Environmental Impact Assessment

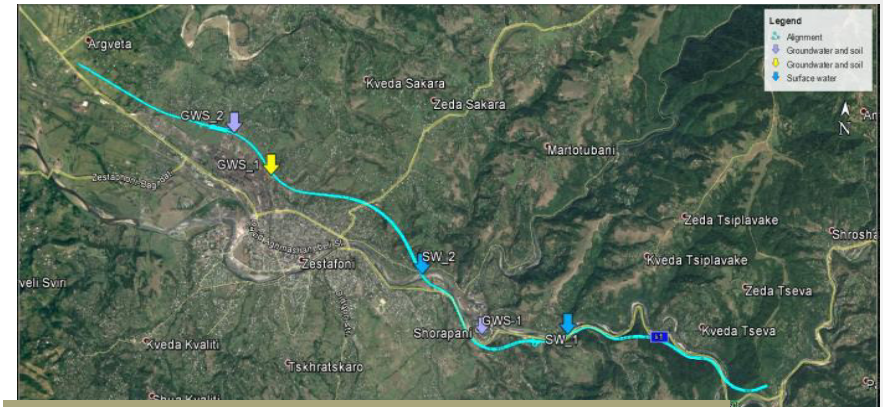
Project Number: 53178-001
May 2019

GEO: East–West Highway (Shorapani–Argveta Section) Improvement Project

Part 12 (Appendixes Dï F)

Prepared by the Roads Department of the Ministry of Regional Development and Infrastructure of Georgia for the Asian Development Bank.

ზედაპირული წყლის ხარისხი



წყლის ხარისხი აკმაყოფილებს ზედაპირული წყლის ხარისხისადმი წაყენებულ ნორმებს. გარდა მარგანეცისა რომელიც მდ.ყვირილაში

ზედაპირული წყალი: **pH**, ელგამტარობა **(EC)**, სიმღვრივე, ჟბმ$_5$, ჟქმ, გახსნილი ჟანგბადი **(DO)**, **TSS**, ჯამური ფოსფორი, ჯამური აზოტი, ჯამური ამონიუმი, ჯამური თუთია, გახსნილი სპილენძი, მარგანეცი, სიმღვრივე, **TPH**, ტოტალური კოლიფორმები

გრუნტის წყლის ხარისხი

pH
გახსნილი ჟანგბადი
ელგამტარობა
ტუტიანობა
სიხისტე
ჯამური შეტივნარებული ნაწილაკები
დარიშხანი
ქლორიდები
რკინა
ნიტრატები
ნატრიუმი
კალიუმი
კალციუმი
მაგნიუმი
მარგანეცი
ტყვია
სულფატები

წყლის ხარისხი აკმაყოფილებს საქართველოში მოქმედ მოთხოვნებს.

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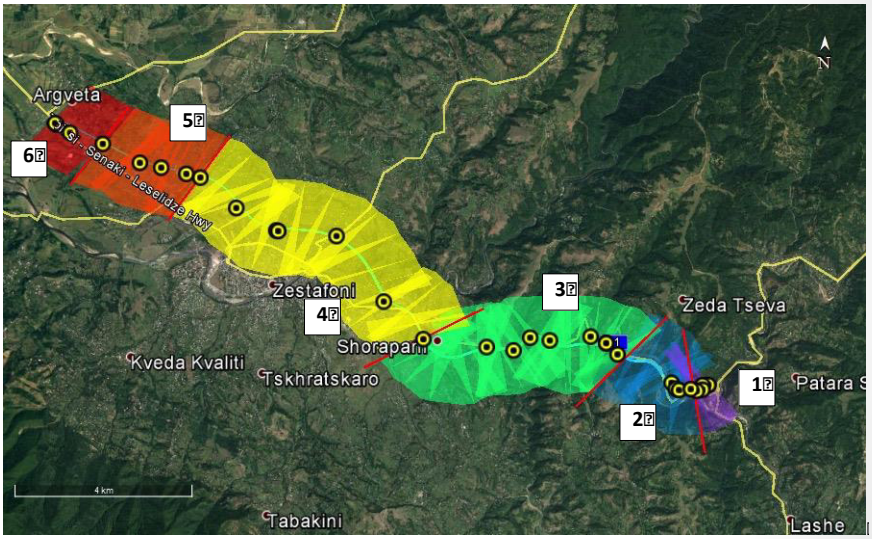

B'. !) ") , . ! (("30 #(, %$"; ! 0 9 ! %, . - * , . "

