

## Appendix 5 – Tabular summary of information on resources of protected species of plant, fungus and animals in the area of Task and its surroundings

This appendix to the Environmental Management Plan (EMP) for Task *2A.2/1 Construction of “Szalejów Górny” – a dry flood control reservoir on Bystrzyca Dusznicka River* includes a summary of information on resources of protected species of plants, fungi and animals in the area of Task and its surroundings.

Table 1. Specification of rare and protected species of plants and fungi within the Task area

No.	Name	Protection status	Regional/national Red List assessment	Population resources (specimens or area)	No of stands	Location
<b>Vascular plants</b>						
1.	Cut-leaved Crane's-bill <i>Geranium dissectum</i>	none	LC / none	100-300 sp.	3	in the field on the left side of the Bystrzyca Dusznicka valley
2.	Wild garlic <i>Allium ursinum</i>	PP	NT / VU	1000-5000 sp.	11	on flood plains of Bystrzyca Dusznicka, most often on the right bank of the river, near the old stone bridge
3.	Stemless carline thistle <i>Carlina acaulis</i>	PP	none / none	2 sp.	1	on top of a hill between Szalejów Górny and the area of reservoir
4.	Giant bellflower <i>Campanula latifolia</i>	PP	NT / VU	2 sp.	1	on flood plain of Bystrzyca Dusznicka, west of the bridge on a dirt road (in plot no. 457 Forest District Zdroje)
5.	Broad-leaved helleborine <i>Epipactis helleborine</i>	PP	none / none	20-30 sp.	1	in the forest on the slope, over landslide
6.	Martagon lily <i>Lilium martagon</i>	SP	LC / none	20-30 sp.	2	in oak-hornbeam forest on the slope of the valley, in the eastern part of area

No.	Name	Protection status	Regional/national Red List assessment	Population resources (specimens or area)	No of stands	Location
7.	Oxlip <i>Primula elatior</i>	PP	none / none	150-300 sp.	13	in the whole area of tasks, the most common in riparian forests on flood plains of Bystrzyca Dusznicka and on wet meadows
8.	Common snowdrop <i>Galanthus nivalis</i>	PP	none / none	1000-3000 sp.	9	in riparian forests on the banks of Bystrzyca Dusznicka
9.	<i>Chamaecytisus supinus</i>	none	LC / none	20-40 sp.	1	on the edge of forest on the southern slope of the hill between Szalejów Górny and the area of reservoir
10.	Autumn crocus <i>Colchicum autumnale</i>	PP	LC / none	several hundred sp.	14	on meadows and herbs in the western part of the reservoir and on wet meadows on the left bank of Bystrzyca Dusznicka in the central part of the area
<b>Bryophyte</b>						
11.	Big shaggy-moss <i>Rhytidiadelphus triquetrus</i>	PP	none / none	2 m <sup>2</sup>	2	on top of landslides in the forest on the slope above Bystrzyca Dusznicka
12.	<i>Homalia trichomanoides</i>	PP	none / none	several m <sup>2</sup>	6	on the roots of trees in the forest on the slope above Bystrzyca Dusznicka
13.	Pointed spear moss <i>Calliergonella cuspidata</i>	PP	none / none	several thousand m <sup>2</sup>	5	on the left bank of Bystrzyca Dusznicka on meadows between Szalejów Górny i Dolny, and on the right bank of Bystrzyca Dusznicka in the western part of the area

No.	Name	Protection status	Regional/national Red List assessment	Population resources (specimens or area)	No of stands	Location
14.	Bruch's pincushion <i>Ulotia bruchii</i>	PP	none / VU	15-20 cm <sup>2</sup>	3	1 location in riparian forest in the western part of the tasks; 2 locations in nameless hill 364 m a.s.l., outside the area of Task
15.	Wall Scalewort <i>Porella platyphylla</i>	SP	none / EN	kilka m <sup>2</sup>	3	in the forest on a steep slope above Bystrzyca Dusznicka
16.	Greater featherwort <i>Plagiochila asplenioides</i>	PP	none / none	kilka m <sup>2</sup>	4	as above
17.	<i>Orthotrichum patens</i>	none	none / rare	1 cm <sup>2</sup>	1	on the trunk of old pear tree at forest road, on a nameless hill SE from Szalejów Dolny, outside the area of Task
18.	Elegant bristle-moss <i>Orthotrichum pulchellum</i>	none	none / unknown	1 cm <sup>2</sup>	1	as above
19.	Straw bristle-moss <i>Orthotrichum stramineum</i>	none	none / VU	ca. 40 cm <sup>2</sup>	1	as above
20.	<i>Anomodon viticulosus</i>	PP	none / none	0,1 m <sup>2</sup>	1	on the roots of hazelnut in oak-hornbeam forest on a slope, in the eastern part of the area
<p><u>Protection status</u>: SP – strict protection, PP – partial protection  <u>Red List assessment</u>: LC – least concern, NT – near threatened, VU – vulnerable, EN – endangered</p>						

