

## **CEPF Final Completion and Impact Report**

<b>Organization's Legal Name:</b>	Fauna & Flora International - HQ
<b>Project Title:</b>	Building capacity to protect Besh Aral's meadows, marmots and megafauna, Kyrgyzstan
<b>Grant Number:</b>	CEPF-110756
<b>Hotspot:</b>	Mountains of Central Asia
<b>Strategic Direction:</b>	1 Address threats to priority species
<b>Grant Amount:</b>	\$148,578.05
<b>Project Dates:</b>	November 01, 2020 - February 28, 2023
<b>Date of Report:</b>	April 30, 2023

### **IMPLEMENTATION PARTNERS**

Fauna & Flora International's Kyrgyzstan office was the lead implementing organization. We coordinated all activities listed in the proposal to CEPF which were all designed to build capacity of the Besh Aral reserve to strengthen its management and engage effectively and equitably with actors operating in the wider landscape. We played a direct role in coordinating field surveys with the reserve, organized all trainings, procured equipment, facilitated involvement of national and international experts and consultants in the project and helped to broker stronger relationships between the reserve, local communities, pasture committees and the mining sector.

Besh Aral State Nature Reserve was the primary beneficiary and partner of the project and played a role in nearly every activity completed. They have adapted and increased the extent of their monitoring and patrolling effort as a result of the project and are using equipment and trainings provided to improve effectiveness of their monitoring work, which they are increasingly taking on independently with FFI. The reserve team co-organized community meetings, which they now plan to lead independently from FFI, as part of their ambitions to improve community engagement.

Other key collaborators involved in the project include:

Local communities, especially Ak-Tash, Jany-Bazar and Kurulush.  
Terek Say, Chatkal and Kok Serak Pasture Committees  
The Institute of Zoology in Kyrgyzstan, Institute of Zoology in Uzbekistan and Institute of Zoology Kazakhstan  
Ministry of Natural Resources, Ecology and Technical Supervision  
Chatkal Biosphere Reserve  
IUCN Small Mammals Specialist Group  
University of Central Asia  
Kyrgyz National Agrarian University

UNDP  
 The Snow Leopard Trust  
 Mining companies, especially Golden Wings and Eti Bakyr Terek Sai  
 Various independent consultants.

## CONSERVATION IMPACTS

Planned Long-Term Impacts: 3+ years (as stated in the approved proposal)

Impact Description	Impact Summary
<p>Conservation status of Menzbier’s marmot improves within five years of project completion compared to new baseline established in 2022 (eg if new IUCN Red List assessment indicates the species is Endangered, we would aim for the species to be Vulnerable by 2027).</p>	<p>Our re-assessment of Menzbier’s marmot’s IUCN status (completed Feb 2023) indicates that it should remain as Vulnerable, although new criteria were applied due to a confirmed decrease in its distribution range. Through this process, the main threat to the species was identified, and potential activities to address those threats were outlined in the regional and national conservation action plans. A least in Kyrgyzstan, there is evidence that recent conservation measures have been successful at stabilizing the population size of the species (now at around 16,000; higher than earlier estimates), with reduced threats from grazing pressure.</p> <p>While the data collected and actions put in place by our project give some reasons for optimism, the long term future of the species still hangs in the balance. We are aware that predicted further habitat loss for the species across its range, most likely due to habitat loss from mining and road development, could push the species towards Endangered status in the coming decade. To avoid this, we need to maintain effective protection of the core marmot populations across its range, and also mitigate against further loss of habitat.</p>
<p>Evidence of habitat recovery in wildflower meadow habitat within Besh-Aral and key areas outside of the reserve within five years of project completion (evidenced by increased abundance of indicator species)</p>	<p>Inside Besh-Aral reserve, our botanist noted the recovery of meadows and increasing key wildflowers such as wild tulips, wild onions, Trollius altaicus and other grassy vegetation. This is due to decreased grazing pressure in recent years. With continued protection, the reserve’s meadows will recover and sustain high diversity of plant species which is now &gt;400 vascular plants.</p> <p>Outside the reserve, where grazing pressure is high and increasing; recovery of pastures depends on sustainable pasture management in the longer term. Pasture experts identified high pasture degradation in the Chatkal district, especially in lowland areas.</p>

Impact Description	Impact Summary
	<p>In Kok-Serek pasture committee’s meadows, pasture experts observed the presence of Menzbier’s marmot at an altitude of 3146 masl., and assessed the state of their habitat. Festuca grass covered 1/3 of the pastures and was used as an indicator species of pasture state. According to the informal talks with local people, and experts’ assessment, pastures are degraded and were subject to sheep grazing in the past. However nowadays, due to more people being employed in mining companies in the valleys, pastures are not used as intensively as they used to do and have good potential for recovery.</p>
<p>Besh-Aral State Nature Reserve’s management and rangers have increased capacity to protect the reserve and mitigate against future threats (evidenced by ongoing increases in METT score for five years following the end of the project).</p>	<p>We have coordinated with UNDP on the planned METT assessment for the reserve, as they were leading on working to conduct METT assessments in protected areas across the Western Tien-Shan. Therefore, we decided to avoid duplication of efforts and used their data. UNDP completed METT assessment of Besh-Aral reserve in 2021 (around one year into our project) and results indicated that it had an overall score of 69 (up from 48 in a previous assessment completed in 2019). Their assessment show that the reserve scored strongly in areas related to infrastructure, equipment, and management, but still scored weakly in areas related to community engagement, staff turnover and scientific capacity. We opted not to carry out another METT assessment in 2022, due to anticipated interview fatigue for the reserve team. Instead, we are planning to collaborate with UNDP, who is planning to do repeated assessment later in 2023, to see if there are further improvements in the reserve’s capacity, two years after the 2021 assessment. In line with the desired long term impact, we hope to see continued increases in METT scores for the reserve in coming years.</p>

Planned Short-Term Impacts: 1 to 3 years (as stated in the approved proposal)

Impact Description	Impact Summary
<p>112,018 hectares of Besh-Aral reserve are under better management as evidenced by increased METT score (currently 48%).</p> <p>Our project is unable to influence all aspects of the reserve’s current METT issues (e.g number of staff, annual budget etc) in the short-term. Relevant METT issues we expect to support increased scores for include Issue 10 (Protection systems); Issue 11 (Research); Issue 14 (Staff Training); Issue 18</p>	<p>As mentioned above, METT score has increased from 48 to 69 and we will continue to track this post project. Beyond this assessment, we highlight areas where we have observed improvements in management:</p> <p>Increased patrolling effort. Besh-Aral’s rangers spent more time in the field, 7-14 days per month patrolling, compared to 4 to 7 days pre project. The project helped them to make protection more</p>