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3	7 0 &! , %"4 ("+, / , ; $* ! * ! B'. !) ") ! ". "4 "&! "#! (7 , ' "$* , #" ' "&0 ! +") , . " ("50 #* ! (:0 $, . "(" 4 ") =! (?, +$"/ ! ; "% 4 "8 ! 5(! %4 " &; , #"%! ("%; , %2 ! 4 "; - * ! ("+, 0 . ".	4 ". "* !
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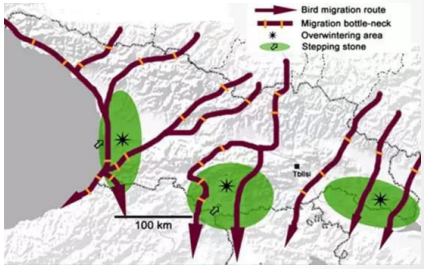
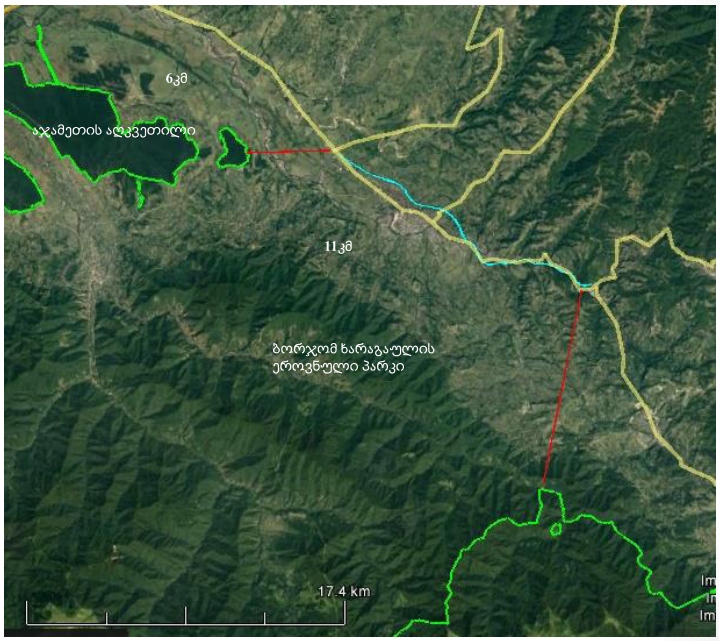
ცხოველთა სამყარო - დაცული სახეობები

სახეობა	წით. ნუსხა	IUCN	სხვა	Section N
კავკასიური ციყვი	VU	LC	EU ჰაბიტატების დირექტივა (92/43) IV 21/05/92; ბერნის კონვენცია 01/03/02,	1/2/3
წავი	VU	NT	CITES დანართი I, ბერნის კონვენცია დანართი II, ჰანიტატების დირექტივა დანართი II და IV	4
ხმელთაშუა ზღვის კუ	VU	VU	-	1/4/

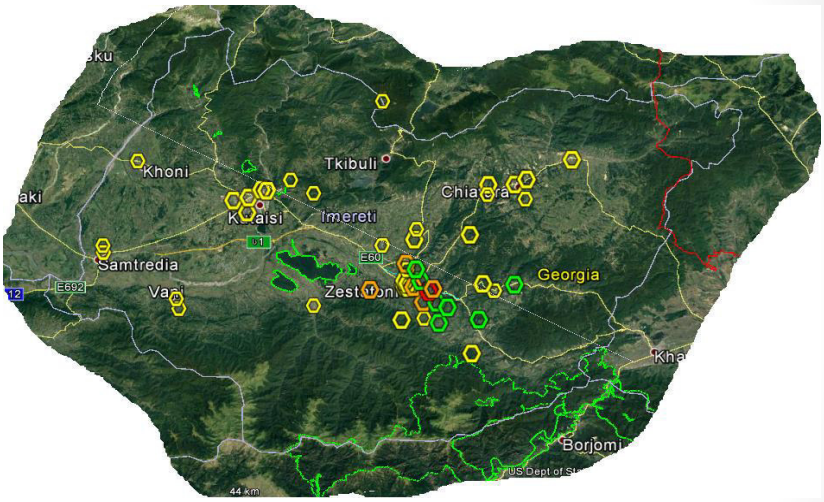


39

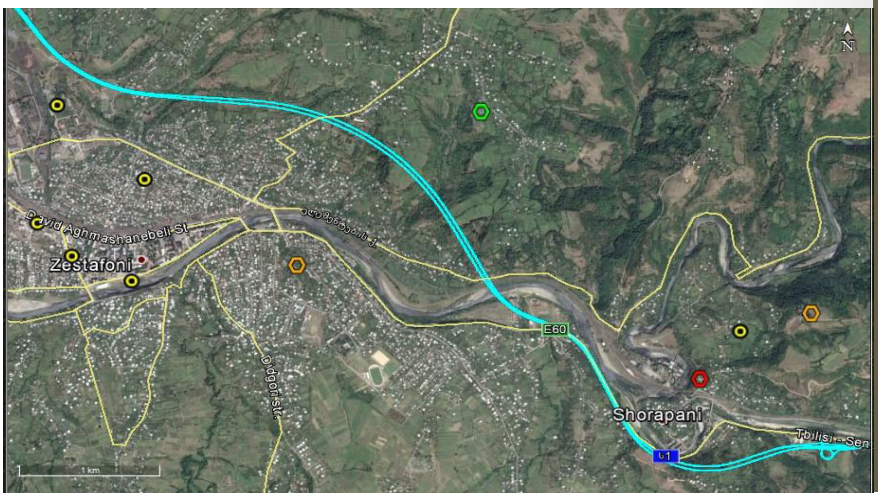
დაცული ტერიტორიები



კულტურული მემკვიდრეობა



კულტურული მემკვიდრეობა



ყვითელი ექსლკუთხედი - ეკლესია; მწვანე ექვსკუთხედი - ეკლესია და სასაფლაო; ნარინჯისფეი ექვსკუთხედი - სასაფლაო;