Table 2. Specification of rare and protected fish species within the range of impact of the Task

No.	Name	Protection status	Average number [number of specimens/100 m <sup>2</sup> ]
1.	Stone loach <i>Barbatula barbatula</i>	PP, LC	6,2
2.	Brook lamprey <i>Lampetra planeri</i>	PP, HDII	0,6
3.	River trout <i>Salmo trutta fario</i>	R, LC	0,75
4.	Grayling <i>Thymallus thymallus</i>	R, CD, HDV	0,3
<p style="text-align: center;"><u>Protection status:</u> PP – partial protection, R – protection period or dimension, HDII – Annex II of the Habitat Directive, HDV – Annex V of the Habitat Directive</p> <p style="text-align: center;"><u>Red List assessment:</u> CD – conservation dependent, LC – least concern</p>			

Table 3. Specification of protected species of amphibians and reptiles within the Task area

No.	Name	Protection status	Estimated number of specimens	Occurrence within the Task area
1.	Common frog <i>Rana temporaria</i>	PP	10-20 sp.	whole area of Task
2.	Edible frog <i>Pelophylax esculentus</i>	PP	20-40 sp.	pond among fields
3.	Smooth newt <i>Lissotriton vulgaris</i>	PP	50-70 sp.	pond among fields
4.	Common toad <i>Bufo bufo</i>	PP	50-100 sp.	whole area of Task
5.	Slow worm <i>Anguis fragilis</i>	PP	20-30 sp.	near Bystrzyca Dusznicka
6.	Grass snake <i>Natrix natrix</i>	PP	10-30 sp.	pond among fields
<u>Protection status:</u> PP – partial protection				

Table 4. Specification of protected species of birds within the Task area

No.	Name	Protection status	Number or density on 10 ha	Status in the area
1.	Common buzzard <i>Buteo buteo</i>	SP	1 p.	b, f
2.	Eurasian sparrowhawk <i>Accipiter nisus</i>	SP	1 p.	b, f
3.	Common kestrel <i>Falco tinnunculus</i>	SP	1 p.	f, a
4.	European turtle dove <i>Streptopelia turtur</i>	SP	1-2 p.	b, f
5.	Eurasian collared dove <i>Streptopelia decaocto</i>	SP	no data	a, f
6.	Common cuckoo <i>Cuculus canorus</i>	SP	no data	b, f
7.	Eurasian eagle-owl <i>Bubo bubo</i>	SP, BDI	1 sp.	b?, f
8.	Tawny owl <i>Strix aluco</i>	SP	1 p.	b, f
9.	Common swift <i>Apus apus</i>	SP	10-20 p.	a, f
10.	Grey-headed woodpecker <i>Picus canus</i>	SP, BDI	1 p.	b, f
11.	Great spotted woodpecker <i>Dendrocopos major</i>	SP	2 p./10 ha	b, f
12.	Eurasian wryneck <i>Jynx torquilla</i>	SP	1 p.	b, f
13.	Eurasian skylark <i>Alauda arvensis</i>	SP	no data	b, f
14.	Barn swallow <i>Hirundo rustica</i>	SP	no data	a, f
15.	Common house martin <i>Delichon urbica</i>	SP	no data	a, f
16.	Meadow pipit <i>Anthus pratensis</i>	SP	3 p.	b, f
17.	Tree Pipit <i>Anthus trivialis</i>	SP	several p.	b, f
18.	White wagtail <i>Motacilla alba</i>	SP	4 p.	b, f
19.	Grey wagtail <i>Motacilla cinerea</i>	SP	2 p.	b, f
20.	Eurasian wren <i>Troglodytes troglodytes</i>	SP	2 p./10 ha	b, f
21.	White-throated dipper <i>Cinclus cinclus</i>	SP	1 p.	b, f
22.	European robin <i>Erithacus rubecula</i>	SP	3,5 p./10 ha	b, f
23.	Black redstart <i>Phoenicurus ochruros</i>	SP	no data	a, f
24.	Whinchat <i>Saxicola rubetra</i>	SP	1,5 p./10 ha	b, f
25.	Song thrush <i>Turdus philomelos</i>	SP	no data	b, f
26.	Fieldfare <i>Turdus pilaris</i>	SP	10-20 p.	b, f
27.	Common blackbird <i>Turdus merula</i>	SP	2 p/10 ha	b, f
28.	Icterine warbler <i>Hippolais icterina</i>	SP	no data	b, f
29.	Garden warbler <i>Sylvia borin</i>	SP	no data	b, f
30.	Eurasian blackcap <i>Sylvia atricapilla</i>	SP	2 p./10 ha	b, f
31.	Lesser whitethroat <i>Sylvia curruca</i>	SP	no data	b, f
32.	Common whitethroat <i>Sylvia communis</i>	SP	2,3 p./10 ha	b, f
33.	Willow warbler <i>Phylloscopus trochilus</i>	SP	no data	b, f
34.	Common chiffchaff <i>Phylloscopus collybita</i>	SP	no data	b, f

