





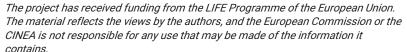






Content

- Project information and introduction
- The main results of the project
- Management of the actions after the LIFE
- Funding of the After-LIFE by actions (table with the budget)









FINLA **ESTONIA**

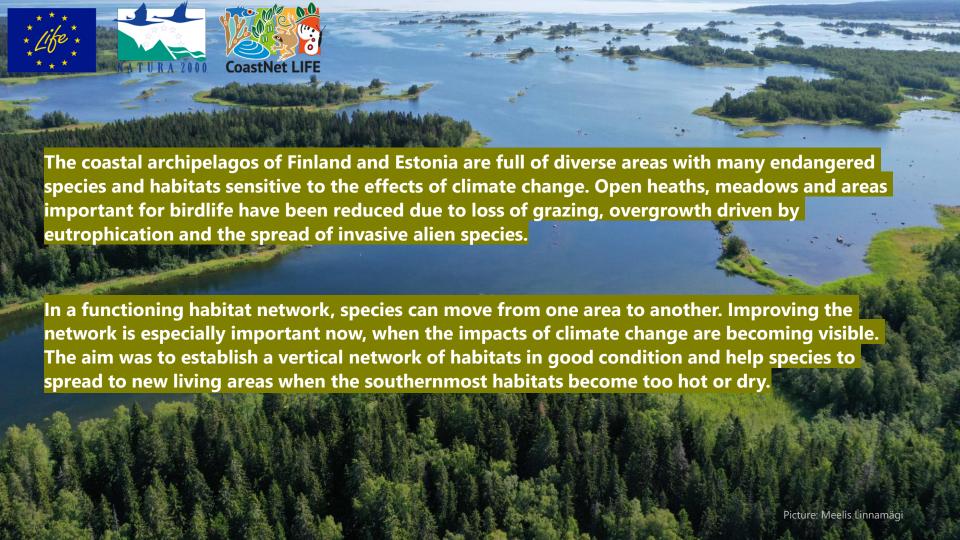
Seven years cooperation for the benefit of coastal nature on land and at sea

- In the CoatNet LIFE -project we restored important coastal and archipelagic habitats. The area managed included Finnish coastal nature from the Bothnian Bay to the Hanko Archipelago as well as the northern coast of Estonia in e.g. Tallinn and the Lahemaa National Park.
- Coordinator: Metsähallitus, Parks & Wildlife Finland (MHPWF)
- Partners: Keskkonnaamet (Estonian Environmental Board, EEB), Town of Raahe, Town of Rauma, City of Tallinn (EDT), City of Turku, University of Turku, Centre for Economic Development, Transport and the Environment, Southwest Finland, WWF Finland
- The implementation period: 1 August 2018–31 March 2025.
- **The budget:** EUR 8.7 million, of which the European Commission's funding covers 60%, i.e., EUR 5.2 million.











Improving the conservation status of selected Natura 2000 areas through restoring their habitat network in the coastal zone 1/2

- We restored:
 - Semi-natural habitats 836 ha
 - Forest habitats 248 ha
 - Sun-lit habitats 217 ha
 - Boreal baltic islets & small sized open habitas 111 ha
 - Parnassius apollo habitat network for 42,5 ha
 - Rivers 5,2 kilometres and made actions to help Freshwater Pearl Mussel
- We combated invasive alien species over an area of 140 hectares in size.
- We established 81 ha Nature conservation areas.
- Volunteers restored with us in 52 camps with 8526 manwork days.









Improving the conservation status of selected Natura 2000 areas through restoring their habitat network in the coastal zone 2/2

- We also:
 - Piloted fagoon restoration for 72ha
 - Updated 2 management plans in Finland and 3 management plans in Estonia
 - Monitored restoration succes
 - Restored river habitat and Freshwater pearlmussel bred
- Nature schools in Finland and Estonia, as well as nature trails, events and exhibitions
 provided information about coastal nature. The project published videos and other
 communication materials to raise environmental awareness.
- Restoration measures targeted 22 habitat types listed in the Habitats Directive Annex 1. Restored habitat types included e.g. Boreal Baltic islets and small islands.