1წმ,ნინოს წკლესია,მიახლოებითი მანძილი 260m; 2 – წმ.ნიკოლოზის ეკლესია - მიახლ.მანძილი 650m. 3 – სასაფლაო - მიახლ მანძილი 630m; 4 – შორპმის ციხე - მიახლ. მანძილი 590მ

კულტურული მემკვიდრეობა - არქეოლოგია

ზემოქმედება	რანგირება
მშენებლობა	
ხარისხის გაუარესება	L-M, S, R, ადგილობრივი.
ხმაური და ვიბრაცია	L-M.S, R, ადგილობრივი
წყლის ხარისხი	L-M, S. R, ადგილობრივი
ნიადაგის ხარისხის გაუარესება	L-M, S, R, ადგილობრივი
ზემოქმედება ფლორაზე/ მცენარეულობა ზე	L-M, ადგილობრივი, ტერიტორიებზე, რომელიც გასხვისება არ ხდება მუდმივად - საშუალოდან ხანმოკლე (დროებითი), შექცევადი.
ზემოქმედება ფაუნაზე	L-M, დამოკიდებულია სამარშრუტო მონაკვეთზე, S, R, ადგილობრივი. ეს იქნება - დარჩენილი ხმაურის გავრცელება, გამონაბოლქვი ემისიები, ზემოქმედების გარკვეული რისკი წყალქვეშა ცხოველებზე, დროებითი ზემოქმედება წყლის ხარისხზე(ძირითადად სიმღვრივის მომატება), შეჯახება
ლანდშაფტის და ვიზუალური ცვლილება	L-VL (დამოკიდებულია ადგილმდებარეობაზე), S, R, ადგილობრივი

ფუნქციონირება	
ჰაერის ხარისხის გაუარესება	დაბალიდან საშუალომდე, მოდელირების მონაცემების მიხედვით, ზემოქმედება არ არის მაღალი, შემამსუბუქებელი ზომები არ არის საჭირო
ხმაური და ვიბრაცია	დაბალიდან საშუალომდე .
წყლის ხარისხი	უმნიშვნელო - დაბინძურება ზედაპირული ჩამონარეცხით
ნიადაგის ხარისხის გაუარესება	დაბალიდან უმნიშვნელომდე - დაბინძურება ჩამონარეცხით
გეოლოგიური საშიშროებების განვითარება	უმნიშვნელო.
ზემოქმედება ფლორაზე/ მცენარეულობაზე	უმნიშვნელო.
ზემოქმედება ფაუნაზე	დაბალი. ხმაურის გავრცელება, გამონაბოლქვი ემისიები, ზემოქმედების გარკვეული რისკი წყლის ცხოველებზე წყლის ხარისხის გაუარესების გამო და კოლიზიის რისკი
ლანდშაფტის და ვიზუალური ცვლილება	მნიშვნელოვანი ცვლილება გზისა და ხიდების გამო

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- 7 , ( ) "8 0 #! (3&6.0 – 11.0)
- 5$.("5"%" (3&11.0 – 12.0)
- "%' $, 2 " (3&13.0 – 15.0)

' "("($* , * , . !

#	ʒ3 (ð)	#	ʒ3 (ð)
01-AT	10,293	03-AT	13,222
01-TA	10,269	03-TA	13,200
02-AT	12,770	04-AT	13,636
02-TA	12,749	04-TA	13,614

კულვერტები

#	პკ (მ)	#	პკ (მ)	#	პკ (მ)	#	პკ (მ)
01-AT	50	14-AT	5,408	28-TA	11,223	40-AT	13,259
01-TA	50	16-TA	8,333	28-AT	11,245	42-TA	13,405
04-AT	190	16-AT	8,344	30-TA	11,567	42-AT	13,427
04-TA	190	18-TA	8,683	30-AT	11,579	44-TA	13,568
06-TA	620	18-AT	8,694	32-TA	12,183	44-AT	13,591
08-AT	755	20-TA	9,923	32-AT	12,204	46-TA	13,818
08-TA	760	20-AT	9,954	34-TA	12,428	46-AT	13,842
06-AT	615	22-TA	10,172	34-AT	12,449	48-TA	13,955
10-TA	4,639	22-AT	10,197	36-TA	12,489	48-AT	13,979
10-AT	4,661	24-TA	10,534	36-AT	12,510	50-TA	14,188
12-TA	5,021	24-AT	10,558	38-TA	12,975	50-AT	14,213
12-AT	5,049	26-TA	10,794	38-AT	12,997	52-TA	14,349
14-TA	5,391	26-AT	10,817	40-TA	13,236	52-AT	14,274