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(Equipment) and Issue 24 (Local communities).	<p>effective by targeting patrolling to highly priority areas identified through surveys.</p> <p>Strengthened equipment. We recognized pre-project that the rangers lacked equipment not only to aid monitoring work, but also basic clothing and protective gear needed to make patrolling safe and comfortable in areas where extreme weather is common. By providing improved equipment, we enabled rangers to spend longer time on patrol in remote areas, and thus ensure more sustained protection for marmots and their habitat.</p> <p>Strengthened skills and knowledge of the reserve staff (including in areas related to field surveys, monitoring, use of camera traps, legislation, community engagement)</p> <p>Initiated and strengthened dialogue with local communities.</p> <p>Improved pay for the reserve team (salary of 6,000 to 7,000 som (\$80-90) at project start; 5,000 to 20,000 som \$190-\$230 by project end).</p>
26 rangers from Besh-Aral State Nature have improved monitoring and protection capacity by month 11. Ongoing application of news skills and equipment will be evaluated in month 19.	<p>As described and detailed in the deliverables section, the Besh Aral rangers participated in 5 different training sessions over the course of the project covering topics related to monitoring, use of camera traps, patrolling, legislation and health and safety.</p> <p>We have since observed many encouraging signs that these new skills are being effectively applied. Rangers are demonstrating competencies required for camera trap installation and GPS use in the field. They are now conducting new monitoring techniques independently and are seeing the first results of their work. In November 2022, rangers captured bears, lynxes, snow leopards, wolves, wild boars, roe deer, and foxes on camera traps installed in the Arap and Barkyrak sections of the reserve. Rangers then re-installed the camera traps in the other parts of the reserve, and they expect more images in spring 2023.</p>
From month 11, there is increased protection for priority areas of Menzbier’s marmot within Besh-Aral State Nature reserve.	<p>Almost all Menzbier’s marmot populations inside the reserve have been recorded with a distribution map prepared. According to the available data Menzbier’s marmots occupy about 4104 ha inside the reserve. Most of the populations are away from the bordering territories with villages, and not directly threatened. For example, the closest marmot population to Ak-Tash village is at 40km distance, or one day travelling by horse.</p>

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	<p>Throughout the project, the reserve’s rangers patrolled all existing marmot populations in the Ken-Bulun and Arap/Barkyrak sections and did not record any poaching cases. They also reported prolonged patrolling (from 7 days to 14 days in one patrolling, compared to 4-10 days before) due to better equipment and materials as high-quality tents and sleeping bags, horseshoes, saddles, and insulation of the outpost in the Ken-Bulun section. For example, rangers from the Barkyrak section had been able to visit populations near the Uzbek border using equipment provided during the project, which they have not visited for the last ten years. They were surprised to see flourishing populations in that part of the reserve. Another example is from the Ken-Bulun section of the reserve, where the reserve’s scientific employees reported the highest density of marmots.</p>
<p>At the end of the project, the Sandalash section of Besh-Aral (around 40,000 hectares of the reserve’s territory) remains protected and has not been conceded to a mining company, and a strong case to maintain its protected status will have been made with the State Agency for Environmental Protection and Forestry.</p>	<p>At end of the project, the Sandalash section was still part of the Besh-Aral reserve and remains under protection. There is a government decree №130 to exchange part of reserve's protected lands within Sandalash section with the lands that are outside of the reserve and not under protection. Although this has not yet been enforced, we understand that this is becoming increasingly likely, and that around 200ha of the reserve will likely be lost to development.</p> <p>This is a very difficult threat to address directly, and the reserve will likely be forced to accept this loss, and will work with govt to identify mitigation options.</p> <p>We have also shared and will continue sharing project data with the Ministry of Natural Resources, Ecology and Technical Supervision.</p> <p>Anecdotally, we know there is an ongoing additional threat from hydropower exploration within the reserve's territory. We hope that project data on a globally threatened and nationally protected species can be a powerful tool to support the reserve and the Ministry of Natural Resources, Ecology and Technical Supervision in work to mitigate any future attempts to degazette parts of the reserve.</p>
<p>Support for the Besh-Aral reserve has increased amongst the nearest 3 villages in the local community by Year 2.</p>	<p>Between two stakeholder engagement meetings completed (one in each project year) we noted some encouraging signs of increased local support for conservation in the reserve. The Year 1 meeting revealed significant distrust between the reserve</p>

Impact Description	Impact Summary
	<p>and the communities, although the meeting in Year 2 involved much more constructive dialogue (including local activists in the villages offering to work with the reserve to prevent illegal activities). This remains a work in progress and there is much to do to further improve trust and relationships between stakeholder groups. However, activities completed by the project, including role play games, film showings and volleyball tournaments between reserve staff and communities, have all helped to initiate and foster much more constructive dialogue and have helped to defrost relationships.</p>
<p>By month 11, &gt;40 local people will be able to voice concerns and issues with the reserve, will have a better understanding of the reserve’s objectives, activities and boundaries and will be better equipped to explore solutions to pasture and natural resource management. An agreement to maintain regular meetings and communications between reserve staff and community members post-project will be in place by project end.</p>	<p>We helped the reserve to establish an annual stakeholder engagement forum and this was ran in both 2021 and 2022 (see more detail in the Deliverable section). While there is no formal or written agreement to continue this in 2023, the reserve has indicated to FFI a willingness to continue regular community engagement, having observed the benefits of these in the CEPF project. Meantime, we know reserve staff and some community members are now more in active informal communication, sharing information with each other over Whatsapp.</p>
<p>By month 10, clear recommendations for reducing impacts of grazing on critical areas for Menzbier’s marmot will have been developed and will have been adopted by pasture committees by month 17.</p>	<p>Grazing in the reserve was low, although we observed some incidences in the boundary areas. Outside of the reserve, the picture is different on the two sides of the reserve. In the Terek-Say/Kok Serak area, grazing is low and pasture conditions good (with mining a more significant threat) and in Chatkal, grazing is high with evidence of pasture degradation, especially near the villages. While grazing pressure is not over-spilling significantly into the reserve, there is a need to proactively address this threat to avoid a scenario where livestock is increasingly taken into the reserve area. Grazing pressure appears to be concentrated in the lower elevation ‘winter pasture’ areas near villages, with grazers not making use of the higher and more remote ‘summer pastures’, mostly due to reduced accessibility (e.g., degradation of tracks, and bridges) or reluctance to spend time grazing livestock far from villages.</p> <p>A feasibility study was completed across the pasture areas and we completed a report outlining recommendations for sustainable use (including how to enable greater use of summer pastures). The Head of Kok Serak Pasture Committee (which overlaps with marmot populations) committed to work with the local pasture users in 2023 to start adoption of these recommendations.</p>

