

Appendix 7.2 National Vegetation Classification (NVC) Survey



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# Nitshill Wind Farm

# National Vegetation Classification Survey



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# Introduction

The proposed Nitshill wind farm is located at the north end of mainland Orkney (Grid reference: HY 30 27), Scotland. A National Vegetation Classification (NVC) survey has been carried out to inform a proposal for the construction of a wind farm which is comprised of four turbines. The site (including a 250m survey buffer) is approximately 270ha in size and has a mixture of grassland, swamp, mires and peatland habitats. The site boundary can be seen in Figure 1 below.



Figure 1: Map showing the site boundary line and the 250m survey buffer

# National Vegetation Classification (NVC) Survey Methods

The NVC survey was carried out by Rory Whytock ACIEEM on the 7<sup>th</sup> and 8<sup>th</sup> of April 2022 in dry conditions with good visibility throughout. The survey area included all communities within the site boundary and a buffer of 250m. This additional buffer area has been surveyed in order to identify any wetland communities that may be negatively affected by any excavations from the proposed development.

The NVC communities within the survey area were mapped by eye and classified according to Rodwell (1998a, 1998b, 2003). Where possible five 2 x 2m quadrats were set up for each habitat type where detailed floristic samples were recorded to allow the habitat to be categorised later into the appropriate NVC classification. Phase 1 categories have also been assigned to NVC communities.

Small areas of interest and general descriptions of features were made using target notes as per Phase 1 survey methodology (JNCC, 2010). The NVC survey area was mapped in the field then digitised using GIS to produce a detailed map of dominant and sub-dominant community composition.

Areas supporting communities which are potentially dependent on groundwater sources were also classified according to guidance issued by SEPA (2017). Higher plant nomenclature follows that of Stace (2010), bryophyte nomenclature follows that of the Hill *et al.* (2008) and lichens follow Coppins (2002).

# Limitations

The NVC surveys were carried out on the 7<sup>th</sup> and 8<sup>th</sup> of April 2022. This is early in the season to carry out NVC surveys and not considered the optimal survey period (May to August) as some species of plants are difficult to detect or impossible to identify to species level at this time of year. However, NVC communities are still readily identifiable as most plants can be identified vegetatively by the surveyor. Therefore, the main limitations of surveying early in the season is that as some plant species may not be detectable, resulting in results where species richness is likely to be under-represented.

### NVC Survey Results

The NVC survey recorded a total of 16 communities. Where these communities were floristically distinct, they were assigned into corresponding sub-communities. The communities recorded during the survey were:

- Mires and flushes: M6, M17, M19, M23, M25, M27 & M28
- Wet heaths: M15
- Dry heaths: H9
- Grasslands communities: MG6, MG10, U5 & U6
- Swamp and fen: S9 & S27
- Marginal vegetation: S23

A number of semi-natural habitats were not recorded as they are not included in the NVC system. The habitats that did not fit into any of the NVC communities are:

- Running water
- Standing water
- Bare ground
- Infrastructure such as tracks/roads/buildings

The following sections describe the NVC communities recorded on site and detail the flora, structure and condition of each of the habitats. A summary of the communities, associated Phase 1 habitat classification, any conservation designation can be found in Appendix A. A map of the survey results can be found in Appendix B with target notes describing notable species or features found during the survey found in Appendix C.

#### M6 Carex echinata - Sphagnum fallax/denticulatum mire

This community is a soliginous mire found on peat substrates that are fed primarily by base-deficient water. However, where surface water comes into contact with the underlying bedrock, mildly base-rich conditions can be found. These mires are situated in valley bottoms, sloping valley sides or channels within the site where water flows slowly over a shallow peat surface. Although it is a widespread and commonly recorded community in Scotland, it was only recorded in one location within the survey area.

This community is defined by the dominance of *Sphagnum* species such as *S. fallax, S. cuspidatum* and *S. palustre*. As the water within the community flows to the loch shore, it increases in base richness as the peat layer becomes thinner and more rock becomes exposed. Small channels are found near the loch shore that contain a slightly more diverse range of species including *Lysimachia tenella, Sphagnum* 

*denticulatum, Callitriche agg.* (non-flowering so not identifiable) and *Scorpidium scorpioides.* Rushes and grasses are the other dominant species commonly found within this community. M6 can be differentiated from similar NVC communities such as M23 *Juncus effusus/acutiflorus – Galium palustre* mires as these typically lack the abundance of *Sphagnum* found in M6 communities.