დამცავი კედლები

- კმ 0.00 to კმ 0.25
- კმ 4.36 to კმ 4.43 (შორაპანთან)
- კმ 8.63 to კმ 8.71
- კმ 8.84 to კმ 8.94

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APPENDIX E

Chance Find Procedure

Purpose of the chance find procedure
The chance find procedure is a project-specific procedure that outlines actions required if previously unknown heritage resources, particularly archaeological resources, are encountered during project construction or operation. A Chance Find Procedure, as described in IFC Performance Standard 8 and EBRD Performance Requirement 8 and law on Cultural Heritage of Georgia, is a process that prevents chance finds from being disturbed until an assessment by a competent specialist is made and actions consistent with the requirements are implemented.

Scope of the chance find procedure
This procedure is applicable to all activities conducted by the personnel, including contractors, that have the potential to uncover a heritage item/site. The procedure details the actions to be taken when a previously unidentified and potential heritage item/site is found during construction activities. Procedure outlines the roles and responsibilities and the response times required from both project staff, and any relevant heritage authority.

Induction/Training
All personnel, especially those working on earth movements and excavations, are to be inducted on the identification of potential heritage items/sites and the relevant actions for them with regards to this procedure during the Project induction and regular toolbox talks.

Chance find procedure
If any person discovers a physical cultural resource, such as (but not limited to) archaeological sites, historical sites, remains and objects, or a cemetery and/or individual graves during excavation or construction, the following steps shall be taken:

1. Stop all works in the vicinity of the find, until a solution is found for the preservation of these artefacts, or advice from the relevant authorities is obtained;
2. Immediately notify a foreman. The foreman will then notify the Construction Manager and the Environment Officer (EO)/Environmental Manager (EM);
3. Record details in Incident Report and take photos of the find;
4. Delineate the discovered site or area; secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities take over;
5. Preliminary evaluation of the findings by archaeologists. The archaeologist must make a rapid assessment of the site or find to determine its importance. Based on this assessment the appropriate strategy can be implemented. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage such as aesthetic, historic, scientific or research, social and economic values of the find;
6. Sites of minor significance (such as isolated or unclear features, and isolated finds) should be recorded immediately by the archaeologist, thus causing a minimum disruption to the work schedule of the Contractor. The results of all archaeological work must be reported to the Ministry/Agency, once completed.
7. In case of significant find the Agency/Ministry (Agency for Protection of National Heritage or Archaeological Research Centre, hereinafter referred to as Heritage team) should be informed immediately and in writing within 7 days from the find (ref.law on heritage protection).
8. The onsite archaeologist provides the Heritage team with photos, other information as relevant for identification and assessment of the significance of heritage items.

9. The Ministry must investigate the fact within 2 weeks from the date of notification and provide response in writing.
10. Decisions on how to handle the finding shall be taken by the responsible authorities. This could include changes in the layout (such as when finding an irremovable remain of cultural or archaeological importance) conservation, preservation, restoration and salvage;
11. Construction works could resume only after permission is granted from the responsible authorities.
12. In case no response received within the 2 weeks period mentioned above, this is considered as authorisation to proceed with suspended construction works.

One of the main requirements of the procedure is record keeping. All finds must be registered. Photolog, copies of communication with decision making authorities, conclusions and recommendations/guidance, implementation reports – kept.

Additional information
Management options for archaeological site

- **Site avoidance.** If the boundaries of the site have been delineated attempt must be made to redesign the proposed development to avoid the site. (The fastest and most cost-effective management option)
- **Mitigation.** If it is not feasible to avoid the site through redesign, it will be necessary to sample it using data collection program prior to its loss. This could include surface collection and/or excavation. (The most expensive and time-consuming management option.)
- **Site Protection.** It may be possible to protect the site through the installation of barriers during the time of the development and/or possibly for a longer term. This could include the erection of high visibility fencing around the site or covering the site area with a geotextile and then capping it with fill. The exact prescription would be site- specific.

Management of replicable and non-replicable heritage
Different approaches for the finds apply to replicable and non-replicable heritage.

Replicable heritage
Where tangible cultural heritage that is replicable[1] and not critical is encountered, mitigation measures will be applied.
The mitigation hierarchy is as follows:

- Avoidance;
- Minimization of adverse impacts and implementation of restoration measures, in situ;
- Restoration of the functionality of the cultural heritage, in a different location;
- Permanent removal of historical and archaeological artefacts and structures ;
- Compensation of loss - where minimization of adverse impacts and restoration not feasible.

Non-replicable heritage
Most cultural heritage is best protected by in situ preservation, since removal is likely to result in irreparable damage or even destruction of the cultural heritage.

[1] Replicable cultural heritage is defined as tangible forms of cultural heritage that can themselves be moved to another location or that can be replaced by a similar structure or natural features to which the cultural values can be transferred by appropriate measures. Archaeological or historical sites may be considered replicable where the particular eras and cultural values they represent are well represented by other sites and/or structures.