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<p>By the end of the project, at one mining company make commitments to mitigate their operations in the landscape surrounding Besh-Aral in order to protect remaining Menzbier's marmot habitat outside of Besh-Aral</p>	<p>Actions taken to understand mining activities, identify priority mining companies and engage with these companies is described in the Deliverables section.</p> <p>Of three priority companies we identified, two agreed to meet with FFI and take part in round table discussions on biodiversity impacts of their operations.</p> <p>Although two mining companies participated and shared their suggestions and recommendations for biodiversity conservation in the area, none of them officially agreed to commit to mitigating their operations around the Besh-Aral reserve.</p> <p>This still represents a positive first step with engagement of these companies, and provides a strong platform for us to work towards more specific agreements to mitigate their operations.</p>
<p>By the end of the project, stakeholders across Kyrgyzstan, Kazakhstan and Uzbekistan have developed a plan for species conservation beyond the project timeframe, informed by an updated IUCN Red List Assessment.</p>	<p>Based on the IUCN re-assessment draft, the regional action plan for conservation of the species was developed and is currently under revision of members of a regional working group on Menzbier's marmot. The plan includes actions such as: creation of micro-reserves in priority sites in Uzbekistan, Kazakhstan and Kyrgyzstan, regulate presence and day-time activity of herder's dogs on pastures, improve and regulate grazing practice, develop a unified method for marmot census in all countries.</p> <p>In addition to the regional conservation plan, local marmot specialists together with Besh-Aral rangers have developed the national plan for the conservation of Menzbier's marmot in Kyrgyzstan for 2023-2028. The reserve's management agreed to implement their conservation activities according to the conservation plan.</p>

**Unexpected impacts (positive or negative)?**

It was very positive and slightly unexpected to see that Menzbier's marmot numbers in the reserve are in good shape and may even be increasing in number. We expected that the population in the reserve may be in decline but, assuming the reserve can maintain strong management, the species should be well placed to survive and thrive in Besh Aral. The field team was also pleasantly surprised with the abundance of large mammals and birds observed during the surveys (with direct visual observations of bear and ibex very common). Such encounters are not so easy in other reserves, and it is likely that the reserve represents a very unique and important wilderness area in the country.

An unexpected negative factor has been the increased interest to carry out development within the reserve. It looks likely that the government will enforce a decree to remove 200 ha from the reserve in the coming years to support a new road. While the overall area is a

relatively small % of the reserve's territory (around 0.2%) it will likely have large secondary impacts and will impact movement of animals in the reserve, with the area in question known to be of importance to bears and wolves. There is a second concern that hydro power development may also be allowed in the reserve in the coming years and that this would have significant direct and indirect physical impacts on the reserve's biodiversity, not least several endemic fish and invertebrate species found in the Chatkal river. Whilst it is very challenging to directly address these issues, it is now more important than ever to build the profile of the reserve, demonstrate its importance and help engender public and political support for its long term protection.

## **PROJECT RESULTS/DELIVERABLES**

### **Overall results of the project:**

By working with the Besh Aral State Nature Reserve, local communities and with other stakeholders operating across the landscape, the project has achieved four main results.

Firstly, we have significantly improved understanding on how to protect the biodiversity found within Besh Aral, including our flagship species, Menzbier's marmot as well as other important megafauna, birds and plant diversity. Despite its global importance, the reserve has received very little research or conservation attention in the last 20 years. For example, the most recent surveys for the threatened Menzbier's marmot were carried out in 2002. Our project collaborated with national and regional experts to carry out the first comprehensive biodiversity surveys in 20 years. Our data indicate there are currently around 16,145 Menzbier's marmots in the Besh Aral area (also representing the total population size for the species in Kyrgyzstan). As this is likely the first reliable estimate of population size for the species in Kyrgyzstan, it's difficult to draw strong conclusions on exactly what level of change this represents compared to past figures. However, it does likely indicate that the population is healthy, stable and possibly even increasing compared to earlier years. Earlier estimates, while not 100% comparable, indicated that there were around 12,000 marmots in the same areas in 2002. Our fieldwork also confirmed the importance of the reserve for bears, wolves, lynx, snow leopards and various raptor species, and more than 400 plant species were documented in the reserve. The results are being used in several ways: they are informing patrolling routes in the reserve, they are being used in media to highlight the global importance of the reserve (important, given emerging threats to the reserve from mining) and are also being used to inform a global understanding of the conservation requirements for the species. To that end, the project also submitted an updated IUCN red list assessment for the species, and worked with actors in Uzbekistan and Kazakhstan to develop a regional action plan.

Secondly, and benefiting from new information yielded above, management of the Besh Aral Nature Reserve has significantly improved. In part thanks to new equipment and protective clothing provided through CEPF funding, the reserve team are now able and motivated to spend much longer on patrol (on average twice the number of days each month compared to pre project), reaching areas of the reserve of high biodiversity value but which were absent from earlier patrol routes. All 26 rangers have received training, including in topics related to monitoring, fieldwork, patrolling and health and safety, and we are observing that the ranger teams are now applying many of these skills independently. The METT score for the reserve has increased (from 48 to 69) and we have observed increased pride and motivation amongst the reserve's staff team. Although not a direct result of this project, it's also pleasing to see that the reserve's team salaries have increased, and this should help to maintain a motivated team, and reduce the recurring issue of high staff turnover.

A third important result is improved dialogue and cooperation with local stakeholders found around the reserve. The project helped to set up a stakeholder forum in Year 1 to help promote greater dialogue, and in the first meeting we observed significant tension, mistrust and misunderstanding between the reserve and local communities. Recognizing that this is not a problem that can be solved over night, we have worked to build greater understanding and trust in both directions. We developed and conducted role play games related to reserve and pasture management (giving stakeholders the opportunities to see each others' perspectives), produced and screened films about the reserve, distributed outreach materials at project start, and calendars in Year 2, and also organized a volleyball tournament to enable to reserve staff and communities members to come together in less formal settings. Whilst there remains work to do, we are observing first signs of some warming of relationships, and we have also observed that community members have taken it upon themselves to increase communication with the reserve team, with some now sharing information with the reserve team on whatsapp on environmental concerns they are facing. The reserve now also place greater importance on community engagement work and have expressed their desire to maintain and build such work in future years.

Finally, the project took strong first steps to understanding and mitigating wider threats in the landscape. We developed a baseline on the conditions of pasture lands surrounding the reserve and provided recommendations to three different Pasture Committees on how to implement more sustainable harvest management (including greater focus on effective rotation between winter and summer pastures). We identified a clear overlap between Kok Serak Pasture Committee and one population of marmots (500 to 600 individuals) found outside of the reserve. The head of that committee has already agreed to work with pasture users to adopt and implement recommendations provided by the project. These include minimizing use of sheepdogs in the areas where marmots are present and also reducing grazing pressure in specific areas at key times of year. We also developed a strong understanding on the overlap of mining sector operations and secondary impacts with the reserve. Operations were mapped and the 3 companies whose operations are most likely to indirectly impact marmot populations and/or have other significant biodiversity impacts were identified. Two of these companies came to a round table organized by the project where they contributed ideas and expressed willingness to support stronger conservation initiatives in the landscape. Whilst no formal agreement has been made on next steps, given the challenges of engaging the mining sector in Kyrgyzstan, these first discussions represent a very positive first step.