Management of the actions after the LIFE

- The following actions are continuing after the project:
 - C1 Restoration of semi-natural habitats
 - C4 Restoration of herb-rich forests
 - C5 Restoring sun-lit habitats
 - C6 Combating invasive alien species
 - C8 Restoration camps for volunteers
 - C10 Margaritifera margaritifera breeding and restoration of freshwater habitats
 - D1 Monitoring of project sites
 - E1 General media work
 - E2 The restoration and science trails
 - E 3 Improving visitor services and environmental education









C1 Restoration of semi-natural habitats 1/4

- The restoration efforts of seminatural habitats in Lahemaa (site 40) have significantly improved the ecological conditions and biodiversity within these sites. The primary results of the project include the re-establishment of natural habitats, the improvement of water regimes, and the enhancement of plant and animal populations.
- To ensure the long-term success of the restoration efforts, several actions require continued support and management. The After-LIFE plan focuses on these key development targets: Annual grazing and mowing activities.
- Without regular grazing or mowing, the restored landscapes would quickly become overgrown, leading to a decline in biodiversity and habitat quality. Agreements with local farmers and landowners will be maintained to continue grazing activities. Funding is ensured by CAP (The Common Agricultural Policy) to ensure sustainable management.
- Expansion of restoration areas: Additional degraded areas need to be restored to further enhance ecological connectivity and resilience. EEB will actively seek and identify new areas for restoration, working with landowners and conservation organizations to extend the impact of the project.
- For Lahemaa restored areas, management is needed to maintain and improve the work. These areas are maintained every year either by cattle grazing or mowing.
- Responsibility: Keskonnaamet (EEB)









C1 Restoration of semi-natural habitats 2/4

- Actions in Paljassaare (site 38) are largely guided by the Conservation
 Management Plan of the area (2020-2029), issued in 2019 within the current
 project. Drafting of a new plan is planned in 2029.
- In Paljassaare grazing continues from 2024. Restoration and maintenance of semi-natural habitats is a vital and continuous activity. Coastal meadows have constantly been restored, and restoration/ maintenance goes on by grazing and supported by mowing to weaken the reed. Plan include also restoration of Suur-Paljassaare dry meadows, including maintenance of Orchis mascula habitat in 2025 and restoration of spawning ponds for amphibians in 2025.
- Actions in Aegna (site 41) are largely guided by the Conservation Management Plan of the area 2022-2031 (issued in 2021). Including Revision of Aegna Nature house concept and Inventory of bat habitat (priority III).
- Estimated budget needed is about 75 000 euros.
- Responsibility: City of Tallinn (EDT)









C1 Restoration of semi-natural habitats 3/4

- Grazing in Rauma will continue in Rauman saaristo (site 19). Grazing contracts have been
 made until spring 2028. This guarantees continuity until at least 2028. However, the threat
 is the possible formation of a wolf territory in the archipelago. This may cause grazing on
 the largest islands to be interrupted due to the constant threat of predators. Reed
 mowing is carried out annually with the city's own funding. Resbonsibility: Town of
 Rauma.
- Semi-natural grasslands in the Ruissalo (site 12) and Rauvolanlahti (site 13) areas were
 managed during the project by removing and mowing the bushes, and in addition, the
 reeds that had spread throughout the area were crushed in the Rauvolanlahti Natura2000
 area. Ensuring the continuity of management activities in the long term is crucial for
 keeping traditional biotopes open. After the project semi-natural grasslands will be mainly
 managed by clearing and mowing. Responsibility: City of Turku.
- The restoration of semi-natural habitats will continue in Raahe (site 34), based on the updated plan, which is currently in process and expected to be ready by summer 2025. In the town of Raahe, the development of a new management and use plan for the Natura 2000 area of the Raahe Archipelago began outside the CoastNet LIFE project but benefited from the project's experiences. For example, the new plan includes actions not only for semi-natural grasslands but also for combating invasive alien species. The new plan utilized the nature management plan for the Raahe Archipelago, which was developed during the project. The maintenance will continue based on the updated plan. Responsibility: Town of Raahe.









