Soil class

Draft

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1.1 Application schema

SoilClass

+ extent [0..1] : SurfaceWithQuality
+ position [0..1] : PointWithQuality
+ areaCondition [0..1] : AreaCondition
+ potentialForestSoilClass [0..1] : PotentialForestSoilClass
+ additionalInformationForest [0..1] : AdditionalInformationForest
+ impedimentPercentageForest [0..1] : ImpedimentPercentageForest
+ landClassification [0..1] : LandClassification
+ marshClassification [0..1] : MarshClassification

<<Topo>>
+boundarySoilClass

1..2   0..*

SoilClassBoundary

+ border : CurveWithQuality
+ boundaryType [0..1] : SoilClassBoundaryType

1..2

<<Topo>>

+boudaryFictitious   0..*

SoilClassBoundaryFictitious

+ border : CurveWithQuality

<<CodeList>>
ImpedimentPercentageForest

+ Not registered = 0
+ 10 % impediment = 10
+ 20 % impediment = 20
+ 30 % impediment = 30
+ 40 % impediment = 40
+ 50 % impediment = 50
+ 60 % impediment = 60
+ 70 % impediment = 70
+ 80 % impediment = 80
+ 90 % impediment = 90

<<CodeList>>
AreaCondition

+ Unclassified/unknown area condition = 1
+ Marsh = 11
+ Marsh w/coniferous forest = 12
+ Marsh w/mixed forest = 13
+ Marsh w/deciduous forest = 14
+ Combination marsh/firm ground = 15
+ Shallow marshland = 16
+ Fulldyrka jord = 21
+ Surface-cultivated land = 22
+ Home fields grazing land = 23
+ Coniferous forest = 24
+ Mixed forest = 25
+ Deciduous forest = 26
+ Other soil-covered firm ground = 27
+ Shallow soil = 28
+ Exposed bedrock = 29
+ Boulder-covered ground = 31
+ GravelPit = 32

<<CodeList>>
AdditionalInformationForest

+ Not registered = 0
+ Water-logged = 11
+ Water-logged ground with wrong kind of conifer = 12
+ Shallow ground = 13
+ Shallow ground with wrong kind of conifer = 14
+ Shallow ground on questionable afforestation ground = 15
+ Wrong kind of conifer = 16
+ Questionable afforestation ground = 17
+ Exposed bedrock = 18
+ Boulder-covered ground = 19

<<CodeList>>
LandClassification

+ Not registered = 0
+ Cultivated marshland = 23
+ Easily cultivated, fully arable land and arable land = 31
+ Easily cultivated self-drained soil = 32
+ Easily arable land which does not readily dry = 33
+ Easily cultivated marshland and cultivation marshland = 34
+ Easily cultivated, boulder-rich, arable land = 41
+ Easily cultivated, boulder-rich, self-draining arable land = 42
+ Easily cultivated, boulder-rich, arable land which does not readily dry = 43
+ Easily cultivated, boulder-rich, arable marshland = 44
+ Easily cultivated, extremely boulder-rich, arable land = 51
+ Easily cultivated, extremely boulder-rich, self-draining arable land = 52
+ Easily cultivated, extremely boulder-rich, arable land which does not readily dry = 53
+ Easily cultivated, extremely boulder-rich, arable marshland = 54
+ Less easily cultivated, fully cultivated soil and arable land = 61
+ Less easily cultivated, self-draining, arable land = 62
+ Less easily cultivated, boulder-rich, arable land which does not readily dry = 63
+ Less easily cultivated marshland and cultivation marshland = 64
+ Less easily cultivated, boulder-rich, arable land = 71
+ Easily cultivated, boulder-rich, self-draining, arable land = 72
+ Less easily cultivated, boulder-rich, arable land which does not readily dry = 73
+ Easily cultivated, boulder-riched, arable marshland = 74
+ Less easily cultivated, extremely boulder-rich, arable land = 81
+ Easily cultivated, boulder-rich, self-draining, arable land = 82
+ Less easily cultivated, extremely boulder-rich, arable land which does not readily dry = 83
+ Easily cultivated, extremely boulder-rich, arable marshland = 84
+ Fully cultivated soil which is difficult to cultivate = 91