In all, with support from CEPF, the reserve finds itself in much stronger management position to ensure long term protection of its biodiversity, and now has productive working relationships with the major stakeholders operating in the landscape who affect and are affected by the reserve's management. Profile for the reserve and its biodiversity has been significantly boosted. This is of vital importance as the reserve likely faces new threats to its integrity in the coming years (see below) and will need broad public and political support to help sustain the progress and success instigated through this work.

**Results for each deliverable:**

<b>Component</b>		<b>Deliverable</b>		
<b>#</b>	<b>Description</b>	<b>#</b>	<b>Description</b>	<b>Results for Deliverable</b>
1.0	Efforts to protect critical areas of Menzbier's marmot habitat inside and outside of Besh-Aral are supported by up-to-date information on species' conservation status	1.1	Report on the training of four Kyrgyz scientists and three staff at Besh-Aral on use of protocol for Menzbier's marmot field surveys and monitoring by May 2021, including the names and genders of the trainees and a brief summary of their training.	<p>On 21st May 2021, FFI organized a one-day technical meeting of project partners and stakeholders to discuss and enable uptake of a unified methodology for Menzbier's marmot field surveys (covering methods for assessing population size, population health and habitat condition). Project partners and two marmot specialists from Uzbekistan joined the meeting online to share their knowledge and experience with Kyrgyz specialists. In total 21 people attended the meeting, including staff of the Besh-Aral State Reserve, the National Academy of Sciences of the Kyrgyz Republic, representatives of the Ministry of Natural Resources, Environment and Technical Supervision, pastoral experts, representatives of environmental NGOs, a Menzbier's marmot surveyor and a wildlife disease research expert from the K.I. Skryabin Kyrgyz National Agrarian University.</p> <p>Details of the training are attached and can be found in reports in folder 1.1.</p>
1.0	Efforts to protect critical areas of Menzbier's marmot habitat inside and outside of Besh-Aral are supported by up-to-date	1.2	A survey report describing the status and health of Menzbier's marmot in Kyrgyzstan will be completed by December 2021 for sharing with	The Besh Aral reserve team, a group of national experts (including zoologists, botanists, pasture scientists and veterinarians) and the FFI team completed comprehensive field surveys for Menzbier's marmots in both June 2021 and June 2022. These surveys

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
	information on species' conservation status		reserve management and decision makers (see components 2 and 4).	<p>gathered information on marmot population size, potential and actual habitat areas, vegetation, threats, presence of predators and prevalence of marmot diseases. The latter surveys involved two experts from Uzbekistan (one from the Institute of Zoology of Uzbekistan and a ranger from Chatkal reserve) to participate in the surveys and share learning from the other side of the border.</p> <p>The FFI Kyrgyzstan team completed a report detailing latest survey findings from the two sections of the reserve, and this included an updated analysis on the number of marmots found in and around the Besh Aral reserve. Our data indicate there are currently around 16,145 Menzbier's marmots in the Besh Aral area (also representing the total population size for the species in Kyrgyzstan).</p> <p>Both reports were shared with the reserve management and the Department of Biodiversity and Protected Areas under the Ministry of Natural Resources, Ecology and technical supervision. Please find both reports in Folder 1.2</p>
1.0	Efforts to protect critical areas of Menzbier's marmot habitat inside and outside of Besh-Aral are	1.3	An IUCN Red List assessment will be submitted to the Small	During the a workshop held in November 2022, and with the support of 2 members from the IUCN Small Mammals Specialist Group, we began the process of updating the

Component		Deliverable		
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	supported by up-to-date information on species' conservation status		Mammals Specialist Group by December 2022	IUCN red list for Menzbier's marmot, with this process including discussion on future species conservation plans and activities. The draft of the IUCN Red List assessment was submitted to Small Mammals Specialist Group in early February 2023 and is under revision by Abi Gazzard and Rosalind Kennerley. Please find the draft in Folder 1.3. The last assessment for Menzbier's marmot was in 2016 using data from the early 2000s.
1.0	Efforts to protect critical areas of Menzbier's marmot habitat inside and outside of Besh-Aral are supported by up-to-date information on species' conservation status	1.4	A shared action plan for Menzbier's marmot developed by leading scientists from Kyrgyzstan, Kazakhstan and Uzbekistan will be completed by December 2022.	A shared regional action plan for Menzbier's marmot was developed based on the information and knowledge of specialists from Kyrgyzstan, Kazakhstan and Uzbekistan who participated in the final regional meeting of project partners and other stakeholders in November 2022. In February 2023 the final document was agreed upon by all stakeholders and adopted by partners.  Please find action plan document in Folder 1.4.
2.0	Besh-Aral State Nature Reserve's rangers have the capacity to adequately patrol critical areas of marmot habitat	2.1	Report on the transfer of CEPF-funded equipment to the Besh-Aral reserve team, including dispossession list specifying equipment, date of transfer, and name of recipient, in September 2021.	A report on all equipment purchased and transferred to the reserve has been prepared. Overall, FFI provided equipment and materials for amount of 1,991,824 KGS. Examples of equipment provided include equipment support monitoring and data analysis (a drone, a digital camera, 10 camera traps, 2 laptops, GPS devices) and equipment to support working conditions for the reserve's

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				rangers (solar panels for field offices, sleeping bags, mats, tents, winter uniforms and horseshoes, horse saddles, hirsute boots ec). Fire extinguishers were also provided to help aid mitigation of increased threat from forest fires. As mentioned in the Impacts section, the new equipment is enabling the reserve team to spend greater time on patrol in more remote areas of the reserve. Please find the detailed report in Folder 2.1
2.0	Besh-Aral State Nature Reserve's rangers have the capacity to adequately patrol critical areas of marmot habitat	2.2	By October 2021, report on training of 26 Besh-Aral rangers, including names and genders of rangers, describing conduct of new monitoring and patrol protocols	<p>Reports on trainings provided to Besh Aral's rangers are available in folder 2.2. Five training courses were provided:</p> <ol style="list-style-type: none"> <li>1. In May 2021, in Bishkek, 3 Besh-Aral's rangers learned field surveys methods for Menzbier's marmot populations and other wildlife.</li> <li>2. In June 2021, training on security measures before the field surveys was provided for 6 rangers.</li> <li>3. In September 2021 in Besh-Aral reserve, a wildlife conservation specialist- Mr Jumabai uulu Kubanychbek carried out practical training on wildlife monitoring methods, patrolling, camera traps and GPS usage. 22 rangers participated.</li> </ol>