C1 Restoration of semi-natural habitats 4/4

- Continuing the restoration of semi-natural habitats is crucial. Semi-natural grasslands and wooded pastures are a highly endangered part of Finland's nature. Changes in farming practices have reduced the surface area of grassland habitats, leaving them abandoned. Semi-natural habitats need continuous management to prevent overgrowth.
- In Finland, there are currently about 25, 000 hectares of semi-natural grasslands and other
 natural pastures under grazing and other forms of management. At present, MHPWF manages
 approximately 6,000 hectares through grazing and other methods.
- In 2025 the aim of the MHPWF is to restore semi-natural habitats approximately 100 hectares of new sites. At existing sites, supplementary clearing will be carried out on about 200 hectares. The actions are carried out in cooperation with the grazers. Restoration of semi-natural sites in 2025 are planned to carry out for example in the archipelago of Ostrobothnia (Luoto, Uusikaarlepyy, Kristiinankaupunki), in Kvarken archipelago (Valassaaret) and in Bothnian Sea National Park (island of Kalla, island of Pohjan Bokreivi).
- The main funding in restoration of semi-natural habitats in MHPWF is the Helmi habitats programme. In MHPWF the aim in Helmi habitats programme is to rehabilitate 4000 hectares of semi-natural grasslands biotopes by the end of 2030 (31 % of the aim completed in 2024).
- After restoration, the primary management method is grazing, which is funded through agrienvironmental subsidies granted to farms that carry out the grazing.
- · Resbonsibility: MHPWF.









C4 Restoration of herb-rich forests

- Ruissalo (site 12) in Turku is home to Finland's largest wild oak and hardwood forests, which provide a habitat for many demanding and endangered species. Monitoring and continuity of management measures in the long term are important to ensure the regeneration of oaks and to maintain favorable conditions for the valuable species.
- After life restoration continues. Forests are managed by creating space for oaks through the selective thinning of birch, aspen, and maple trees. Spruces are removed from groves.
- Forest areas that do not belong to Natura habitat types are managed by promoting
 oaks and other hardwoods while maintaining structural features that resemble a forest's
 natural state. Non-native tree species and shrubs are removed. Management activities
 take place in winter, and the felled trees are left on the ground as deadwood.
 Responsibility: The City of Turku.
- The management measures for the herb rich forests restored in the project will naturally
 continue in close connection with the management of traditional biotope sites, as herb
 rich forests occurrences are often an integral part of traditional biotopes. Key
 management actions include favoring noble broadleaved trees and hazel (e.g., site 25,
 Vuorelanmäki).
- Responsibility: MHPWF







C5 Restoring sun-lit habitats

- To avoid overgrowth of tree species the restored areas (sites 39 and 40), regular monitoring and removing of pines and junipers is needed. To maintain open landscapes and support ecosystem balance, scheduled removal activities will take place at least every second year.
- · Resbonsibility: Keskkonnaamet (EEB).
- The management of the restored sun-lit habitats areas (site 21, Saaristomeri), where monitoring has also been conducted, will continue in the coming years through grazing. In heathland areas, management will continue by re-burning the areas every 10–15 years. Controlling undesirable species, such as sand reed grass (Calamagrostis epigejos), will require mowing and grazing in the future.
- Responsibility: MHPWF



Picture of Sun-lit habitat Riina Martverk.