Nonreplicable cultural heritage[2] must not be removed unless all of the following conditions are met:

- There are no technically or financially feasible alternatives to removal;
- The overall benefits of the project conclusively outweigh the anticipated cultural heritage loss from removal; and

Any removal of cultural heritage must be conducted using the best available technique advised by relevant authority and supervised by archaeologist.

Human Remains Management Options

The handling of human remains believed to be archaeological in nature requires communication according to the same procedure described above.

There are two possible courses of action:

- **Avoid.** The development project is redesigned to completely avoid the found remains. An assessment should be made as to whether the remains may be affected by residual or accumulative impacts associated with the development, and properly addressed by a comprehensive management plan.
- **Exhumate.** Exhumation of the remains in a manner considered appropriate by decision makers. This will involve the predetermination of a site suitable for the reburial of the remains. Certain ceremonies or procedures may need to be followed before development activities can recommence in the area of the discovery.

EMERGENCY CONTACTS

Ministry of Culture and Monument Protection

Address: 4 Sanapiro Street, 0105, Tbilisi, Georgia; Fax: 995 32 2999966, 2932235;
E-Mail: culturegovge@gmail.com

National Agency for Cultural Heritage of Georgia

27 Atoneli street, 0105 Tbilisi, Georgia: tel/fax: +(99532) 2932411
E mail: info@heritagesites.ge

Archaeological Research Centre under the Georgian National Museum

3, Rustaveli Avenue0105 Tbilisi, Georgia
Tel: +(995 32) 2998022; Fax: +(995 32) 2982133
E-Mail: info@museum.ge

[2] Nonreplicable cultural heritage may relate to the social, economic, cultural, environmental, and climatic conditions of past peoples, their evolving ecologies, adaptive strategies, and early forms of environmental management, where the (i) cultural heritage is unique or relatively unique for the period it represents, or (ii) cultural heritage is unique or relatively unique in linking several periods in the same site. Examples of non-replicable cultural heritage may include an ancient city or temple, or a site unique in the period that it represents.

APPENDIX F

State Forest Fund

Wood Resource Listing

Forest Fund Territorial Authority with the right of management - LEPL Imereti Forestry Service of National Forestry Agency

Forest district - Zestaponi - Kharagauli , forest district- Satsable

Quarter_31, district - former Sak.forest; area _5086m2,

Slope inclination (degree)-15.

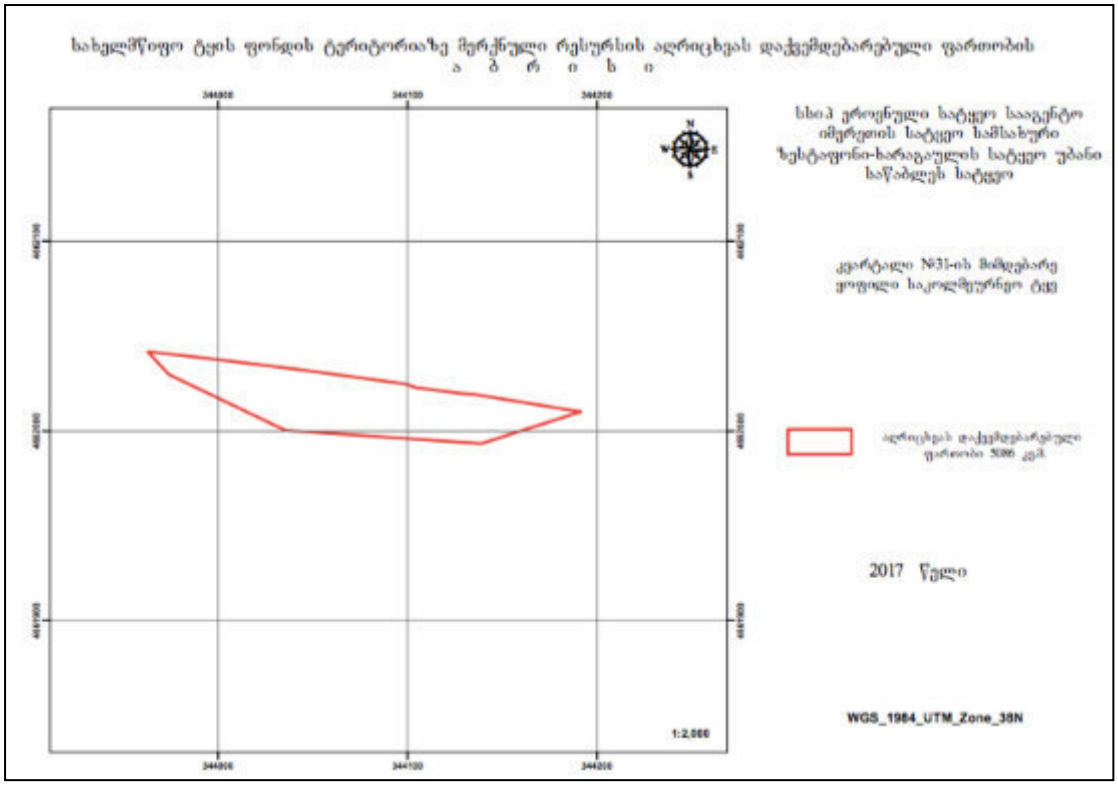
Quantity of the wood resources of 8 cm and more taxation diamter subject to recording (in pieces), volume (m3), according to the diameters and varieties of wood resources