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				<p>4. In August 2022, 2 specialists - Shakhzod Dekhonov from the National Academy of Sciences of Uzbekistan and Abdualam Abdualamov, a ranger from Chatkal Reserve, shared field experience with Besh-Aral's rangers. This helped to refresh knowledge and skill of rangers on wildlife monitoring, marmot counts and use of GPS and camera traps. 11 rangers participated.</p> <p>5. In January 2023, in Bishkek, we provided final training to consolidate monitoring competencies. This training covered wildlife laws and regulations, camera trapping and wildlife ID. It included a field trip to Ala-Archa gorge to aid exchange of learning with other rangers already applying similar methods in the field.</p>
2.0	Besh-Aral State Nature Reserve's rangers have the capacity to adequately patrol critical areas of marmot habitat	2.3	By the end of the project, facilitate the completion of a Management Effectiveness Tracking Tool (METT) with the reserve team, including submission of the METT to CEPF	<p>A METT assessment was carried out by UNDP in 2021 and shared with reserve team and us. Repeated monitoring is planned in May 2023 by UNDP and FFI will participate in that assessment.</p> <p>Please find the reports in folder 2.3.</p>
2.0	Besh-Aral State Nature Reserve's rangers have the capacity to adequately patrol critical areas of marmot habitat	2.4	Stories of three rangers will be included in awareness-raising materials, contributing to esteem and pride of Besh-Aral's rangers.	The story of one ranger Ilich Dosmatov- head of scientific department of Besh-Aral reserve- was included in a film produced within the project.

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				Please find the video film in folder 3.4.
3.0	Local people increasingly support marmot conservation	3.1	Report on perspectives of local shepherds and residents produced and shared with reserve management.	The report produced under 3.2. was shared with the Besh-Aral reserve's management.  Please find the reports in folder 3.1
3.0	Local people increasingly support marmot conservation	3.2	Report on 40 local people, disaggregated by sex, with goal of 25 percent women, demonstrating improved awareness of natural resource and pasture management approaches and techniques as well as improved understanding of the reserve's management objectives	In August 2021, FFI conducted interviews with 50 respondents living in Chatkal district (25% women and 75 men) from nearby villages to the reserve. Before the interview, the purpose and objectives of the interview were explained to respondents and a consent sheet was signed by each respondent. This provided an initial baseline understanding on attitudes and perspectives towards the reserve conservation more broadly.  As part of work to strengthen mutual understanding on issues affecting pasture management around the reserve, the FFI team designed a role play game called "Joint Sustainable Resource Management" and then piloted this with 3 villages situated around Besh-Aral reserve. The game explored aspects of sustainable pasture management and biodiversity conservation, enabling discussion on perspectives of different stakeholder groups. In total 44 people (30% women) participated in 3 villages. After the sessions, participants reported better awareness of the Besh-Aral's borders, methods for sustainable

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				pasture management and their improvement techniques, as well as status of the Menzbier's marmots and other wildlife, and the roles and responsibility of Pasture Committees, Besh-Aral reserve and other stakeholders in the area. A full report can be found in folder 3.2.
3.0	Local people increasingly support marmot conservation	3.3	By end of Year 2, report on reserve staff and residents of Ak-Tash village agreement to cooperate on effective management of the reserve and the surrounding pastures, with commitments made to maintain joint communication and planning meetings post-project	<p>FFI and Besh-Aral's management organized two community meetings in Ak-Tash village. During those meetings local residents and reserve management openly discussed issues facing the reserve, and faced by the community. In the first-year community meeting, people were skeptical of the idea and blamed the reserve a lot for not allowing their animals to graze in the reserve's territory, part of which was historical grasslands of their grandfathers where they grazed their animals.</p> <p>In the next community meeting, held October 21 to 22 2022, we trialed a different approach. FFI and the reserve jointly organized a volleyball tournament event between the villages as a lighter touch means to promote a dialogue with people from Ak-Tash, Kurulush and Jany Bazar villages. We also screened a film about the Besh Aral reserve and the work of the rangers, created under the CEPF project. In the 2nd meeting, people asked the reserve for direct support on how to share information on illegal activities they are observing, and this has prompted</p>

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				further productive discussion between the reserve and community members on appropriate channels for sharing information together.
3.0	Local people increasingly support marmot conservation	3.4	Film celebrating Besh-Aral's biodiversity and the lives of its rangers and local people seen by 200 community members and online by >1,000 people in Kyrgyzstan.	<p>A film celebrating the biodiversity of Besh-Aral reserve, its rangers' work, a field expedition to census Menzbier's marmot and other megafauna was produced with the help of an ex BBC film maker based in Kyrgyzstan.</p> <p>As mentioned above, the film was shown to 20 people during the community meeting in Jany-Bazar village in August 2022. Another time, it was shown during the regional meeting of the project partners and stakeholders in November 2022 in Bishkek. In that meeting, 27 local and international participants from Kazakhstan and Uzbekistan saw the film.</p> <p>Besh-Aral state reserve has been planning to demonstrate a video to school children, community members and other stakeholders during awareness-raising events carried out annually.</p> <p>The film was uploaded to FFI's Instagram channel and seen and liked by many viewers. Additionally, a local journalist from the Chatkal area uploaded the film to his YouTube channel.</p>

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				Please find the film in the Kyrgyz language with Russian and English subtitles in folder 3.4
4.0	Large-scale threats to Besh-Aral and the wider landscape (grazing and mining) are fully understood, with information available to support changes in practice of pasture committees and mining companies	4.1	By October 2021, map of grazing and mining activity, overlaid with marmot habitat, in and outside of Besh-Aral	<p>The map of Menzbier's marmot distribution inside of the Besh-Aral state reserve was prepared based on the first field expedition in 2021. The mining report (see 4.2) confirmed distance between mining operations and marmot populations. Marmot populations found outside of the reserve were found to overlap only with pasture lands belonging to Kok Serak Pasture Committee.</p> <p>Please find the map in folder 4.1</p>
4.0	Large-scale threats to Besh-Aral and the wider landscape (grazing and mining) are fully understood, with information available to support changes in practice of pasture committees and mining companies	4.2	By June 2022, report on agreement with at least one major mining company to implement mitigation activities for marmots' habitat at a roundtable meeting.	FFI tried to engage with three mining companies identified as priorities by our mining report: Full Goldmining, Eti Bakyr Terek-Say and Golden Wings, all operating near the reserve and Menzbier's populations outside of the reserve. Unfortunately, Full Gold mining company - the closest mining company operating near marmot populations- ignored our emails and phone calls and did not participate in the roundtable meeting held in September 2022. In this roundtable, results from the 2021 mining report, alongside other data and reports produced by the CEPF project were shared, and the mining companies present also shared information on their environmental policies. Through the roundtable, different groups shared ideas and