C6 Combating invasive alien species 1/3

- The CoastNet LIFE project cannot resolve the whole question of invasive alien species
 on the project sites. The target was to get the situation under control, get rid of the
 current occurrences, and continue the work for example with volunteer work after the
 project. Combating invasive alien species continues in the following sites:
 - Combating Japanese rose (Rosa Rugasa) continues by voluntary work in Paljassaare (site 38). Resbonsibility: City of Tallinn (EDT).
 - In Kolga Lahe (site 39) small islands, continuous control of the abundance of American mink and raccoon dog is needed to protect nesting birds and maintain ecological balance.
 - Efforts to control American mink and raccoon dog populations help protect native bird species and other wildlife that are vulnerable to predation. Removing these invasive predators supports the recovery of native fauna, particularly nesting birds. Continued control efforts and monitoring ensure that previous restoration actions are not undermined by invasive species pressure.

 Resbonsibility: Keskonnaamet (EEB).







Picture: Katri Lehtola



C6 Combating invasive alien species 2/3

- The City of Turku has been controlling invasive species for several years, and the continuity of these control measures every year is also important in the future to curb the spread of invasive species and maintain the results already achieved. In the CoastNet LIFE project (sites 12 and 13) Turku for example competed Japanese Rose (*Rosa rugosa*) and Himalayan balsam (*Impatiens glandulifera*) and removed invasive predators like minks and raccoon dogs.
- Harmful invasive alien plant species included in the EU list and the national list are controlled annually with the aim of eliminating their occurrence. Tree-like harmful alien plant species are controlled in connection with other nature conservation work and area restoration. **Responsibility: City of Turku.**







Picture: Meelis Linnamägi



C6 Combating invasive alien species 3/3

- Metsähallitus Parks & Wildlife Finland will continue the control of Japanese rose (Rosa rugosa) after the project.
- The methods used by MHPWF include manual or mechanical digging, covering with durable tarpaulins, weakening the plant by removing green parts three times per summer, and chemical control using glyphosate, which has proven to be the most effective method.
- For example, between late May and mid-September 2025, Japanese rose will be removed from an estimated 450–600 sites along the coast and archipelago of Ostrobothnia. The areas can be found on Metsähallitus' website: https://www.metsa.fi/wp-content/uploads/2025/05/helmi_kurtturuusu_kartat.pdf
- Seedlings emerging from the seed bank of eradicated populations are removed at 2–3year intervals.
- Control of Japanese rose populations approved by landowners will continue with national funding, with the goal of eradicating all occurrences.
- The emergence of new Japanese rose populations will be monitored in the future through various volunteer efforts (e.g., bird surveyors, paddlers) and alongside other Metsähallitus archipelago work. Any detected populations will be eradicated.
- Responsibility: MHPWF







Picture: Meelis Linnamägi



C8 Restoration camps for volunteers

- Volunteers made significant restoration work during the CoastNet LIFE project: 52 camps in Finland and in Estonia. Volunteers have done valuable work on overgrown meadows, heaths and bird islands during the 8526 manwork days.
- Restoration camps provide excellent opportunity for environmental education and raising awareness for the participants and for media, in addition to the habitat restoration work itself.
- WWF was the main organizer of the camps in Finland (19 camps). WWF's goal is to use the
 volunteers' work as efficiently as possible for the benefit of nature. Camp sites are selected
 where volunteer work is the most cost-effective option and where, for example, due to the
 terrain or remote location, they cannot be reached by machine power.
- After the CoastNet LIFE project volunteer camps organized by WWF will continue in good cooperation with MHPWF. Examples of the camps planned for volunteers in 2025 together with MHPWF: Pähkinäinen in Saaristomeri 2.–9.8., Hamnholmen in Saaristomeri 16.-23.8.
- Restoration camps have been planned also in the Priodiversity-LIFE –project for the year 2026.
- MHPWF organizes also camps with other associations for example with The Finnish Association for Nature Conservation (FANC), the next camp will be 19.7.-25.7.2025 in Jungfruskär.
- Responsibility: MHPWF, WWF.