<<CodeList>>
MarshClassification

+ Not registered = 0
+ Slightly conv. not sparse shallow marsh = 11
+ Medium conv. not sparse shallow marsh = 12
+ Strongly conv. sparse not shallow marsh = 13
+ Slightly conv. sparse shallow marsh = 21
+ Medium conv. sparse shallow marsh = 22
+ Strongly conv. sparse shallow marsh = 23
+ Slightly conv. upper and lower not sparse deep marsh = 31
+ Slightly conv. upper med. lower not sparse deep marsh = 32
+ Slightly conv. upper strongly lower not sparse deep marsh = 33
+ Medium conv. upper slightly lower not sparse deep marsh = 34
+ Medium conv. upper and lower not sparse deep marsh = 35
+ Medium conv. upper strongly lower sparse deep marsh = 36
+ Strongly conv. upper slightly lower not sparse deep marsh = 37
+ Strongly conv. upper med. lower not sparse deep marsh = 38
+ Strongly conv. upper and lower not sparse deep marsh = 39
+ Slightly conv. upper and lower sparse deep marsh = 41
+ Slightly conv. upper medium lower sparse deep marsh = 42
+ Slightly conv. upper strongly lower sparse deep marsh = 43
+ Medium conv. upper and slightly lower sparse deep marsh = 44
+ Medium conv. upper and lower sparse deep marsh = 45
+ Medium conv. upper strongly lower not sparse deep marsh = 46
+ Strongly conv upper and slightly lower sparse deep marsh = 47
+ Strongly conv. upper medium lower sparse deep marsh = 48
+ Strongly conv. upper and sparse deep marsh = 49

<<CodeList>>
PotentialForestSoilClass

+ Not relevant = 0
+ Impediment/unproductive forest = 11
+ Low site quality = 12
+ Medium site quality = 13
+ High site quality = 14
+ Very high site quality = 15
+ Spruce, site quality 6 = 21
+ Spruce, site quality 8 = 22
+ Spruce, site quality 11 = 23
+ Spruce, site quality 14 = 24
+ Spruce, site quality 17 = 25
+ Spruce, site quality 20 = 26
+ Spruce, site quality 23 = 27
+ Spruce, site quality 6-8 = 28
+ Furu, bonitet 6 = 31
+ Pine, site quality 8 = 32
+ Pine, site quality 11 = 33
+ Pine, site quality 14 = 34
+ Pine, site quality 17 = 35
+ Pine, site quality 20 = 36
+ Pine, site quality 23 = 37
+ Pine, site quality 6-8 = 38
+ Birch, site quality 6 = 41
+ Birch, site quality 8 = 42
+ Birch, site quality 11 = 43
+ Birch, site quality 14 = 44
+ Birch, site quality 17 = 45
+ Birch, site quality 20 = 46
+ Birch, site quality 23 = 47
+ Birch, site quality 6-8 = 48
+ Spruce, site quality 26 = 91
+ Pine, site quality 26 = 92
+ Birch, site quality 26 = 93