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				<p>priorities for supporting the conservation of the reserve, the marmots and the wider landscape. This included some productive early discussions with the mining companies on the potential use of their funding to support conservation measures outside of the reserve (e.g., a micro reserve for marmots found outside of the reserve was proposed as a possible measure). A need to strengthen collaboration between the mining sector, local government and with the pasture communities was also expressed.</p> <p>Please find the mining threat assessment report in folder 4.2</p>
4.0	Large-scale threats to Besh-Aral and the wider landscape (grazing and mining) are fully understood, with information available to support changes in practice of pasture committees and mining companies	4.3	By July 2022, report on recommendations for sustainable pasture management and marmot conservation will be developed and shared with Chatkal and Terek-Say Pasture Committees.	<p>In December 2022 the report on sustainable pasture management and marmot conservation was shared with both Chatkal Pasture Committees and Kok-Serak Pasture Committee. During the field expeditions to count Menzbier's marmot outside of the reserve, we identified that marmot populations originally believed to be in Terek-Say's pasture territory were found in land under the management of Kok-Serek. Therefore, we placed particular priority in engaging with this Pasture Committee. We shared the sustainable management report with the Kok-Serek pasture committee and then completed subsequent phone calls with the head of the pasture committee Mr.</p>

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				Zhunusov Mambetkul Anarbaevich to explain recommendations outlined in the report. He has agreed to use the recommendations for Menzbier's marmot conservation when the PC will start allocating pastures to herders in May 2023. The recommendations will be attached to the agreement between PC and pasture users. Please find the reports in folder 4.3
4.0	Large-scale threats to Besh-Aral and the wider landscape (grazing and mining) are fully understood, with information available to support changes in practice of pasture committees and mining companies	4.4	By project end, report with data and recommendations (including an analysis of mining impacts and compliance with legislation) will be developed for the State Agency for Environmental Protection and Forestry.	The final report of the project was prepared and shared with the Department of Biodiversity Conservation and Protected Areas under the Ministry of Natural Resources, Ecology and Technical Supervision.  Please find the report in folder 4.4.
2.0	Besh-Aral State Nature Reserve's rangers have the capacity to adequately patrol critical areas of marmot habitat	2.5	By the end of the project, report on improved reserve management with recommendations for further strengthening.	At the end of the project the report was prepared in Kyrgyz language and shared with Besh-Aral reserve's management. The reported accounted for FFI's personal experience on which areas the reserve was strong and weak at, and also accounted for emerging threats to the reserve, and the scores from the 2021 METT assessment.  Please find the report in folder 2.5.

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
5.0	Adherence to CEPF requirements on gender and safeguards	5.1	Completion of CEPF gender tracking tool at beginning and end of project	FFI has done a gender tracking tool exercise at the beginning and the end of the CEPF project.  Please find the results in Folder 5.1.
5.0	Adherence to CEPF requirements on gender and safeguards	5.2	Semi-annual report on adherence to the Process Framework on restriction on access to resources	Semi-annual reports on adherence to the Process Framework, outlining actions taken by FFI to mitigate safeguarding risks were completed and are attached. These reports describe actions taken by FFI to ensure a grievance mechanism is in place, to understand and communicate needs of local communities and to strengthen dialogue and communication between the reserve management and local communities.

### Tools, products or methodologies that resulted from the project or contributed to the results:

The project developed a large number of different products and methodologies, all of which have been uploaded to a OneDrive: [https://ffionline-my.sharepoint.com/:f:/g/personal/osultangaziev\\_fauna-flora\\_org/Ej4OHDlvAEJGnLvGJ-hRjYBycRdQRc3Su3UfUZmmsycuQ?e=QAcGlq](https://ffionline-my.sharepoint.com/:f:/g/personal/osultangaziev_fauna-flora_org/Ej4OHDlvAEJGnLvGJ-hRjYBycRdQRc3Su3UfUZmmsycuQ?e=QAcGlq) with selected outputs uploaded in the Other Information Tab.

These include survey methodologies for marmots, calendars, films, instructions for a FFI created role play game on pasture management, a draft IUCN red list assessment and a regional conservation action plan.

## PORTFOLIO INDICATORS

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
1	15 Key Biodiversity Areas (KBAs), covering 600,000	112,018	112,018 hectares of Besh-Aral reserve are under better	112,018	As described in the Impact Section, Improved METT score, alongside our

<b>Portfolio Indicator Number</b>	<b>Portfolio Indicator Description</b>	<b>Expected Numerical Contribution</b>	<b>Expected Contribution Description</b>	<b>Actual Numerical Contribution</b>	<b>Actual Contribution Description</b>
	hectares, have improved management		management as evidenced by increased METT score (currently 48%).		observations of improved capacity across the reserve's territory, indicate better management across this area.
3	2 initiatives launched with private sector stakeholders resulting in adoption or maintenance of biodiversity-friendly practices	1	By the end of the project, at least one mining company make commitments to mitigate their operations in the landscape surrounding Besh-Aral in order to protect remaining Menzbier's marmot habitat outside of Besh-Aral	0	By project end, no mining companies made a solid or written agreement to mitigate biodiversity impacts of their operations in the landscape. However, the project did make good steps towards this end through completing the first assessment of priority mining companies for engagement, and by initiating positive discussions at a round table attended by staff from two of the major companies in the landscape.
4	10 land-use plans or land-use management practices incorporate provisions for biodiversity conservation	1	By month 10, clear recommendations for reducing impacts of grazing on critical areas for Menzbier's marmot will have been developed and will have been adopted by pasture committees by month 17.	1	Kok-Serek Pasture committee have adopted and incorporated the recommendation for reducing grazing in critical areas for Menzbier's marmot on its high-altitude meadows. According to the head of the Kok-Serek Pasture committee Junusov Mambetkul, there will be a separate point in the agreement with the pasture

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
					users covering the issue of protection of Menzbier's marmot as well as other red-listed wild animals on meadows.
1.1	Number of species to which threats are reduced	1	Menzbier's marmot	1	While two years is a short time period to observe a reduction in threat to a species, we can say that threats remain stable and that this project has completed a number of necessary actions to better understand threats to the species, and lay the groundwork for further threat reduction work (e.g. through strengthen reserve management, and through engagement with stakeholders outside of the reserve whose activities have been shown to overlap with or influence the species)
1.2	Number of species benefiting from strengthened regulation on extractive use	1	Menzbier's marmot	0	While no new regulations governing extraction were developed through this project, the project made positive steps towards this outcome, through engagement with the mining sector.
2.1	Number of hectares of KBA with	112,018	112,018 hectares of Besh-Aral reserve are	112,018	As described above, and in the Impacts section.