#	Species (variety)	species (Latin)	Diameter (D)	Number of trees	Volume (v)	Note
1	**2**	**3**	**4**	**5**	**6**	**7**
1	zelkova	**Zelkova carpinifolia**	8	9	0.135	**VI-rank**
			10	6	0.21	**(Red list)**
			12	14	0.714	
			14	13	0.975	
			16	12	1.188	
			18	2	0.27	
			20	5	0.85	
			24	3	0.78	
			32	1	0.5	
Total zelkova:				**65**	**5.622**	
2	Acacia	**Acacia dealbata**	8	16	0.336	**IV-rank**
			10	9	0.369	
			12	15	0.96	
			16	1	0.123	
			20	1	0.21	

Total Acacia:				**42**	**1.998**	
3	ashtree	**Fraxinus excelsior**	8	2	0.024	**IV-rank**
			10	3	0.114	
			12	1	0.056	
Total ashtree:				**6**	**0.194**	
4	alder	**Alnus barbata**	8	1	0.019	**V-rank**
			10	1	0.038	
			12	1	0.058	
			14	1	0.088	
			16	3	0.36	
			20	2	0.4	
Total alder:				**9**	**0.963**	
5	willow	**Salix magnifica**	12	3	0.153	**VI-rank**
			14	2	0.15	
			16	2	0.198	
			18	2	0.27	
			20	12	2.04	
			24	5	1.3	
			28	1	0.37	
			32	1	0.5	
			36	1	0.67	
Total willow:				**29**	**5.651**	
6	oriental hornbeam	**Carpinus orientalis**	8	14	0.238	**VIII-rank**
			10	10	0.3	
			12	12	0.516	
			14	10	0.62	
			16	3	0.246	
			18	2	0.222	
			20	2	0.288	
Total oriental hornbeam:				**53**	**2.43**	
Grand total:				**204**	**16.858**	
In addition to the above, the wood resource of less than 8 cm diamter						**Note**

was also recorded with the following quantity:					
zelkova	150	unit	0.01	m3	**Red list**
Acacia	110	unit	0.008	m3	
oriental hornbeam	80	unit	0.01	m3	
oak Geo.	15	unit	0.001	m3	
hawthorn	40	unit	0.002	m3	
holly	22	unit	0.001	m3	
total	**417**	**unit**	**0.032**	**m3**	
grand total	**621**	**unit**	**16.89**	**m3**	

Date of preparation of listing: 20.12.2017.



Wood Resource Listing

Forest Fund Territorial Authority with the right of management - LEPL Imereti Forestry Service of National Forestry Agency

Forest district - Zestaponi - Kharagauli , forest district- Satsable

Quarter_34, district - former Sak.forest; area _34869 m2,

Slope inclination (degree) -15-25.

Quantity of the wood resources of 8 cm and more taxation diamter subject to recording (in pieces), volume (m3),according to the diamters and varieties of wood resources

#	Species (variety)	Species (variety)	Diameter (D)	Number of trees	Volume (v)	Note
1	2	3	4	5	6	7
1	hornbeam	Carpinus caucasica	8	18	0.27	VI-rank
			10	7	0.231	
			12	24	1.224	
			14	6	0.45	
			16	16	1.584	
			18	16	2.16	
			20	31	5.27	
			24	8	2.08	
			28	6	2.22	
			32	2	1	
			36	2	1.34	
			40	1	0.84	
Total hornbeam:				**137**	**18.669**	
2	Oak Geo.	Quercus iberica	12	2	0.09	VI-rank
			14	1	0.068	
			16	1	0.09	
			20	1	0.157	
			24	1	0.256	
			28	1	0.356	
			32	2	1	

			40	1	0.78	
			44	1	0.97	
Total oak:				**11**	**3.767**	
3	crab apple	**Malus sylvestris**	16	1	0.099	**VI-rank**
			20	1	0.17	
Total wild apple:				**2**	**0.269**	
4	alder	**Alnus barbata**	8	13	0.247	**V-rank**
			10	2	0.076	
			12	14	0.812	
			16	4	0.48	
			18	13	2.08	
			20	16	3.2	
			24	1	0.3	
			28	5	2.05	
			32	1	0.55	
			36	1	0.73	
Total alder:				**70**	**10.525**	
5	hazel	**Corylus avellana**	8	20	0.3	**VI-rank**
			10	14	0.462	
			12	14	0.714	
			20	2	0.34	
Total hazel:				**50**	**1.816**	
6	common pear	**Pyrus communis**	12	1	0.051	**VI-rank**
			20	2	0.34	
			28	1	0.37	
			32	1	0.5	
			36	1	0.67	
Total common pear:				**6**	**1.931**	
7	oriental hornbeam	**Carpinus orientalis**	8	31	0.527	**VIII-rank**
			10	17	0.51	

