authorized collector from Dzongkhag and transporter should be sub-contracted to transport and finally dispose;</li> <li>• All construction materials should be covered during the transportation to avoid waste dispersion;</li> <li>• The options for reuse/recycling of the generated waste streams should be taking into consideration (e.g. excavated soil, etc.).</li> <li>• Burning of construction waste should be prohibited.</li> </ul> <p><i>After construction:</i></p> <ul style="list-style-type: none"> <li>• All waste shall be removed from the project site.</li> </ul>		
Workers' health and safety	Short term Minor	<ul style="list-style-type: none"> <li>• Follow the workers' health and safety guidelines as per BFL guidelines.</li> <li>• Ensure regular health screening for the workers pre and during construction</li> </ul>	BFL focal point in [PNP] Contractor	Included in the bidding documents from the activity budget

		<p>activities.</p> <ul style="list-style-type: none"> <li>• Ensure that no underage workers, or children are engaged.</li> <li>• Decent work conditions, including an appropriate salary, working hours, accommodation and food for workers shall be provided to all workers.</li> <li>• 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, job assignment, termination of employment or retirement, and disciplinary practices.</li> <li>• A grievance mechanism for workers to raise workplace concerns should be in place</li> </ul>		
--	--	---	--	--

**2. Improvement of waterholes includes clearing of trails for the wildlife around the waterholes**

Potential impact	Impact scale	Proposed mitigation measures	Responsible party	Costs
<b><i>Activity: Water hole restoration</i></b>				<b>4,761.9</b>
Wastes from workers	Short term Minor	<ul style="list-style-type: none"> <li>• Proper containers/waste bins should be provided at the project site;</li> <li>• Dumping of waste in the waterholes, in the protected areas or in other non-designated places should be strictly prohibited.</li> <li>• Dumping of waste shall be prohibited on fragile slopes, forests, religious or other culturally sensitive areas or areas where livelihood is derived;</li> <li>• Collection, transportation and final disposal of all waste should be collected on a daily basis and not left in the protected areas</li> </ul>	BFL focal point in [PNP]	Included in the bidding documents in the activity budget.

		<ul style="list-style-type: none"> <li>Burning of construction waste should be prohibited.</li> </ul>		
Increased poaching	Short term Minor	<ul style="list-style-type: none"> <li>Increased frequency of patrolling of park authorities should be carried out during and after the waterhole restoration.</li> <li>Camera traps to be installed</li> </ul>	BFL focal point in [PNP]	Include in the activity budget

**3. River protection wall which includes construction of wall along Murichhu near Lingmethang range office which is the new site identified for construction.**

Potential impact	Impact scale	Proposed mitigation measures	Responsible party	Costs (USD 3565)
<i>Activity: River protection wall</i>				
Waste management during construction	Short term Minor	<p><i>Pre-construction:</i> requirements for appropriate waste management should be included in the bidding documents, as a precondition for the contractor's selection</p> <p><i>During construction:</i></p> <ul style="list-style-type: none"> <li>Identification of the different waste types at the project site (soil, asphalt, food, etc.);</li> <li>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.</li> <li>Proper containers/waste bins should be provided at the project site;</li> <li>Dumping of waste on the sides of the road, on private land, or in other non-designated places should be prohibited.</li> <li>Dumping waste shall be prohibited on fragile slopes, forests, religious or other culturally sensitive areas or areas where livelihood is derived;</li> <li>Collection, transportation and final disposal of all waste should be undertaken regularly [weekly]</li> <li>Possible hazardous wastes should be collected separately</li> </ul>	BFL focal point in [PNP] Contractor	Wastes collection: Nu. 18,000 = USD 255.32

		<p>and authorized collector and transporter should be sub-contracted to transport and finally dispose;</p> <ul style="list-style-type: none"> <li>• The options for reuse/recycling of the generated waste streams should be taking into consideration (e.g. excavated soil, etc.).</li> <li>• Burning of construction waste should be prohibited.</li> </ul> <p><i>After construction:</i></p> <ul style="list-style-type: none"> <li>• All waste shall be removed from the project site.</li> </ul>		
Water contamination as a result of construction.	Short term Minor	<ul style="list-style-type: none"> <li>• Avoid pouring construction materials into the river.</li> </ul>	BFL focal point in [PNP] Contractor	Included in the bidding documents in the activity budget
Workers' health and safety	Short term Minor	<ul style="list-style-type: none"> <li>• Follow the workers' health and safety guidelines as attached to the ESMP.</li> <li>• Ensure regular health screening for the workers pre and during construction activities.</li> <li>• Ensure that no underage workers, or children are engaged.</li> <li>• Decent work conditions, including an appropriate salary, working hours, accommodation and food for workers shall be provided to all workers.</li> <li>• 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</li> </ul>	BFL focal point in [PNP] Contractor	Included in the bidding documents in the activity budget

		retirement, and disciplinary practices.		
		<ul style="list-style-type: none"> <li>• A grievance mechanism for workers to raise workplace concerns should be in place.</li> </ul>		