<b>Portfolio Indicator Number</b>	<b>Portfolio Indicator Description</b>	<b>Expected Numerical Contribution</b>	<b>Expected Contribution Description</b>	<b>Actual Numerical Contribution</b>	<b>Actual Contribution Description</b>
	improved management		under better management as evidenced by increased METT score (currently 48%).		
2.2	Number of KBAs with official protection status with improved management	112,018	112,018 hectares of Besh-Aral reserve are under better management as evidenced by increased METT score (currently 48%).	112,018	As described above, and in the Impacts section.
3.2	Number of local level land use plans that incorporate biodiversity conservation as a management objective	1	By month 10, clear recommendations for reducing impacts of grazing on critical areas for Menzbier's marmot will have been developed and will have been adopted by pasture committees by month 17.	2	<p>Clear recommendations for reducing impacts of grazing on critical areas for Menzbier's marmot had been developed for Kok-Serek and Chatkal pasture committees and shared with them. Although there were no Menzbier's marmot population found in Chatkal PC's meadows, there might be some populations in Zhailoo-Choo, At-Zhailoo, Boz-Beri, Besh-Aral, Isfara and Chon-Tash meadows according to the local herders and population surveys.</p> <p>Recommendations have been adopted by both Pasture Committees.</p>

<b>Portfolio Indicator Number</b>	<b>Portfolio Indicator Description</b>	<b>Expected Numerical Contribution</b>	<b>Expected Contribution Description</b>	<b>Actual Numerical Contribution</b>	<b>Actual Contribution Description</b>
3.3	Number of major development projects, sub-national plans, or national plans that incorporate biodiversity conservation as a management objective	1	By the end of the project, at least one mining company make commitments to mitigate their operations in the landscape surrounding Besh-Aral in order to protect remaining Menzbier's marmot habitat outside of Besh-Aral	0	Out of three mining companies identified during the threat assessment as being close to the Menzbier's marmot populations, two have participated in the roundtable discussion in Bishkek. However, none of the two formally committed to mitigate their operations in the landscapes surrounding Besh-Aral reserve.
4.1	Number of private companies that adopt biodiversity-friendly practices	1	By the end of the project, at least one mining company make commitments to mitigate their operations in the landscape surrounding Besh-Aral in order to protect remaining Menzbier's marmot habitat outside of Besh-Aral	2	As mentioned above, Kok-Serek and Chatkal Pasture committee have adopted and incorporated the recommendation for reducing grazing in critical areas for Menzbier's marmot on its high-altitude meadows.
4.2	Number of hectares of farming or grazing areas that incorporate biodiversity conservation into operations	0	By month 10, clear recommendations for reducing impacts of grazing on critical areas for Menzbier's marmot will have been developed and will have been	9,743	In Kok-Serek pasture committee, the grazing plans cover an area of 9743 ha (Syn-Tash, Teskei Ishtamberdi sites- 9196 ha; Kuldambes, Kol sites- 547 ha), and in these areas our surveys found around 500

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description
			adopted by pasture committees by month 17.		to 600 marmots. The Pasture Committee has adopted recommendations to support marmot conservation as part of their pasture management plan.
4.5	Number of conservation issues of concern to civil society that are the subject of public debate	1	Mining near Besh-Aral	0	While mining does indeed continue to be a hot topic of discussion, we would say that this project has not actively contributed to increased civil society debate on this topic. For reasons described in the challenges section of the report, we decided to avoid actively stimulating public debate on the topic, given safety concerns we had for community members and our staff team.

## GLOBAL INDICATORS

### Protected Areas

Protected areas that have been created and/or expanded as a result of the project. Protected areas may include private or community reserves, municipal or provincial parks, or other designations where biodiversity conservation is an official management goal.

<b>Name of Protected Area</b>	<b>WDPA ID*</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Country</b>	<b>Original Total Size (Hectares) **</b>	<b>New Protected Hectares ***</b>	<b>Year of Legal Declaration or Expansion</b>
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\*World Database of Protected Areas

\*\*If this is a new protected area, 0 should appear in this column

\*\*\* This column excludes the original total size of the protected area.

## Key Biodiversity Area Management

Key Biodiversity Areas (KBAs) under improved management—where tangible results have been achieved to support conservation—as a result of the project.

KBA Name	KBA Code	Size of KBA	Number of Hectares with Improved Management
Besh-Aral	KGZ01		112,018

## Production Landscapes

Production landscapes with strengthened management of biodiversity as a result of the project.

A production landscape is defined as a site outside a protected area where commercial agriculture, forestry or natural product exploitation occurs.

Name of Production Landscape	Latitude	Longitude	Hectares Strengthened	Intervention
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## Benefits to Individuals

- Structured Training:**

Number of Men Trained	Number of Women Trained	Topics of Training
26	0	(1) Field survey methods for marmots; (2) health and safety in the field; (3) wildlife monitoring and use of GPS and camera traps; (4) wildlife legislation; (5) plant ID; (6) mammal ID.

- Cash Benefits:**

Number of Men – Cash Benefits	Number of Women – Cash Benefits	Description of Benefits
0	0	

## Benefits to Communities

View the <b>characteristics</b> column below with the following corresponding codes:	View the <b>benefits</b> column below with the following corresponding codes:
1- Small Landowners	a. Increased Access to Clean Water
2- Subsistence Economy	b. Increased Food Security
3- Indigenous/ Ethnic Peoples	c. Increased Access to Energy
4- Pastoralists / Nomadic Peoples	d. Increased Access to Public Services
5- Recent Migrants	e. Increased Resilience to Climate Change
6- Urban Communities	f. Improved Land Tenure
7- Other	g. Improved Use of Traditional Knowledge
	h. Improved Decision-Making
	i. Improved Access to Ecosystem Services

Community Name	Community Characteristics							Type of Benefit									Country	Number of Males Benefitting	Number of Females Benefitting
	1	2	3	4	5	6	7	a	b	c	d	e	f	g	h	i			

### Characteristics of "Other" Communities:

## Policies, Laws and Regulations

View the <b>topics</b> column below with the following corresponding codes:			
A- Agriculture	E- Energy	I- Planning/Zoning	M- Tourism
B- Climate	F- Fisheries	J- Pollution	N- Transportation
C- Ecosystem Management	G- Forestry	K- Protected Areas	O- Wildlife Trade
D- Education	H- Mining and Quarrying	L- Species Protection	P- Other

No.	Name of Law	Scope	Topics															
			A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P

**“Other” Topics Addressed by the Policy, Law or Regulation:**

No.	Country/ Countries	Date Enacted/ Amended	Expected impact	Action Performed to Achieve the Enactment/ Amendment
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**Companies Adopting Biodiversity-friendly Practices**

A company is defined as a for-profit business entity. A biodiversity-friendly practice is one that conserves or uses natural resources in a sustainable manner.

Name of Company	Description of Biodiversity-Friendly Practice	Country/Countries where Practice was Adopted
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**Networks and Partnerships**

Networks/partnerships should have some lasting benefit beyond immediate project implementation. Informal networks/partnerships are acceptable.

Name of Network/Partnership	Year Established	Country/ Countries	Established by Project?	Purpose
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**Sustainable Financing**

Sustainable financing mechanisms generate funding for the long-term (generally five or more years). These include, but are not limited to, conservation trust funds, debt-for-nature swaps, payment for ecosystem services (PES) schemes, and other revenue, fee or tax schemes that generate long-term funding for conservation.