There are four sub-communities associated with M6 habitat types, with M6d the only one to be recorded within the survey area. The M6d *Juncus acutiflorus* community has a more varied species assemblage than the M6c *Juncus effusus* sub-community. Ranunculus repens, Myosotis secunda, Succisa pratensis, Carex echinata and C. nigra were frequently recorded throughout.

#### M15 Trichophorum germanicum – Erica tetralix wet heath

This community has a rather restricted distribution within the survey area. It is a habitat that occurs on shallow, ombrogenous peat substrates and has relatively few constant species associated with it. It is possible that some areas of M15 have been derived from blanket bog communities and still occurs on deep peat, however most stands appear to occur on gently sloping ground on a peat layer <50cm in depth.

The M15 community illustrates a wide variation in its flora including species that occur as dominants or co-dominants. Species that were recorded in high frequency included *Trichophorum germanicum*, *Erica tetralix* and *Calluna vulgaris*.

One sub-community was recorded within the survey area and one area was not assigned to subcommunity level. The largest (by area) is the M15b typical sub-community and has frequent *Erica tetralix* with lesser amounts of *Calluna vulgaris*. One stand of M15 located in the west of the survey area was not assigned to sub-community level as it did not fit into one. It was quite degraded in nature due to a combination of drainage and grazing activities but did contain small amounts of *Schoenus nigricans* which indicates that the area may be quite diverse if allowed to recover.

#### M17 Trichophorum germanicum - Eriophorum vaginatum blanket mire

M17 communities were recorded on waterlogged peat which allowed a significant sphagnum layer to dominate underneath tussocks of *Trichophorum germanicum*, *Erica tetralix* and *Calluna vulgaris*. Sphagnum species include many important peat-forming mosses such as *Sphagnum medium*, *Sphagnum papillosum* and *Sphagnum capillifolium*.

Two sub-communities were recorded in the survey area, the M17a Drosera rotundifolia-Sphagnum species and the M17c Juncus squarrosus – Rhytidiadelphus loreus sub-community. The two sub-communities represent two differing ground conditions with the M17c occurring on sloping soils that are drier in nature than the M17a. Species such as round-leaved sundew Drosera rotundifolia, Eriophorum vaginatum, Sphagnum capillifolium and Vaccinium oxycoccos were more common in M17a sub-communities where the ground layer is often saturated with water. Species such as *Nardus stricta*, *Juncus squarrosus* and *Deschampsia flexuosa* are more common in the M17c sub-community where the peat layer is thinner.

#### M19 Calluna vulgaris - Eriophorum vaginatum blanket mire

This habitat is dominated by large swathes of *Calluna vulgaris, Eriophorum vaginatum* and regular shoots of *Eriophorum angustifolium*. Bryophytes are dominated by common pleurocarpous mosses including *Hylocomium splendens, Pleurozium schreberi, Rhytidiadelphus loreus* and *Hypnum jutlandicum*. Sphagnum species are not as well represented in this community as either M17 or M18 blanket mires. However, *S. capillifolium* can be conspicuous and is the most common *Sphagnum* species, though *S. papillosum* was present in small amounts.

The M19a *Erica tetralix* sub-community was the only sub-community to be recorded within the survey area. M19a is often located where the topography is flat or only slightly inclined so that a continuous peat layer can form. The community was rather uniform in composition and contained *Trichophorum germanicum*, *Molinia caerulea* and *Empetrum nigrum* where they were all occasional with species such as *Narthecium ossifragum* and *Drosera rotundifolia* occurring in wetter areas.

#### M23 Juncus effusus/acutiflorus – Galium palustre rush pasture

M23 communities are widespread throughout the survey area and are found mainly in valley bottoms and gently sloping ground with slow, constant water movement. This habitat is closely associated with M6 *Carex echinata – Sphagnum fallax* mires and is often found adjacent to them but M23 differs in having a greater diversity of rushes and a lesser amount of *Sphagnum* species.

Two sub-communities are described for the M23 community, one of which was recorded within the survey area. The M23b *Juncus effusus* sub-community is widespread throughout the survey area but was species poor throughout. However, the early timing of the surveys may well be under representing species richness of this community. Though in most instances the density of *Juncus effusus* is so high that it is likely to smother most other species. Other species recorded within this community included *Viola palustris, Succisa pratensis, Galium palustre, Cirsium palustre, Ranunculus acris* and *Ranunculus repens*. Species such as *Cirsium palustre, Rumex acetosa* and *Anthoxanthum odoratum* are also widespread within this community. Though many of these species are only found where the density of *J. effusus* is lower.