Picture: Teemu Niinimäki



C10 Margaritifera margaritifera breeding and restoration of freshwater habitats

- In Lahemaa (site 40), freshwater pearl mussel (FPM) breeding and habitat restoration activities are continued under the LIFE Revives project. The primary goal of these efforts is to improve the habitat conditions necessary for the successful reproduction and survival of freshwater pearl mussels. A key component of these efforts is the removal of beaver dams, which is a continuous process coordinated by EEB to ensure the sustainability of the ecosystem.
- Freshwater pearl mussels require specific habitat conditions, including stable substrates and high-water quality. Future Actions will be ongoing sediment management, removal of obstructions, and water quality improvement measures will be implemented to maintain ideal conditions for mussel populations.
- Why Needed: Water quality in river is not good enough for young FPM to survive. Young FPMs
 ar grown in Põlula laboratory and then returned to river. This is long process (estimated at least
 10 years).
- After CoastNet LIFE -project: Acting according to mussel breeding program, monitoring young FPM in river. Responsibility: Keskonnaamet (EEB).



River structures built into Pudisoo river to make the environment more suitable for FPM.







Picture: Tõnis Relvik

D1 Monitoring of the project sites 1/3

- The main aim of monitoring the restoration sites is to define whether restoration of habitats and removal of alien species have led to the recovery of habitat characteristics, improving the representativeness of N2000 habitats, as well as strengthening habitat networks and improving the state of declined species.
- The aim in the CoastNet LIFE project was to do the general monitoring of the restoration success in all sites, one site visit before restoration actions and one site visit 2-4 years after the actions is made. In Finland based on the monitoring results, most of the monitored sites are in excellent condition after restoration. Nature management work has significantly improved the habitats of the CoastNet LIFE sites. In Estonia also, most project areas are now in excellent condition, ranked "A" grade. Restoration efforts have significantly improved habitat health.
- In Finland part of the restoration work of MHPWF was completed in 2023-2025. Therefore, general monitoring after the restoration rest of the sites will be completed after the project.
- Responsibility: MHPWF.



Picture: Lena Wargén







D1 Monitoring of the project sites 2/3

- On state-owned lands in Finland, the management of semi-natural habitats is monitored through annual documentation of management activities. A monitoring network based on permanent sample plots has been established for tracking vascular plant species.
- The monitoring of vascular plants on sample plots located in restored and continuously grazed project sites, as well as on control sites, will continue as part of Metsähallitus Parks & Wildlife Finland's national seminatural grassland species monitoring network. Monitoring is conducted every five years.
- In total, there are 23 sample plots across the project and control sites (7 project sites plus control plots). These are planned to be sampled approximately twice by the year 2030, resulting in a total of 46 plot samplings.
- The estimated cost of this monitoring by 2030 is approximately €100,000.
- · Resbonsibilty: Metsähallitus Luontopalvelut.







D1 Monitoring of the project sites 3/3

- Monitoring of the effectiveness of management measures for the clouded Apollo (Parnassius Mnemosyne).
- Management measures aimed at improving the clouded Apollo's habitat have been carried out at the sites in the CoaestNet LIFE project, such as
 opening up overgrown habitats, fencing off areas from deer and arranging grazing. Clouded Apollos have so far been counted at these three sites
 by using the same method in 2019, 2020, 2021 and 2023. Monitoring of clouded Apollo will continue at three sites (three islands) using the same
 counting method with repeated counts every two years until at least 2029, and longer if necessary.
- Below is the monitoring plan for the clouded Apollo sites managed by CoastNet LIFE.

Year	Explanation	Status
2019	counting, 1 (preliminary counting)	done (2 sites)
2020	counting, 2	done (all 3 sites)
2021	counting, 3	done (all 3 sites)
2023	counting, 4 (monitoring after the measures)	done (all 3 sites)
2025	counting, 5 (monitoring after the measures)	arranged (all 3 sites)
2027	counting, 6 (monitoring after the measures)	planned (all 3 sites)
2029	counting, 7 monitoring after the measures)	planned (all 3 sites)
≥2031	counting, 8, etc. monitoring after the measures)	if necessary (all 3 sites)

Estimated costs for monitoring three (3) sites in 2025, 2027 and 2029: 5000–6000 € / monitoring year.