Codelists

<<CodeList>> MarshClassification

+ Not registered = 0
+ Slightly conv. not sparse shallow marsh = 11
+ Medium conv. not sparse shallow marsh = 12
+ Strongly conv. sparse not shallow marsh = 13
+ Slightly conv. sparse shallow marsh = 21
+ Medium conv. sparse shallow marsh = 22
+ Strongly conv. sparse shallow marsh = 23
+ Slightly conv. upper and lower not sparse deep marsh = 31
+ Slightly conv. upper med. lower not sparse deep marsh = 32
+ Slightly conv. upper strongly lower not sparse deep marsh = 33
+ Medium conv. upper slightly lower not sparse deep marsh = 34
+ Medium conv. upper and lower not sparse deep marsh = 35
+ Medium conv. upper strongly lower sparse deep marsh = 36
+ Strongly conv. upper slightly lower not sparse deep marsh = 37
+ Strongly conv. upper med. lower not sparse deep marsh = 38
+ Strongly conv. upper and lower not sparse deep marsh = 39
+ Slightly conv. upper and lower sparse deep marsh = 41
+ Slightly conv. upper medium lower sparse deep marsh = 42
+ Slightly conv. upper strongly lower sparse deep marsh = 43
+ Medium conv. upper and slightly lower sparse deep marsh = 44
+ Medium conv. upper and lower sparse deep marsh = 45
+ Medium conv. upper strongly lower not sparse deep marsh = 46
+ Strongly conv upper and slightly lower sparse deep marsh = 47
+ Strongly conv.. upper medium lower sparse deep marsh = 48
+ Strongly conv. upper and sparse deep marsh = 49

<<CodeList>> PotentialForestSoilClass

+ Not relevant = 0
+ Impediment/unproductive forest = 11
+ Low site quality = 12
+ Medium site quality = 13
+ High site quality = 14
+ Very high site quality = 15
+ Spruce, site quality 6 = 21
+ Spruce, site quality 8 = 22
+ Spruce, site quality 11 = 23
+ Spruce, site quality 14 = 24
+ Spruce, site quality 17 = 25
+ Spruce, site quality 20 = 26
+ Spruce, site quality 23 = 27
+ Spruce, site quality 6-8 = 28
+ Furu, bonitet 6 = 31
+ Pine, site quality 8 = 32
+ Pine, site quality 11 = 33
+ Pine, site quality 14 = 34
+ Pine, site quality 17 = 35
+ Pine, site quality 20 = 36
+ Pine, site quality 23 = 37
+ Pine, site quality 6-8 = 38
+ Birch, site quality 6 = 41
+ Birch, site quality 8 = 42
+ Birch, site quality 11 = 43
+ Birch, site quality 14 = 44
+ Birch, site quality 17 = 45
+ Birch, site quality 20 = 46
+ Birch, site quality 23 = 47
+ Birch, site quality 6-8 = 48
+ Spruce, site quality 26 = 91
+ Pine, site quality 26 = 92
+ Birch, site quality 26 = 93

<<CodeList>> AreaCondition

+ Unclassified/unknown area condition = 1
+ Marsh = 11
+ Marsh w/coniferous forest = 12
+ Marsh w/mixed forest = 13
+ Marsh w/deciduous forest = 14
+ Combination marsh/firm ground = 15
+ Shallow marshland = 16
+ Fulldyrka jord = 21
+ Surface-cultivated land = 22
+ Home fields grazing land = 23
+ Coniferous forest = 24
+ Mixed forest = 25
+ Deciduous forest = 26
+ Other soil-covered firm ground = 27
+ Shallow soil = 28
+ Exposed bedrock = 29
+ Boulder-covered ground = 31
+ GravelPit = 32

<<CodeList>> AdditionalInformationForest

+ Not registered = 0
+ Water-logged = 11
+ Water-logged ground with wrong kind of conifer = 12
+ Shallow ground = 13
+ Shallow ground with wrong kind of conifer = 14
+ Shallow ground on questionable afforestation ground = 15
+ Wrong kind of conifer = 16
+ Questionable afforestation ground = 17
+ Exposed bedrock = 18
+ Boulder-covered ground = 19

<<CodeList>> ImpedimentPercentageForest

+ Not registered = 0
+ 10 % impediment = 10
+ 20 % impediment = 20
+ 30 % impediment = 30
+ 40 % impediment = 40
+ 50 % impediment = 50
+ 60 % impediment = 60
+ 70 % impediment = 70
+ 80 % impediment = 80
+ 90 % impediment = 90