#### M25 Molinia caerulea – Potentilla erecta mire

This community occurs on moderately wet, shallow peat and has a restricted distribution within the survey area. *Molinia caerulea* is the most dominant species within this community and can form large conspicuous tussocks. Bryophyte diversity is often poor and restricted to robust common pleurocarpous mosses such as *Hylocomium splendens* and *Hypnum jutlandicum*. Species poor stands have not been assigned to a sub-community.

Two sub-communities have been recorded within the survey area and represent two quite distinct communities. The M25a *Erica tetralix* sub-community is derived from blanket bog communities and contain species typical of those communities such as *Empetrum nigrum, Calluna vulgaris* and *Erica tetralix*. Sphagnum species such as *S. fallax* can be present but it is occasional. The M25c *Angelica sylvestris* sub-community is found in mosaics with M6d communities near the Loch Swannay shore in the east. Mildly base rich water mixes from bedrock combines with more acidic soliginous mires to form a diverse community with *Angelica sylvestris, Juncus effusus, Juncus acutiflorus, Succisa pratensis, Cardamine pratensis* and *Primula vulgaris* and *Ajuga repens*.

#### M27 Filipendula ulmaria - Angelica sylvestris mire

Several stands of this community type were recorded within the survey area where they occupied moderately large areas where water flows sluggishly and are located predominantly in valley bottoms. Species recorded included *Juncus effusus, Juncus acutiflorus, Primula vulgaris, Filipendula ulmaria, Succisa pratensis and Galium palustre. Carex rostrata* can be occasional where the water table is high also. The M27c *Juncus effusus* sub-community was recorded within the survey area and is similar in composition to M23b mires but has a more diverse range of species including *Angelica sylvestris* which is prominent within the community.

#### M28 Iris pseudacorus - Filipendula ulmaria mire

Recorded in small stands in the north-west of the survey area, this community occupies very wet areas where it is closely linked to swamp communities. *Iris pseudacorus* is the overwhelmingly dominant species, though other recorded species included *Glyceria fluitans*, *Juncus effusus*, *Galium palustre and Angelica sylvestris*.

The M28a *Juncus species* sub-community was assigned to all of the recorded M28 habitats on site. They were assigned due to the dominance of *Juncus* species throughout all stands within the survey area.

#### U5 Nardus stricta – Galium saxatile grassland

U5 grassland has a patchy and scarce distribution within the survey area. This community is found at on rather moist, acidic soils often with a mix of peat substrates, often near the loch shores. *Nardus stricta* is the most frequent grass and often grows in thick wiry clumps. Other species recorded within the community include *Agrostis capillaris, Festuca ovina* and lesser amounts of *Deschampsia flexuosa* and *Anthoxanthum odoratum. Galium saxatile* can form intricate patches in places and is generally widespread throughout. A familiar suite of mosses including *Hylocomium splendens, Pleurozium schreberi, Hypnum jutlandicum* and *Rhytidiadelphus squarrosus* are present in varying amounts throughout the community.

Two sub-communities were recorded within the survey area which included the U5a species poor and the U5c *Carex panicea-Viola riviniana* sub-community.

#### U6 Juncus squarrosus – Festuca ovina grassland

This is a habitat found on mineral deficient, shallow peaty substrates. This habitat is likely formed through a combination of intensive grazing or burning practices on peatland habitats. The dark green basal rosettes of *Juncus squarrosus* are the most prominent feature of this habitat type. These are mixed with *Anthoxanthum odoratum*, *Agrostis canina*, *Deschampsia flexuosa*, *Galium saxatile* and *Potentilla erecta*. Bryophytes recorded within this community included *Hylocomium splendens*, *Pleurozium schreberi*, *Rhytidiadelphus squarrosus* and *Calliergonella cuspidata*.

U6 was widely distributed within the survey area though not particularly abundant. All subcommunities within the survey area were assigned to the U6c *Vaccinium myrtillus* sub-community due to the high frequency of *V. myrtillus* recorded within the community.