No.	Name	Protection status	Number or density on 10 ha	Status in the area
35.	Goldcrest <i>Regulus regulus</i>	SP	no data	b, f
36.	Spotted flycatcher <i>Muscicapa striata</i>	SP	several p.	b, f
37.	Great tit <i>Parus major</i>	SP	no data	b, f
38.	Eurasian blue tit <i>Cyanistes caeruleus</i>	SP	no data	b, f
39.	Willow tit <i>Poecilla montana</i>	SP	no data	b, f
40.	Marsh tit <i>Poecilla palustris</i>	SP	several p.	b, f
41.	Long-tailed tit <i>Aegithalos caudatus</i>	SP	no data	b, f
42.	Eurasian nuthatch <i>Sitta europaea</i>	SP	no data	b, f
43.	Eurasian treecreeper <i>Certhia familiaris</i>	SP	1 p./10 ha	b, f
44.	Red-backed shrike <i>Lanius collurio</i>	SP, BDI	ca. 12 p.	b, f
45.	Eurasian jay <i>Garrulus glandarius</i>	SP	no data	b, f
46.	Common raven <i>Corvus corax</i>	PP	1 p.	b, f
47.	Common starling <i>Sturnus vulgaris</i>	SP	no data	b, f
48.	Orioles <i>Oriolus oriolus</i>	SP	no data	b, f
49.	Common chaffinch <i>Fringilla coelebs</i>	SP	no data	b, f
50.	European serin <i>Serinus serinus</i>	SP	no data	b, f
51.	Common Linnet <i>Carduelis cannabina</i>	SP	several p.	b, f
52.	European goldfinch <i>Carduelis carduelis</i>	SP	no data	b, f
53.	European greenfinch <i>Carduelis chloris</i>	SP	3 p./10 ha	b, f
54.	Eurasian siskin <i>Carduelis spinus</i>	SP	no data	b, f
55.	Eurasian bullfinch <i>Pyrrhula pyrrhula</i>	SP	2 p.	b, f
56.	Hawfinch <i>Coccothraustes coccothraustes</i>	SP	no data	b, f
57.	House sparrow <i>Passer domesticus</i>	SP	no data	b, f
58.	Eurasian tree sparrow <i>Passer montanus</i>	SP	no data	b, f
59.	Yellowhammer <i>Emberiza citrinella</i>	SP	4 p./10 ha	b, f
60.	Corn bunting <i>Emberiza calandra</i>	SP	1-2 p.	b, f
61.	Kingfisher <i>Alcedo atthis</i>	SP, BDI	2 p.	b, f
<p><u>Protection status</u>: SP – strict protection, PP – partial protection, BDI – Annex I of the Bird Directive,</p> <p><u>Number or density</u>: p. – breeding pairs, m. – males, no data – common species, not counted</p> <p><u>Status of species in the area</u>: b – breeding species, a – species rarely appearing in the area, f – species feeding in the area</p>				

Table 5. Specification of protected species of land mammals within the Task area

No.	Name	Protection status	Number	Occurrence
1.	Eurasian otter <i>Lutra lutra</i>	PP, HDII	no data	on both banks of Bystrzyca Dusznicka
2.	Eurasian beaver <i>Castor fiber</i>	PP, HDII	probably only 1 family	on both banks of Bystrzyca Dusznicka
<u>Protection status:</u> PP – partial protection, HDII – Annex II of the Habitat Directive				

Table 6. Specification of protected bat species within the Task area

No.	Name	Protection status	Occurrence
1.	Common noctule <i>Nyctalus noctula</i>	SP, HDIV, LC	within the whole area of Task
2.	Common pipistrelle <i>Pipistrellus pipistrellus</i>	SP, HDIV, LC	within the whole area of Task
3.	Nathusius's pipistrelle <i>Pipistrellus nathusii</i>	SP, HDIV, LC	within the whole area of Task
4.	Daubenton's bat <i>Myotis daubentonii</i>	SP, HDIV, LC	within the whole area of Task
5.	Serotine bat <i>Eptesicus serotinus</i>	SP, HDIV, LC	near the dam of reservoir
6.	Parti-coloured bat <i>Vespertillo murinus</i>	SP, HDIV, LC	in the upper part of the area
7.	Long-eared bat <i>Plecotus sp.</i>	SP, HDIV, LC	in the upper part of the area
8.	Mouse-eared bat <i>Myotis sp.</i>	SP, HDIV, LC	within the whole area of Task
<u>Protection status:</u> SP – strict protection, HDIV – Annex IV of the Habitat Directive <u>Red List assessment:</u> LC – least concern			