E1 General media work

- <u>The website of the project</u> will be maintained and funded by MHPWF staff. This will last for a minimum of 5 years. Ensuring access to the restoration action plans and other collected data during the project.
- From the website can be found the project results in Layman's report and After LIFE Plan (in Finnish, in Estonian and in English).
- Also, the project all 12 videos are available on the project website after the life.
- · Responsibility: MHPWF.

Other actions After-LIFE:

• Installation of direction signs will be in 2025, and installation of information boards of new construction 2025-2026. **Responsibility: The city of Tallin (EDT).**







E2 The restoration and science trails 1/2

- In the CoastNet LIFE completed restoration and science trails are situated in Pähkinämaa, Tasku and in Seili. The restoration trails do not only inform the visitors about Natura 2000 areas and project's work but are essential in keeping the fragile nature on the sites intact.
- The maintenance and possible restorations will be made if needed.
- Responsibility: Town of Raahe, MHPWF, UTU.



Picture for restoration trail of Tasku. Illustration: Jari Kostet.

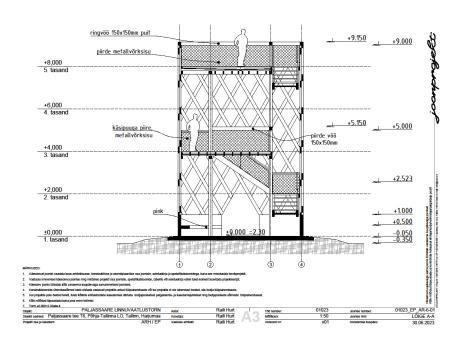






E2 The restoration and science trails 2/2

- In Paljasaari bird area (site 38) is placed a birdwatching tower. The plan was a replacement of an existing wooden birdwatching tower by a new one after approval of new general planning (2026-2027). As construction of new birdwatching tower did not realize during the project, it will be ready, together with installation of a specific information board in the vicinity of the tower.
- Design of tower is ready, and it is possible to proceed with construction as soon as general planning of the area has been signed.
- Renewing the birdwatching tower in Paljasssare (2026) the estimated budget is 200 000 euros.
- Responsibility: City of Tallinn (EDT).









E3 Improving visitor services and environmental education

- EEB developed an Environmental Education Package for students and stakeholders related to the nature conservation works and built a mobile exhibition. All elements of the mobile exhibition are aimed at upper primary and secondary school students, but they are also suitable for adults. The elements are weatherproof and can be used both indoors and outdoors. This way, the exhibition is interactive and reaches more people.
- After LIFE practical programs to introduce nature conservation works will be presented at various outdoor events and school outdoor programs all over Estonia. Responsibility: EEB.
- City of Turku built a lightweight hut in the yard of the Nature School and firm pier by the pondside to function as the base for the outdoor education of the children. Nature school in Ruissalo continues and hut and pier built in the project are supporting nature school activities after the project. The maintenance and possible restorations of the hut and pier will be made if needed. Responsibility: City of Turku.



Photo: Riina Martvek







Funding of the After-LIFE by actions 1/4

€ = <10 000 € **€€** = 10 000 € - 99 999 € **€€€** = 100 000 € - 499 999 € **€€€€** = 500 000 € - 999 999 € **€€€€** = >1 000 000 €