<<CodeList>> SoilClassBoundaryType

+ WaterBorder = 3000
+ GlacierBoundary = 3310
+ SoilClassBoundary = 4201
+ DevelopedAreaBoundary = 5200
+ TrafficBoundary = 7200
+ UnchartedOceanSurveyedBoundary = 9300

<<CodeList>> LandClassification

+ Not registered = 0
+ Cultivated marshland = 23
+ Easily cultivated, fully arable land and arable land = 31
+ Easily cultivated self-drained soil = 32
+ Easily arable land which does not readily dry = 33
+ Easily cultivated marshland and cultivation marshland = 34
+ Easily cultivated, boulder-rich, arable land = 41
+ Easily cultivated, boulder-rich, self-draining arable land = 42
+ Easily cultivated, boulder-rich, arable land which does not readily dry = 43
+ Easily cultivated, boulder-rich, arable marshland = 44
+ Easily cultivated, extremely boulder-rich, arable land = 51
+ Easily cultivated, extremely boulder-rich, self-draining arable land = 52
+ Easily cultivated, extremely boulder-rich, arable land which does not readily dry = 53
+ Easily cultivated, extremely boulder-rich, arable marshland = 54
+ Less easily cultivated, fully cultivated soil and arable land = 61
+ Less easily cultivated, self-draining, arable land = 62
+ Less easily cultivated, boulder-rich, arable land which does not readily dry = 63
+ Less easily cultivated marshland and cultivation marshland = 64
+ Less easily cultivated, boulder-rich, arable land = 71
+ Easily cultivated, boulder-rich, self-draining, arable land = 72
+ Less easily cultivated, boulder-rich, arable land which does not readily dry = 73
+ Easily cultivated, boulder-riched, arable marshland = 74
+ Less easily cultivated, extremely boulder-rich, arable land = 81
+ Easily cultivated, boulder-rich, self-draining, arable land = 82
+ Less easily cultivated, extremely boulder-rich, arable land which does not readily dry = 83
+ Easily cultivated, extremely boulder-rich, arable marshland = 84
+ Fully cultivated soil which is difficult to cultivate = 91

1.2   Description

1.2.1   SoilClass

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
1	Class SoilClass	relatively homogeneous area for cultivation of plants and natural plant production				
1.1	extent	area over which an object extends	0	1	SurfaceWithQuality	
1.2	position	location where the object exists	0	1	PointWithQuality	
1.3	areaCondition	defines natural types of terrain and types of enhanced acreage	0	1	AreaCondition	
1.4	potentialForestSoilClass	the potential ability of this acreage to produce timber ote: What is registered is the normally expected site quality, i.e. the production to be expected with the right type of trees, normal density and reasonably good silviculture Both the H40 system and a categorization based on ??<truncated>	0	1	PotentialForestSoilClass	
1.5	additionalInformationForest	describes difficult operating conditions or measures which may result in increased forest production	0	1	AdditionalInformationForest	
1.6	impedimentPercentageForest	indicates the part of the soil classification area which is unproductive land Note: impediment percentage is only used where the forest has been assessed according to the H40 system	0	1	ImpedimentPercentageForest	
1.7	landClassification	characterizes the operating conditions on cultivated land and the operational and soil attributes of arable land Note: Size, inclination and geometric form (rounding out vs. gerrymandering) are decisive factors for cultivated land. Moreover, for arable land, the degree	0	1	LandClassification	

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
		of drainage and rock content in the upper?? are also <truncated>				
1.8	marshClassification	describes peat depth, transformation degree and vegetation for marshland Note: marsh classification is only relevant where the marsh is evaluated as suitable for cultivation or forest production	0	1	MarshClassification	
1.9	Role boundarySoilClass		0	N	SoilClassBoundary	Aggregration
1.10	Role boudaryFictitious		0	N	SoilClassBoundaryFictitious	Aggregration