**4. Combined zonation which includes a total area of 905 km<sup>2</sup>. PNP will have four different zones - core zone, multiple-use zone, buffer zone and enclave zone. The boundary of respective zone will be demarcated clearly and fix the zone pillars.**

Potential impact	Impact scale	Proposed mitigation measures	Responsible party	Cost (11,116)
<i>Activity: Combined zonation</i>				
Wastes during consultation and peg fixing	Short term Minor	<ul style="list-style-type: none"> <li>• Proper containers/waste bins should be provided at the consultation and the peg fixation sites;</li> <li>• Dumping of waste on the sides of the road, on private land, or in other non-designated places should be prohibited.</li> <li>• Dumping waste shall be prohibited on fragile slopes, forests, religious or other culturally sensitive areas or areas where livelihood is derived</li> </ul>	BFL focal person	Included in the bidding documents in the activity budget

**5. Maintenance of In-situ Rhododendron Garden**

Potential impact	Impact scale	Proposed mitigation measures	Responsible party	Costs
<i>Activity: Maintenance of garden</i>				

<p>Wastes: soil from the activities such as clearing of walking trails, canopy construction and waste from toilet construction activities and old tags.</p>	<p>Short term Minor</p>	<ul style="list-style-type: none"> <li>• Proper containers/waste bins should be provided at the project site;</li> <li>• Dumping of waste in the protected areas, on the sides of the road, on private land, or in other non-designated places should be strictly prohibited.</li> <li>• Dumping of waste shall be prohibited on fragile slopes, forests, religious or other culturally sensitive areas or areas where livelihood is derived;</li> <li>• Collection, transportation and final disposal of all waste should be collected on a daily basis and not left in the protected areas</li> <li>• Burning of construction waste should be prohibited.</li> </ul>	<p>BFL focal</p>	<p>Included in the bidding documents in the activity budget</p>
<p>Disturbance to wildlife habitat, migration, breeding</p>	<p>Short term Minor</p>	<ul style="list-style-type: none"> <li>• Ensure careful siting, alignment, design of rig sites, and/or timing of works (seasonal)</li> <li>• Avoid using heavy machinery</li> <li>• Avoid soil excavation and noise disturbance to minimize impact on natural habitats</li> </ul>	<p>BFL focal (PNP)</p>	<p>Included in the activity</p>
<p>Workers' health and safety</p>	<p>Short term Minor</p>	<ul style="list-style-type: none"> <li>• Follow the workers' health and safety guidelines including first aid kits and safety gears such as boots and work wear.</li> <li>• Ensure that no underage workers, or children are engaged.</li> <li>• Decent work conditions, including an appropriate salary, working hours, accommodation and food for workers shall be provided to all workers</li> <li>• 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, job assignment,</li> </ul>	<p>BFL focal (PNP)</p>	<p>Safety gears and first aid kit: Nu. 24,000 = USD 340.43</p>

		<p>promotion, termination of employment or retirement, and disciplinary practices.</p> <ul style="list-style-type: none"> <li>• A grievance mechanism for workers (and their organizations, where they exist) to raise workplace concerns.</li> </ul>		
--	--	---	--	--

### 5. ESMP Implementation Arrangements

The implementation of project activities will be carried out by the BFL focal person in PNP. 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 PNP 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 PNP’s 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 PNP 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.