#### MG6 Lolium perenne – Cynosurus cristatus grassland

This habitat was the dominant grassland community recorded within the survey area. Many of these grasslands have had some form of nutrient input (likely limed or re-sown) to encourage grasses that are of high grazing value such as *Lolium perenne* and *Cynosurus cristatus*. Forb species were frequent, but limited to a few species such as *Bellis perennis*, *Ranunculus repens*, *Ranunculus acris* and *Trifolium repens*. This is a community which is of high value for grazing but low in biodiversity and of limited conservation value.

Of the three described sub-communities the MG6a *Typical* sub-community was the only type to be assigned.

#### MG10 Holcus lanatus – Juncus effusus rush-pasture

This community is widely distributed within the survey area. Juncus effusus tussocks are the most obvious feature of this community, with Juncus acutiflorus also present but rarely recorded within the community. Between these tussocks of rushes is a species poor sward of Holcus lanatus, Agrostis stolonifera and Poa trivialis. Forb species included Ranunculus repens, Ranunculus acris and Cardamine pratensis. It is distinct from other rush dominated communities by the higher frequency of grasses that are frequently grazed which maintains the open, short sward of the grass pasture between the tussocks of rush species. All MG10 communities were assigned to the MG10a Typical sub-community.

#### S9 Carex rostrata swamp

This is a swamp community dominated by *Carex rostrata* that is thinly distributed in the survey area. One sub-community was recorded; the S9b *Menyanthes trifoliata – Equisetum fluviatile* sub-community which has a richer vascular plant assemblage. Dominant species recorded within the community included *Caltha palustris, Menyanthes trifoliata, Potentilla palustris, Carex nigra* and *Equisetum fluviatile*. These communities have a diverse range of other plants that were locally frequent including *Cardamine pratensis* and *Pedicularis palustris*.

#### S23 Other water – marginal vegetation

This community was recorded along the Loch Swannay shore where frequent inundation creates a narrow niche along the loch shore. Recorded species were not particularly varied within the habitat, though single species such as *Littorella uniflora* or *Ranunculus repens* were often dominant to the exclusion of most other species.

#### S27 Carex rostrata – Comarum palustre tall herb fen

This community is a large swamp community situated around loch margins. The only sub-community recorded was the S27b Lysimachia vulgaris type (however Lysimachia vulgaris was not recorded itself), it is particularly rich in herbaceous species including Comarum palustre, Pedicularis palustris, Caltha palustris, Parnassia palustris, Filipendula ulmaria, Achillea ptarmica and Ranunculus repens. Lychnis flos-cuculi was also recorded in the shallower areas. Access to this area was limited to the margins where the water was shallow but the community appeared to be a good example of its type.

### Notable Species

Lysimachia tenella - National status: <u>not scarce</u>, <u>least concern</u>. Regional status: <u>Occasional</u> Small to medium sized populations located in mildly base rich water near the Loch Swannay shore.

## Groundwater Dependent Terrestrial Ecosystems (GWDTE) Results

GWDTEs are classified according to SEPA (2017), defining each NVC community on their potential dependency on groundwater. Groundwater dependency is often linked to wetlands that contain flora that is dependent upon the chemical composition of the water fed from a groundwater source. SEPA defines the habitats with regard to their potential for groundwater dependency, therefore not all communities listed may be truly groundwater dependent.

Table 1 lists the NVC communities that have a potential for groundwater dependency. The table categorises each habitat type according to whether they are likely to be moderately or highly groundwater dependent as defined by SEPA (2017). In total, there are six communities listed as moderate and two communities listed as having high potential for groundwater dependency.

NVC code	NVC community name	GWDTE potential
M15	Trichophorum germanicum - Erica tetralix wet heath	Moderate
M25	<i>Molinia caerulea - Potentilla erecta</i> mire	Moderate
M27	Filipendula ulmaria - Angelica sylvestris mire	Moderate
M28	Iris pseudacorus – Filipendula ulmaria mire	Moderate
MG10	Holcus lanatus - Juncus effusus rush pasture	Moderate
U6	Juncus squarrosus - Festuca ovina grassland	Moderate
M6	Carex echinata – Sphagnum fallax mire	High
M23	Juncus effusus/acutiflorus - Galium palustre rush pasture	High

Table 1: Potential GWDTE recorded on site

Maps showing locations of GWDTEs and their associated groundwater potential can be found in Appendix B.