1.2.2   SoilClassBoundary

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
2	Class SoilClassBoundary	boundary for soil classification figure				
2.1	border	course following the transition between different real world phenomena	1	1	CurveWithQuality	
2.2	boundaryType	indication of the type of boundary	0	1	SoilClassBoundaryType	
2.3	Role (unnamed) SoilClass		1	2	SoilClass	

1.2.3   SoilClassBoundaryFictitious

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
3	Class SoilClassBoundaryFictitious	boundary between soil classification figures with identical attributes				
3.1	border	course following the transition between different real world phenomena	1	1	CurveWithQuality	
3.2	Role (unnamed) SoilClass		1	2	SoilClass	

1.2.4   Association <<Topo>> SoilClass-SoilClassBoundary

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
4	Association					

Soil class   English version – SOSI standard 4.0

	SoilClass-SoilClassBoundary					
4.1	Role boundarySoilClass		0	N	SoilClassBoundary	Aggregation
4.2	Role (unnamed) SoilClass		1	2	SoilClass	

1.2.5 Association <<Topo>> SoilClass-SoilClassBoundaryFictitious

No	Name/ Role name	Description	Obligation/ Condition	Maximum Occurrence	Type	Constraint
5	Association SoilClass-SoilClassBoundaryFictitious					
5.1	Role boudaryFictitious		0	N	SoilClassBoundaryFictitious	Aggregation
5.2	Role (unnamed) SoilClass		1	2	SoilClass	

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1.2.5.1   <<CodeList>> AreaCondition

Nr	Code name	Definition/Description	Code
1	CodeList AreaCondition	defines natural types of terrain and types of enhanced area	
1.1	Unclassified/unknown area condition	FF-Was used when unable to check signature?? Using aerial photos or otherwise. No longer in use, but may be found in older data sets.	1
1.2	Marsh	FF-area with at least 30 cm thick layer of peat which on the surface appears as marshland	11
1.3	Marsh w/coniferous forest	FF-marshland which also meets the requirements for coniferous forest	12
1.4	Marsh w/mixed forest	FF-marshland which also meets the requirements for mixed forest	13
1.5	Marsh w/deciduous forest	FF-marshland which also meets the requirements for deciduous forest	14
1.6	Combination marsh/firm ground	FF-area alternating so much between marsh and firm ground that the partitioning becomes too fragmented Note: No longer in use, but may be found in older data	15
1.7	Shallow marshland	FF-area which alternates so much between shallow soil and marshland that the partitioning becomes too fragmented. Note: No longer in use, but may be found in older data	16
1.8	Fulldyrka jord	areal som er dyrka til vanleg pløyedjupn, og som kan nyttast til åkervekstar eller til eng som kan fornyast ved pløying	21
1.9	Surface-cultivated land	FF-area with a predominantly cleared and levelled surface, enabling machine-harvesting	22
1.10	Home fields grazing land	FF-home fields which may be used as pasture, but which cannot be machine-harvested. At least 50% of the acreage must be covered by species of grass. Note: The term was previously fertilized pasture (altered in 2001)	23
1.11	Coniferous forest	FF-area which meets the forest criteria (at least 60 trees per hectare which are or may become 5 m high), and where least 50% of the forest-covered acreage is coniferous	24
1.12	Mixed forest	FF-area which meets the forest criteria (at least 60 trees per hectare which are or may become 5 m tall), and where 20-50% of the forest-covered acreage is coniferous	25
1.13	Deciduous forest	FF-area which meets the forest criteria (at least 60 trees per hectare which are or may become 5 m high), and where less than 20% of the forest-covered acreage is coniferous	26
1.14	Other soil-covered firm ground	FF-firm ground which is neither forest nor farmland, and where more than 50% has a soil depth of more than 30 cm	27
1.15	Shallow soil	FF-area where more than 50% has a soil depth of less than 30 cm, but which cannot be classified as exposed bedrock	28
1.16	Exposed bedrock	FF-area where more than 50% is exposed bedrock and less than 10% has a soil depth of more than 30 cm	29
1.17	Boulder-covered ground	FF-area where the surface is mainly covered with boulders Note: Replaces the previous scree, boulder field (changed in 2001)	31

| 1.18 | GravelPit | FF-Gravel pit Note: No longer in use, but may be found in older data | 32 |