PNP’s PA is also fully responsible for the compliance of all external contractors and service providers working in the PNP 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 and staff quarter

- Monitoring by implementing entities:
  - At least weekly field visits (Once a month) (approval from the Chief)

(Once in a week from field office and once in a month by BFL focal, PNP. Monthly report on the progress, constraints, complains, etc. shall submit to ESS consultants at the end of every month)

Date	Location	Report
January, 2020	Mongar (PNP)	Implementation
January - November, 2020	Mongar (PNP)	Monitoring every month
December, 2020	Mongar (PNP)	Completion report

- Monthly reports prepared by implementing entities and submitted to ESS consultants

Date	Location	Report
January, 2020	Mongar (PNP)	Implementation report
March, 2020	Mongar (PNP)	Quarterly report
June, 2020	Mongar (PNP)	Quarterly report
September, 2020	Mongar (PNP)	Quarterly report
December, 2020	Mongar (PNP)	Completion report

- Monitoring by ESS consultants:

- At least quarterly field visits by ESS consultants

Date	Location	Report
December, 2019	Mongar (PNP)	Inspection and monitoring
June, 2020	Mongar (PNP)	Monitoring
September, 2020	Mongar (PNP)	Monitoring
December, 2020	Mongar (PNP)	Completion report

- Quarterly reports by ESS consultants to the PCU (M&E officer)

Date	Location	Report
December, 2019	PCU	Annual progress report
July, 2020	PCU	Semi-Annual progress report
December, 2020	PCU	Annual progress report

- Bi-annual reports by PCU (M&E officer) to Secretariat

Date	Location	Report
January 15, 2020	BFL	Annual progress report
July 15, 2020	BFL	Semi-Annual progress report
January 15, 2021	BFL	Annual progress report

- Bi-annual reports of the Secretariat to WWF US (as part of mid-year and final APRs)

Date	Location	Report
January 31, 2020	WWF	Annual progress report
July 31, 2020	WWF	Semi-Annual progress report
January 31, 2021	WWF	Annual progress report

## 2. Waterhole and salt lick management:

- Monitoring by implementing entities:

Date	Location	Report
July 2020	PNP	Implementation
August - November 2020	PNP	Implementation and Monitoring
December, 2020	PNP	Completion report
*Increased SMART patrolling as part of their workplan after the completion of the activity.		

- Reports by the implementing entities submitted to ESS consultants

Date	Location	Report
August, 2020	PNP	Implementation report
December, 2020	PNP	Completion report
*Increased SMART patrolling as part of their workplan after the completion of the activity		

- Monitoring by ESS consultants:

- Field visits by ESS consultants - at least once during the intervention;

Date	Location	Report
August, 2020	PNP	Implementation

- Reports by ESS consultants to the PCU (M&E officer) – within two weeks after the field visit and for semi-annual reporting

Date	Location	Report
August, 2020	PCU	Implementation report
December, 2020	PCU	Annual report

- Annual report by PCU (M&E officer) to Secretariat

Date	Location	Report
15 January, 2021	BFL	Annual Progress Report

- Annual reports by the Secretariat to WWF US (as part of mid-year and final APRs)

Date	Location	Report
31 January, 2021	BFL	Annual Progress Report

### 3. River Embankment construction to protect from flooding:

- Monitoring by implementing entities:

- Field visits - at least monthly (Once in a week from field office and once in a month by BFL focal, PNP. Monthly report on the progress, constraints, complains, etc. shall submit to ESS consultants at the end of every month)

Date	Location	Report
October, 2020	Mongar (PNP)	Implementation
October - December, 2020	Mongar (PNP)	Monitoring every month
December, 2020	Mongar (PNP)	Completion report

- Monthly reports by the implementing entities submitted to ESS consultants

Date	Location	Report
October, 2020	Mongar (PNP)	Implementation report
October - December, 2020	Mongar (PNP)	Monitoring and status report
December, 2020	Mongar (PNP)	Completion report

- Monitoring by ESS consultants:

- Field visits - at least twice during the construction activities.

Date	Location	Report
October, 2020	Mongar (PNP)	Implementation
December, 2020	Mongar (PNP)	Monitoring and progress status

- Reports by ESS consultants to the PCU (M&E officer) – quarterly reports

Date	Location	Report
October, 2020	PCU	Implementation report

December, 2020	PCU	Mid-term review
----------------	-----	-----------------

- Annual report by PCU (M&E officer) to Secretariat

Date	Location	Report
15 January, 2021	BFL	Annual Progress Report

- Annual report of the Secretariat to WWF US (as part of mid-year and final APRs)

Date	Location	Report
31 January, 2021	WWF	Annual Progress Report

#### 4. Combined zonation:

- Monitoring by implementing entities:

- Field visits - at least once during the intervention by implementing entities, and then three months after the intervention.