			12	8	0.344	
			14	4	0.248	
			16	1	0.082	
Total oriental hornbeam:				**61**	**1.711**	
8	chestnut		8	13	0.156	**VI-rank**
			10	8	0.184	**(red list)**
			12	3	0.135	
			14	2	0.136	
			16	6	0.54	
			18	8	0.992	
		Castanea sativa	20	11	1.727	
			24	7	1.792	
			28	6	2.136	
			32	2	1	
			36	3	1.869	
			40	8	6.24	
			48	4	4.76	
			52	2	2.84	
			56	2	3.34	
Total chestnut:				**85**	**27.847**	
9	Lime tree		8	1	0.012	**V-rank**
			10	1	0.034	
			12	7	0.392	
			14	2	0.168	
			16	2	0.224	
			18	3	0.45	
		Tilia caucasica	20	7	1.323	
			28	1	0.412	
			32	1	0.556	
			36	1	0.723	
			40	3	2.736	
			44	1	1.134	
			56	1	1.93	
			60	1	2.26	
Total lime tree:				**32**	**12.354**	
10	maple	**Ac er ca mp est**	8	1	0.012	**VI-rank**

			20	3	0.471	
			24	1	0.256	
			32	1	0.5	
			36	2	1.246	
			52	1	1.42	
Total maple:				**9**	**3.905**	
11	taller ash	**Fraxinus excelsior**	8	9	0.108	**V-rank**
			12	4	0.224	
			14	4	0.336	
			16	5	0.56	
			18	3	0.45	
			24	1	0.279	
			36	1	0.723	
			40	3	2.736	
			52	1	1.64	
total taller ash:				**31**	**7.056**	
12	bladder nut	**Staphylea colchica**	8	7	0.126	**VII-rank**
			10	8	0.248	**(red list)**
			12	18	0.846	
			14	5	0.335	
Total bladder nut:				**38**	**1.555**	
13	yew-tree	**Taxus baccata**	10	1	0.031	**VII-rank**
						(red list)
Total yew-tree:				**1**	**0.031**	
14	zelkova	**Zelkova carpinifolia**	8	4	0.072	**VII-rank**
			10	4	0.124	**(red list)**
			12	2	0.094	
			16	2	0.18	
Total zelkova:				**12**	**0.47**	

15	Wild plum	**Prunus insititia**	8	2	0.03	**VI-rank**
			10	4	0.132	
			12	1	0.051	
			16	2	0.198	
			32	1	0.5	
total wild plum:				**10**	**0.911**	
16	hawthorn	**Crataegus microphylla**	8	2	0.036	**VII-rank**
			10	4	0.124	
			12	1	0.047	
			16	2	0.18	
			32	1	0.466	
Total hawthorn:				**10**	**0.853**	
17	cedar	**Cedrus deodara**	16	5	0.35	**VI-rank**
			20	19	4.56	
			24	15	11.55	
			28	22	13.64	
			32	29	25.81	
			36	15	12.45	
			40	5	5.35	
			44	6	8.04	
			48	4	6.6	
			52	1	1.99	
Total cedar:				**121**	**90.34**	
18	Acacia	**Acacia dealbata**	8	37	0.777	**IV-rank**
			10	16	0.656	
			12	41	2.624	
			14	11	1.034	
			16	22	2.706	
			18	25	4.25	
			20	84	17.64	
			24	83	25.73	
			28	47	20.21	
			32	19	10.83	
			36	8	6	
			40	2	1.84	
			44	2	2.22	

			56	1	1.84	
total Acacia:				**398**	**98.357**	
19	tree of heaven	**ailanthus altissima**	8	11	0.242	**V-rank**
			12	14	0.798	
			16	11	1.21	
			18	4	0.56	
			20	10	1.8	
			24	3	0.84	
			28	1	0.4	
Total tree of heaven:				**54**	**5.85**	
20	Elm	**Ulmus foliacea**	8	2	0.036	**VII-rank**
			12	1	0.047	
			20	5	0.725	
			24	2	0.466	
			28	2	0.666	
			32	1	0.466	
Total elm:				**13**	**2.406**	
21	Circassian walnut	**juglans regia**	8	1	0.015	**VI-rank**
			20	1	0.17	**(red list)**
			40	1	0.84	
Total Circassian walnut:				**3**	**1.025**	
22	Fig-tree	**Ficus carica**	12	2	0.094	**VII-rank**
			16	2	0.198	
Total fig-tree:				**4**	**0.292**	
23	honey-locust	**gleditschia caspica**	12	1	0.047	**VI-rank**
			20	1	0.17	
Total honey-locust:				**2**	**0.217**	