Although there are several communities that are listed as having GWDTE potential, none were considered to be truly groundwater dependent. There was no single source (such as a spring head) that fed into any of the potential GWDTE communities. Botanically diverse communities such as M27 mires contain some plant species that require base-rich conditions; however, this is considered to be from where water flows over mildly calcicolous rock rather than a groundwater source.

# **Conservation Status**

Several communities within the survey area are designated for their conservation value at a European (Annex 1), national (Scottish Biodiversity Action Plan (BAP)) or regional scale (Orkney BAP). For Annex 1 communities, many of the recorded communities within the survey area are not in favourable condition and do not meet the qualifying criteria for being recognised as having Annex 1 status. This is because they are in quite degraded condition (e.g., H9, M15, M19 and M25 communities) or are species poor (e.g., H9 and M25). However, three areas of blanket bog (M17 and M19 communities) are considered to be in favourable condition and therefore Annex 1 quality (see Figure 5 Appendix D). Both communities are predominantly located in the buffer of the site, however the M17 community located in the south east of the survey area occupies a small area within the main site also.

The S27 swamp community located in the north-west of the survey area is also considered to be in favourable condition and considered to qualify for Annex 1 status, though this is not likely to be affected by the development as it is only found in the 250m buffer area.

All other communities are not considered to be in favourable condition. For example, some areas consisting blanket bog vegetation (M17c) (were apparently on a peat layer of less than 50cm, which is the criteria often used to make the distinction between wet heath (<50cm) and blanket bog (>50cm) communities in the Phase 1 Survey classification system (JNCC, 2010). However, blanket bog communities are frequently found on shallow peat in the north and west of Scotland where the highly oceanic climate maintains a saturated peat layer for more typical blanket bog species to grow. Though, even if the peat depth were greater than 50cm in depth, grazing pressure has modified the composition of this community to unfavourable condition.

Within the survey area there are two designated areas, both covering the same geographical area but listed under a different name for each, there is the West Mainland Moors Site of Special Scientific Interest (SSSI) and the Orkney Mainland Moors Special Protection Area (SPA). The West Mainland Moors SSSI is designated for its breeding birds, upland habitat assemblage and blanket bogs. The qualifying interest for the Orkney Mainland Moors SPA consists of the breeding bird assemblage of Annex 1 bird species.

### Discussion

Three Annex 1 communities have been identified during the present surveys, these are considered as features of ecological importance and have value at a European level. One of the identified communities is the S27 *Carex rostrata – Comarum palustre* tall herb fen swamp community which has Annex 1 status but providing the Pollution Prevention Guidelines (Environment Agency, 2012) and stringent mitigation measures to avoid any pollution instances are followed during construction and operation, any adverse effects on the community should be avoided.

The two other Annex 1 communities are both peatland communities: *M17a Trichophorum germanicum* - *Eriophorum vaginatum* blanket mire and the M19a *Calluna vulgaris* – *Eriophorum vaginatum* blanket mire. However, some of these communities are degraded and not in favourable condition. Those that are considered to be in favourable condition are shown in Appendix D. Peatlands are sensitive to change and are slow to recover from negative effects. As an ombrogenous community, they are also sensitive to changes in hydrology. This relates not only to the Annex 1 peatland communities but also to those communities that are hydrologically linked to them.

Therefore, all infrastructure should avoid these areas and any other communities that are hydrologically linked to them. The M19 community in the north western corner of the survey area is located within a different watershed and distinct from any communities within the main site area, it is also solely within the 250m buffer where no infrastructure is proposed, as such no mitigation is required for this community. The Annex 1 M17 and M19 communities located in the south east of the survey area appear to be hydrologically linked to the M27 community. Therefore, infrastructure should not be sited in either the M17, M19 or M27 communities in these areas as the negative effects would be significant. Both blanket bog communities within this area are also designated as a SSSI and an SPA.

Table 2 in Appendix A details a number of habitats that are listed in either the Scottish BAP or the Orkney BAP. These habitats are considered to be of conservation value at a national and regional level, however the value of some areas is often linked to other ecological features. For example, the purple moor grass and rush pastures (M23 & some M25 communities) within the survey area consist of a species poor plant assemblages but are primarily designated as an important for wader breeding habitat. The importance of these habitats should be evaluated in conjunction with other data such as breeding bird survey results. As Scottish BAP communities and Orkney BAP are important ecological features at a regional scale, communities should be avoided where possible otherwise suitable mitigation measures may be required.