Action	Description of the action	Continuity	Organisation responsible for continuation	Sources of Finance	Funding and budget
C1	Restoring semi-natural habitats.	For example, management by grazing is needed to maintain and improve the work.	MHPWF, Town of Rauma, Town of Raahe, City of Turku, City of Tallinn (EDT), EEB	MHPWF, Helmi habitats programme, Town of Rauma, City of Tallinn, CAP, City of Turku (Biodiversity Programme, LUMO)	-MHPWF €€€/year -Town of Rauma € (until year 2028) -Town of Raahe € -City of Turku € -City of Tallinn €€ (until year 2028) -EEB €€€
C4	Restoration of herb-rich forests	Forests are managed by creating space for oaks through the selective thinning of birch, aspen, and maple trees.	City of Turku, MHPWF	City of Turku (Biodiversity Programme, LUMO) MHPWF	City of Turku €€ MHPWF €€







Funding of the After-LIFE by actions 2/4

€ = <10 000 € €€ = 10 000 € - 99 999 € €€€ = 100 000 € - 499 999 € €€€€ = 500 000 € - 999 999 € €€€€€ = >1 000 000 €

Action	Description of the action	Continuity	Organisation responsible for continuation	Sources of Finance	Funding and budget
C5	Restoration of sun-lit habitats	To avoid overgrowth of tree species the restored areas, regular monitoring and removing of pines and junipers is needed. Activity is planned to be carried out at least every second year.	EEB MHPWF	EEB	EEB € MHPWF €€
C6	Compating invasive alien species	In site 39 Kolga lahe small islands continuous control of abundance of American mink and raccoon dog is needed. In the City of Turku Harmful invasive alien plant species included in the EU list and the national list are controlled annually with the aim of eliminating their occurrence.	EEB, City of Turku, MHPWF	EEB, City of Turku (Biodiversity Programme, LUMO), MHPWF Helmi	EEB € City of Turku € MHPWF €€
C8	Restoration camps for volunteers	Camp sites are selected where volunteer work is the most cost-effective option and where, for example, due to the terrain or remote location, they cannot be reached by machine power.	WWF, MHPWF, The Finnish Association for Nature Conservation (FANC),	MHPWF, WWF, Priodiversity LIFE	MHPWF €€ Priodiversity LIFE €€€ (2024–2031)

Funding of the After-LIFE by actions 3/4

€ = <10 000 € €€ = 10 000 € - 99 999 € €€€ = 100 000 € - 499 999 € €€€€ = 500 000 € - 999 999 € €€€€€ = >1 000 000 €

Action	Description of the action	Continuity	Organisation responsible for continuation	Sources of Finance	Funding and budget
C10	Margaritifera margaritifera breeding and habitat restoration	In site 40 Lahemaa FPM breeding and habitat restoration activities are continued in the LIFE Revives project. Removing of beaver dams is continuous process and will be coordinated by EEB.	EEB	EEB/State Forest Management Centre	€€€€
D1	Monitoring of the sites	In Estonia future monitoring of the project sites is planned in the frames of the National Monitoring program. In Finland after the restoration monitoring will be done rest of the sites after the project. Monitoring of the effectiveness of management measures for the clouded Apollo continues.	EEB, MHPWF	Estonian Environmental Agency, MHPWF	EEB € MHPWF €€
E1	Dissemination of the actions	1 information board for the renewed birdwatching tower; new directing signs; information boards/ Paljassaare (2025-2026), MHPWF is maintaining the project website.	EDT, MHPWF	City of Tallinn, MHPWF	City of Tallinn € MHPWF € NATURA 2000 CoastNet LIFE

Funding of the After-LIFE by actions 4/4

€ = <10 000 € €€ = 10 000 € - 99 999 € €€€ = 100 000 € - 499 999 € €€€€ = 500 000 € - 999 999 € €€€€€ = >1 000 000 €

Action	Description of the action	Continuity	Organisation responsible for continuation	Sources of Finance	Funding and budget
E2	The restoration and nature trails	Renewing the birdwatching tower in Paljassaare (2027).	EDT	City of Tallinn	€€€
E3	Improving visitor services and environmental education	Practical programs to introduce nature conservation works will be presented at various outdoor events and school outdoor programs all over Estonia.	EEB	Estonian Museum of Natural History	€