1.2.5.2   <<CodeList>> LandClassification

Nr	Code name	Definition/Description	Code
2	CodeList LandClassification	characterizes the operating environment of cultivated land and the operational and soil attributes of arable land Note:Size, inclination and geometric form (rounding out vs. gerrymandering) are decisive factors for cultivated land. Moreover, for arable land, the degree of drainage and rock content in the uppermost 50 ?? are also <truncated>	
2.1	Not registered		0
2.2	Cultivated marshland		23
2.3	Easily cultivated, fully arable land and arable land		31
2.4	Easily cultivated self-drained soil		32
2.5	Easily arable land which does not readily dry		33
2.6	Easily cultivated marshland and cultivation marshland		34
2.7	Easily cultivated, boulder-rich, arable land		41
2.8	Easily cultivated, boulder-rich, self-draining arable land		42
2.9	Easily cultivated, boulder-rich, arable land which does not readily dry		43
2.10	Easily cultivated, boulder-rich, arable marshland		44
2.11	Easily cultivated, extremely boulder-rich, arable land		51
2.12	Easily cultivated, extremely boulder-rich, self-draining arable land		52
2.13	Easily cultivated, extremely boulder-rich, arable land which does not readily dry		53
2.14	Easily cultivated, extremely boulder-rich, arable marshland		54
2.15	Less easily cultivated, fully cultivated soil and arable land		61

2.16	Less easily cultivated, self-draining, arable land		62
2.17	Less easily cultivated, boulder-rich, arable land which does not readily dry		63
2.18	Less easily cultivated marshland and cultivation marshland		64
2.19	Less easily cultivated, boulder-rich, arable land		71
2.20	Easily cultivated, boulder-rich, self-draining, arable land		72
2.21	Less easily cultivated, boulder-rich, arable land which does not readily dry		73
2.22	Easily cultivated, boulder-riched, arable marshland		74
2.23	Less easily cultivated, extremely boulder-rich, arable land		81
2.24	Easily cultivated, boulder-rich, self-draining, arable land		82
2.25	Less easily cultivated, extremely boulder-rich, arable land which does not readily dry		83
2.26	Easily cultivated, extremely boulder-rich, arable marshland		84
2.27	Fully cultivated soil which is difficult to cultivate	'restjord'	91

1.2.5.3   <<CodeList>> ImpedimentPercentageForest

Nr	Code name	Definition/Description	Code
3	CodeList ImpedimentPercentageForest	indicates the part of the soil classification area which is unproductive land Note:impediment percentage is only used where the forest has been assessed according to the H40 system	
3.1	Not registered		0
3.2	10 % impediment		10
3.3	20 % impediment		20
3.4	30 % impediment		30
3.5	40 % impediment		40

3.6	50 % impediment		50
3.7	60 % impediment		60
3.8	70 % impediment		70
3.9	80 % impediment		80
3.10	90 % impediment		90