Name of Mechanism	Purpose	Date Established	Description	Country/Countries	Project Intervention	Delivery of Funds?
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### Globally Threatened Species

Globally threatened species (CR, EN, VU) on the IUCN Red List of Threatened Species, benefitting from the project.

Genus	Species	Common Name (English)	Status	Intervention	Population Trend at Site
Marmota	menzbieri	Menzbier's Marmot	VU	Improved patrolling and protection within Besh Aral; development of a conservation action plan and initial engagement with pasture and mining sectors to reduce habitat degradation and loss outside of Besh Aral Nature Reserve	Stable

## LESSONS LEARNED

Engaging with the mining companies operating in Terek-Say and Chatkal areas was the main challenge of the project. It was challenging to obtain information about mining operations, its impact, and compliance with the legislation because they do not have any Environmental Impact Assessment, or they did not want to share it with us. Although we hired a mining expert who has a lot of experience working with mining companies, even he faced some challenges with obtaining all the necessary information for the proper analysis. Therefore, we assessed the mining threat using all available open sources and the information gathered from the mining companies. In future projects, we suggest hiring specialists from the Ministry of Natural Resources, Ecology and Technical supervision-an authority that regulates the operation of mining companies- who will have more command functions to collect necessary information for the analysis. We could not hire a such person because requirements from the CEPF to not employ and pay for the consultancy of the government employee.

Another problem we encountered during the project is the anticipated withdrawal of land from the reserve for the mining industry. At the time of the project, we were unable to influence the national government's decisions on the transfer of land for mining companies. Nor were we able to influence the processes that took place when the project was already in operation. For example, we found out that the National Academy of Sciences of the Kyrgyz Republic issued an expert assessment that has given a green light for road construction and development of new sites for road construction in the Arab section. Assuming this eventually goes ahead, around 200ha of the reserve will be directly lost as a result of this development.

We could not actively discuss the mining problem with the local community because we had fears that our discussions could lead to an action that would provoke people to act against the mining companies operating near the reserve. We found out that people are annoyed by mining happening in the area, and personally witnessed a meeting between the local community members in Kurulush village and an investor who willing to do mining near their village. People were against the mining and often uncontrollable and aggressive. After seeing that behaviour and people's attitude towards mining investors, we decided not to discuss this topic in-depth as this would also escalate the situation and could have led to unpredictable consequences not only to local community members, but also to FFI's staff. Because the mining is a national issue and we have seen the cases where people were imprisoned for posting a message on their Social Media accounts or their statements on public meetings, we were very cautious. One possible way to increase the visibility of the problem was to invite independent media such as Azattyk media, but they have already covered the mining issue in Besh-Aral several times.

Despite the status of a nature reserve, the country's socio-economic situation applies increased political pressure on the state to allocate land in the reserve to mining operations. There is a conflict of interest here, with the state having to ensure conservation of biodiversity as well as raise the economy and well-being of the population.

To avoid further destruction of the Besh-Aral reserve it is necessary to work more with the reserve, to raise its status and visibility in society. Since the implementation of the CEPF project, other conservation organizations have begun to show interest in the Besh-Aral reserve and have already secured grants. Prior to this project, Chatkal District and particularly Besh-Aral state reserve had been forgotten, and projects had not been implemented for almost 20 years.

We believe that the more visibility and information about the unique biodiversity of the Chatkal region, the easier it will be to defend the rights and integrity of the reserve.

## **SUSTAINABILITY/REPLICATION**

### Successes:

Capacity and skills of the Besh-Aral's rangers are indicators of a long-term sustainability of this project. From 2021 on, rangers use the methods and skills to monitor and patrol reserve's territory and have got initial results of wildlife monitoring using camera traps. Besh-Aral's scientific department are already using their knowledge and data from the project in awareness- raising activities among school students in Chatkal district. Increased pay for the Besh Aral team should also help to reduce threat of high staff turnover.

A dialogue between Besh-Aral reserve and community members of Ak-Tash, Kurulush and Jany-Bazar and other villages of the Chatkal district will be continued and strengthened. Reserve's management wants to continue a dialogue and understands the importance of involving the local population in nature conservation. Steps are in place to bring together community members and the reserve. We believe that future meetings will reduce the level of mistrust between stakeholders, and they will find ways of working together.

Kok-Serek pasture committee adopted the sustainable pasture use on its meadows where Menzbier's marmot are present. The head of the pasture committee- Mr. Zhunusov Mambetkul- appreciated the importance of conservation of red-listed marmot species in their habitats and supported the idea of reducing the grazing pressure as well as illegal hunting by herders and their dogs. The pasture committee will raise awareness of pasture users in matters of wildlife conservation, and from 2023 on incorporate a protection of Menzbier' marmot populations into an annual agreement with pasture users.

### Challenges:

Planned concession of part of the reserve's territory, and recent anecdotal evidence (mining, road, hydro power plant construction) in the media suggest that the territorial integrity of the reserve could be in jeopardy. Thus, the reserve's effort to conserve biodiversity will not be so successful unless they have a full control over reserve's territory.

Increasing staff turnover due to cost-of-living crisis could have an impact on the sustainability of the project results in the long run, where trained rangers will migrate to Russia or to Bishkek in search of a better-paid job. Increased salaries of the rangers should offset this risk to some extent.

Lack of financial resources to continue support Besh-Aral reserve after the end of the project could also be a major challenge for the sustainability of the project results. Although some activities such as monitoring and patrolling, awareness-raising are financed by the government, other important activities such as community meetings, inviting scientists or experts are not or are only partly financed by the government. Therefore, additional support from donors or conservations organizations (including FFI in the near term) is needed to fully execute planned conservation actions to conserve Menzbier' marmot populations and other wild animals within the reserve.

Lack of sufficient financial resource has had an impact on supporting the Chatkal and Terek-Say pasture committees to reduce the grazing pressures at the bordering areas with the Besh-Aral reserve and open access to high-altitude meadows by improving the infrastructure. Although the threat to Menzbier’s marmot populations inside the reserve is low, the population outside of the reserve is experiencing grazing pressure.

## **ENVIRONMENTAL AND SOCIAL SAFEGUARDS/STANDARDS**

A separate safeguard report has been uploaded.

## **ADDITIONAL COMMENTS/RECOMMENDATIONS**

### **ADDITIONAL FUNDING**

<b>Total Amount of Additional Funding Actually Secured (USD)</b>	\$0.00
<b>Breakdown of Additional Funding</b>	

## **INFORMATION SHARING AND CEPF POLICY**

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned and results. For more information about this project, you may contact the organization and/or individual listed below.

Fauna & Flora International (FFI), The David Attenborough Building, Pembroke Street, Cambridge, CB2 3QZ United Kingdom David Gill- Director of Operations, Eurasia- david.gill@fauna-flora.org