Date	Location	Report
July, 2020	PNP	Consultation
October, 2020	Mongar (PNP)	After consultation
December, 2020	Mongar (PNP)	During peg fixing

- Reports submitted by the implementing entities to ESS consultants once after the completion of the intervention, and then three months after the intervention

Date	Location	Report
July, 2020	PNP	Consultation report
October, 2020	Mongar (PNP)	After consultation report
December, 2020	Mongar (PNP)	During peg fixing report (zonation map)

- Monitoring by ESS consultants:

- Field visits– at least once during the intervention

Date	Location	Report
July, 2020	PNP	Consultation

- Reports submitted once by ESS consultants within a week after the field visit, and then for semi-annual reporting to the PCU (M&E officer)

Date	Location	Report
August, 2020	PCU	Monitoring report
December, 2020	PCU	Annual Progress Report

- Reports by PCU (M&E officer) to Secretariat

Date	Location	Report
15 January, 2021	BFL	Annual Progress Report

- Reports of the Secretariat to WWF US-bi-annually, as part of mid-year and final APR

Date	Location	Report
31 January, 2021	WWF	Annual Progress Report

#### 5. Maintenance of In-situ Rhododendron Garden

- Field visits - at least once during the intervention by implementing entities, and then three months after the intervention.

Date	Location	Report
July, 2020	PNP	Implementation

October, 2020	PNP	Monitoring
December, 2020	PNP	Completion

- Reports submitted by the implementing entities to ESS consultants once after the completion of the intervention, and then three months after the intervention

Date	Location	Report
July, 2020	PNP	Implementation report
October, 2020	PNP	Status report
December, 2020	PNP	Completion report

- Monitoring by ESS consultants:

- Field visits– at least once during the intervention

Date	Location	Report
August, 2020	PNP	Implementation report

- Reports submitted once by ESS consultants within a week after the field visit, and then for semi-annual reporting to the PCU (M&E officer).

Date	Location	Report
August, 2020	PCU	Monitoring report

- Reports by PCU (M&E officer) to Secretariat

Date	Location	Report
15 January, 2021	BFL	Annual report

- Reports of the Secretariat to WWF US-bi-annually, as part of mid-year and final APR

Date	Location	Report
31 January, 2021	WWF	Annual report

## 2. Capacity Need and Budget

Activities under this ESMP will be implemented by the BFL focal person, supervising engineer, and a contractor that will employ workers as mentioned in the contract agreement.

The budget for each of the activities is:

1. Construction of Range Office: USD 95,620
2. Restoration of waterholes and salt licks: USD 4,761
3. River bank protection: USD 3,500
4. Combined zonation: USD 10,000
5. Maintenance of in-situ garden: USD 33,000

A separate budget of USD 644.68 will cover the implementation of the ESMP mitigation measures.

## 3. Consultation and Disclosure Mechanisms

This ESMP has been prepared in a participatory manner, and a community consultation was carried out on the construction of office on 15/7/2017 and 20/7/2017 to inform local communities regarding the planned project activities, solicit their opinions, and enable them to question proposed mitigation measures. The main discussion was about the land acquisition and social clearance from Saling Geog Office. It was discussed and agreed that the office construction of PNP on the site called Tortorlathang will benefit the community in getting access to the services. The clearance is attached in Annex 1. There were no minutes attached but the office has the clearance from the Gewog Office. However, henceforth for all

the consultation meetings the details of minutes of meeting will be kept by the BFL focal as per the requirement of this ESMP.

The detailed minutes of the consultation meeting are attached to this ESMP, along with a full list of participants (disaggregated by gender and age).

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.

#### 4. Stakeholder Engagement Plan

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

1. Construction of office building and staff quarter
  - Dates of consultation: 15/7/2017 and 20/7/2017
  - Agenda: Land acquisition and social clearance
  - Location: Saling Geog Office
2. Waterholes and salt lick restoration
  - a. Dates of consultation: August 2020
  - b. Agenda: Conservation plans and as part of BFL activities
  - c. Location: PNP
3. River bank protection
  - a. Dates of consultation: October, 2020
  - b. Agenda: Information to Gewog
  - c. Location: Saling
4. Combined zonation
  - a. Dates of consultation: August 2020 full month
  - b. Agenda: To collect information on traditional right (on Tseri, Tsamdro and other resources) and cattle migration routes
  - c. Location: Ura, Chumey, Shingkar, Tsamang, Saling, Jaray, Metsho geogs
5. Maintenance of garden is in the existing structure,
  - a. Dates of consultation: August 2020
  - b. Agenda: Conservation plan and as part of BFL activities
  - c. Location: PNP

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.