1.2.5.4   <<CodeList>> MarshClassification

Nr	Code name	Definition/Description	Code
4	CodeList MarshClassification	describes peat depth, transformation degree and vegetation for marsh Note: marsh classification is only relevant where the marsh is evaluated as suitable for cultivation or forest production	
4.1	Not registered		0
4.2	Slightly conv. not sparse shallow marsh	Shallow marsh, not sparse vegetation, slightly converted upper layer	11
4.3	Medium conv. not sparse shallow marsh	Shallow marshland, sparse vegetation, medium-converted upper layer	12
4.4	Strongly conv. sparse not shallow marsh	Shallow marsh, not sparse vegetation, strongly converted upper layer	13
4.5	Slightly conv. sparse shallow marsh	Shallow marshland, sparse vegetation, slightly converted upper layer	21
4.6	Medium conv. sparse shallow marsh	Grunn myr, nøysom vegetasjon, middels omdanna øvre lag	22
4.7	Strongly conv. sparse shallow marsh	Shallow marsh, sparse vegetation, strongly converted upper layer	23
4.8	Slightly conv. upper and lower not sparse deep marsh	Deep marsh, not sparse vegetation, slightly converted upper layer, strongly converted lower layer	31
4.9	Slightly conv. upper med. lower not sparse deep marsh	Deep marsh, not sparse vegetation, slightly converted upper layer, medium-converted lower layer	32
4.10	Slightly conv. upper strongly lower not sparse deep marsh	Djup myr, ikke nøysom vegetasjon, lite omdanna øvre lag, sterkt omdanna nedre lag	33
4.11	Medium conv. upper slightly lower not sparse deep marsh	Deep marsh, not sparse vegetation, medium-converted upper layer, slightly converted lower layer	34
4.12	Medium conv. upper and lower not sparse deep marsh	Deep marsh, not sparse vegetation, medium-converted upper layer, medium-converted lower layer	35
4.13	Medium conv. upper strongly lower sparse deep marsh	Deep marsh, sparse vegetation, medium-converted upper layer, strongly converted lower layer	36
4.14	Strongly conv. upper slightly lower not sparse deep marsh	Djup myr, ikke nøysom vegetasjon, sterkt omdanna øvre lag, lite omdanna nedre lag	37

4.15	Strongly conv. upper med. lower not sparse deep marsh	Djup myr, ikke nøysom vegetasjon, sterkt omdanna øvre lag, middels omdanna nedre lag	38
4.16	Strongly conv. upper and lower not sparse deep marsh	Djup myr, ikke nøysom vegetasjon, sterkt omdanna øvre lag, sterkt omdanna nedre lag	39
4.17	Slightly conv. upper and lower sparse deep marsh	Deep marsh, sparse vegetation, slightly converted upper layer, slightly converted lower layer	41
4.18	Slightly conv. upper medium lower sparse deep marsh	Deep marsh, sparse vegetation, slightly converted upper layer, medium-converted lower layer	42
4.19	Slightly conv. upper strongly lower sparse deep marsh	Deep marsh, not sparse vegetation, slightly converted upper layer, strongly converted lower layer	43
4.20	Medium conv. upper and slightly lower sparse deep marsh	Deep marsh, sparse vegetation, medium-converted upper layer, slightly converted lower layer	44
4.21	Medium conv. upper and lower sparse deep marsh	Deep marsh, sparse vegetation, medium-converted upper layer, medium-converted lower layer	45
4.22	Medium conv. upper strongly lower not sparse deep marsh	Deep marsh, not sparse vegetation, medium-converted upper layer, strongly converted lower layer	46
4.23	Strongly conv upper and slightly lower sparse deep marsh	Deep marsh, not sparse vegetation, strongly converted upper layer, strongly converted lower layer	47
4.24	Strongly conv.. upper medium lower sparse deep marsh	Deep marsh, not sparse vegetation, strongly converted upper layer, medium-converted lower layer	48
4.25	Strongly conv. upper and sparse deep marsh	Deep marsh, sparse vegetation, strongly converted upper layer, strongly converted lower layer	49

1.2.5.5   <<CodeList>> PotentialForestSoilClass

Nr	Code name	Definition/Description	Code
5	CodeList PotentialForestSoilClass	the potential ability of the area to produce timber Note:What is registered is the normally expected quality class, i.e. the production to be expected with the right type of wood, normal density and reasonably good silviculture. Both the H40 system and a categorization based on Land <truncated>??	
5.1	Not relevant	Skogbonitet er berre registrert på skog og skogreisingsmark	0
5.2	Impediment/unproductive forest		11
5.3	Low site quality		12
5.4	Medium site quality		13
5.5	High site quality		14
5.6	Very high site quality		15