24	mulberry tree	**morus alba**	8	6	0.108	**VII-rank**
			16	3	0.27	
			24	3	0.699	
			28	1	0.333	
Total mulberry tree:				**13**	**1.41**	
25	asp	**Populus alba**	56	1	2.02	**V-rank**
Total asp:				**1**	**2.02**	
26	willow	**Salix magnifica**	20	1	0.145	**VII-rank**
Total willow:				**1**	**0.145**	
27	persimmon	**Diospyros kaki**	8	13	0.234	**VII-rank**
			10	4	0.124	
			12	9	0.423	
			14	5	0.335	
			16	4	0.36	
			18	4	0.48	
			20	8	1.16	
			24	1	0.233	
			28	1	0.333	
Total persimmon:				**49**	**3.682**	
Grand total:				**1224**	**299.414**	

In addition to the above, the wood resource of less than 8 cm diamter was also recorded with the following quantity:				**Note**	
hornbeam	25	unit	0.001	m 3	
Oak Geo.	5	unit	0.001	m	

				3	
hazel	1550	unit	0.4	m 3	
blackberry	900	unit	0.002	m 3	
persimmon	13	unit	0.001	m 3	
bladder nut	250	unit	0.005	m 3	
Fig-tree	7	unit	0.001	m 3	
elm	51	unit	0.002	m 3	
tree of heaven	80	unit	0.005	m 3	
mulberry tree	41	unit	0.002	m 3	
maple	12	unit	0.001	m 3	
oriental hornbeam	550	unit	0.03	m 3	
pine-tree.	2	unit	0.001	m 3	
crab apple	5	unit	0.001	m 3	
wild plum	10	unit	0.002	m 3	
ash-tree	15	unit	0.001	m 3	
wild cherry	5	unit	0.001	m 3	
hawthorn	335	unit	0.05	m 3	
cornel	135	unit	0.005	m 3	
laurel cherry	50	unit	0.004	m 3	
winterberry	55	unit	0.001	m 3	
greenbrier	1160	unit	0.03	m 3	
Acacia	100	unit	0.02	m 3	
zelkova	9	unit	0.001	m 3	**red list**
chestnut tree	22	unit	0.002	m 3	**red list**
Total	**5387**	**unit**	**0.57**	**m 3**	
Grand total:	**6611**	**unit**	**299.984**	**m 3**	

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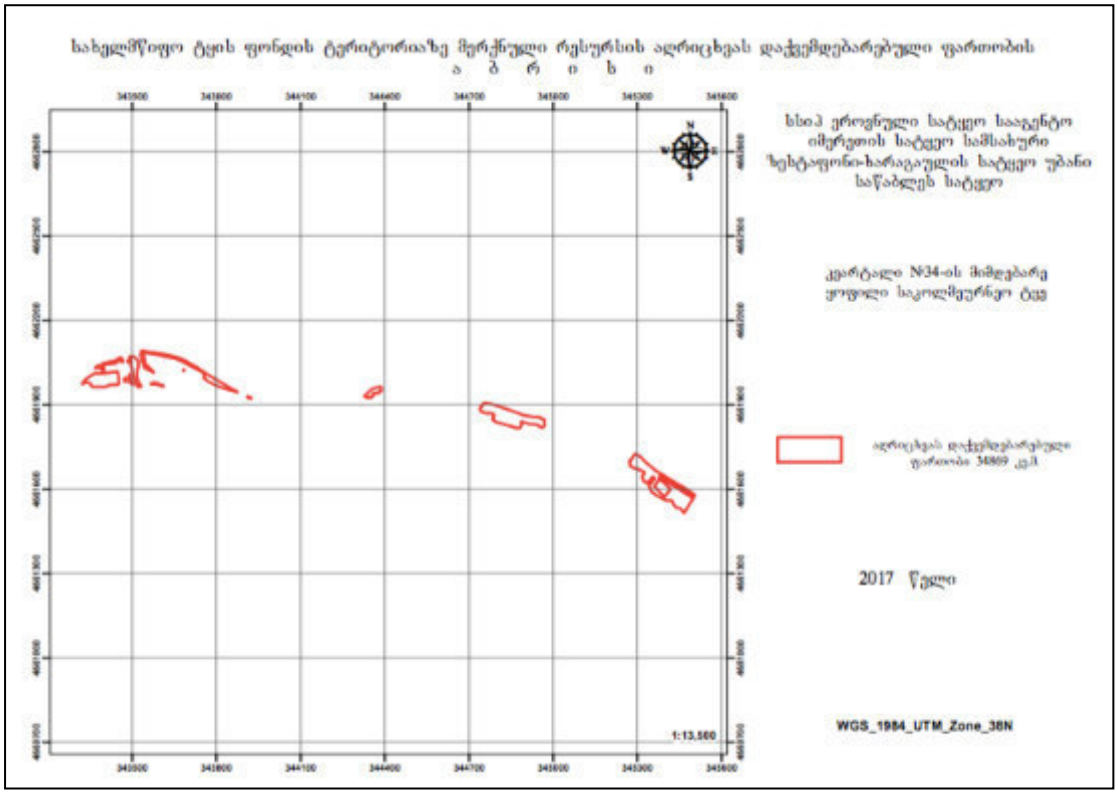
სსიპ ეროვნული სატყეო სააგენტო
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2017 წელი
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