5.7	Spruce, site quality 6		21
5.8	Spruce, site quality 8		22
5.9	Spruce, site quality 11		23
5.10	Spruce, site quality 14		24
5.11	Spruce, site quality 17		25
5.12	Spruce, site quality 20		26
5.13	Spruce, site quality 23		27
5.14	Spruce, site quality 6-8		28
5.15	Furu, bonitet 6		31
5.16	Pine, site quality 8		32
5.17	Pine, site quality 11		33
5.18	Pine, site quality 14		34
5.19	Pine, site quality 17		35
5.20	Pine, site quality 20		36
5.21	Pine, site quality 23		37
5.22	Pine, site quality 6-8		38
5.23	Birch, site quality 6		41
5.24	Birch, site quality 8		42
5.25	Birch, site quality 11		43
5.26	Birch, site quality 14		44
5.27	Birch, site quality 17		45
5.28	Birch, site quality 20		46
5.29	Birch, site quality 23		47
5.30	Birch, site quality 6-8		48
5.31	Spruce, site quality 26		91
5.32	Pine, site quality 26		92
5.33	Birch, site quality 26		93

1.2.5.6   <<CodeList>> AdditionalInformationForest

Nr	Code name	Definition/Description	Code
6	CodeList AdditionalInformationForest	describes difficult operating conditions or measures which may result in increased forest production	
6.1	Not registered		0
6.2	Water-logged	forest covered or bare firm ground area (less than 30 cm thick peat layer), where site quality may be increased by at least 3.0 m3 per ha per year with ditching	11

6.3	Water-logged ground with wrong kind of conifer	Please see explanation of code 11 Water-logged forest ground and code 6 Wrong kind of conifer	12
6.4	Shallow ground	area where more than 50% has a soil depth of less than 30 cm, but which may not be classified as exposed bedrock	13
6.5	Shallow ground with wrong kind of conifer	please see explanation of code 13 Shallow ground and code 16 Wrong kind of conifer	14
6.6	Shallow ground on questionable afforestation ground	in this connection, questionable afforestation ground means deciduous forest and bare ground which according to climate and soil quality should be afforestation land, but which owing to particularly difficult terrain (rugged and/or landslide hazard) is unsuited for afforestationparticularly difficult terrain (rugged and/or landslide hazard) is unsuited for afforestation	15
6.7	Wrong kind of conifer	area in afforestation areas (Vest-Agder to Troms) with low-production pine or mixed forest. By changing species of conifer the production may be increased by at least 3.0 m3 per hectare per year	16
6.8	Questionable afforestation ground	deciduous forest and bare ground which according to the climate and soil quality should be afforestation land, but which owing to particularly difficult terrain (rugged and/or landslide hazard) is unsuited for afforestation	17
6.9	Exposed bedrock	area where more than 50% is exposed bedrock and less than 10% has soil deeper than 30 cm	18
6.10	Boulder-covered ground	area where the surface is mainly covered with boulders. Includes scree, boulder land and stone pile	19

1.2.5.7   <<CodeList>> SoilClassBoundaryType

Nr	Code name	Definition/Description	Code
7	CodeList SoilClassBoundaryType	various types of boundaries which can delimit the soil class surface	
7.1	WaterBorder	demarcation of a body of water	3000
7.2	GlacierBoundary	demarcation of a glacier	3310
7.3	SoilClassBoundary	demarcation between areas with different soil classes	4201
7.4	DevelopedAreaBoundary	demarcation of a built-up area	5200
7.5	TrafficBoundary	demarcation of a traffic area	7200
7.6	UnchartedOceanSurveyedBoundary	demarcation of an uncharted area	9300