### Summary

A NVC survey was carried out at the proposed Nitshill wind farm in April 2022 by Rory Whytock ACIEEM. The survey has been carried out early in the year which makes some species difficult or impossible to detect or identify. However, the majority of plants are identifiable vegetatively which allowed for the accurate classification of the communities within the survey area. The limitations to surveying early in the season are largely restricted to difficulties in determining how species rich a particular community is.

A number of communities were identified as having conservation value at either a European, National or Regional level. Infrastructure should avoid any Annex 1 communities that are in favourable condition or those that are hydrologically linked to them. Some habitats such as purple moor-grass and rush pastures are species poor and of little conservation value for plants, however they may support important breeding wader assemblages. As a result, the value of these habitats should be evaluated alongside other ecological survey information such as breeding bird surveys in order to fully assess their ecological value. Where possible, infrastructure should avoid these areas, if not then suitable mitigation measures should be employed to reduce negative impacts.

A number of potential GWDTE communities were recorded within the survey also. However, none are considered to be truly groundwater dependent and do not require any specific mitigation during either the constructional or operational phases.

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# Appendix A – Habitat Summary

**Table 2**: Summary of Phase 1 habitats and NVC communities recorded on site and related conservation designations

NVC code	Phase 1 code	Annex 1 code/s	Scottish BAP	Orkney BAP	Area (Ha)
H9	D1.1	H4030	Upland heathland	Upland heathland	1.41
M15	D2	H4010	Upland heathland	Upland heathland	6.24
M17	E1.6.1	H7130	Blanket bog	Blanket bog	13.21
M19	E1.6.2	H7130	Blanket bog	Blanket bog	5.59
M23	B5	N/A	Purple moor grass	Purple moor grass	
			& rush pastures	& rush pastures	25.03
M25	E1.7	H7130 (Where peat	Blanket bog &	Blanket bog &	
		depth is >50cm)	purple moor grass	purple moor grass	
			& rush pastures	& rush pastures	13.21
M27	E3.1	N/A	Lowland Fen	Lowland Fen	11.61
M28	E3.1	N/A	Lowland Fen	Lowland Fen	0.69
M6	E2.1	N/A	Upland flush	Upland flush	2.60
MG10	B5	N/A	N/A	N/A	34.18
MG6	B4	N/A	N/A	N/A	87.69
S23	F2.2	N/A	N/A	N/A	2.42
S27	F1	H7140	Lowland Fen	Lowland Fen	1.90
S9	F1	N/A	Lowland Fen	Lowland Fen	0.08
U5	B1.2	N/A	N/A	N/A	2.78
U6	D6	N/A	N/A	N/A	8.62
Non-NVC	J5	N/A	N/A	N/A	51.94
				Total (Ha)	269.18

## Appendix B – NVC and Potential GWDTE Survey Results

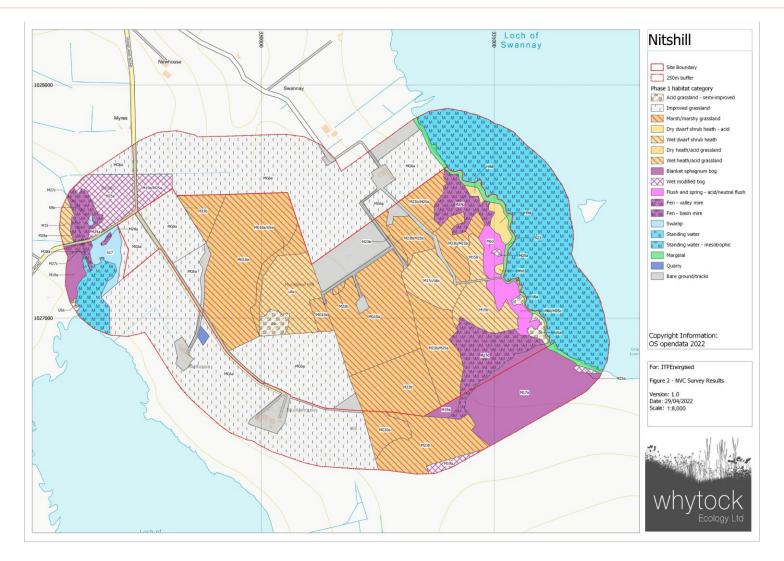


Figure 2: NVC survey results

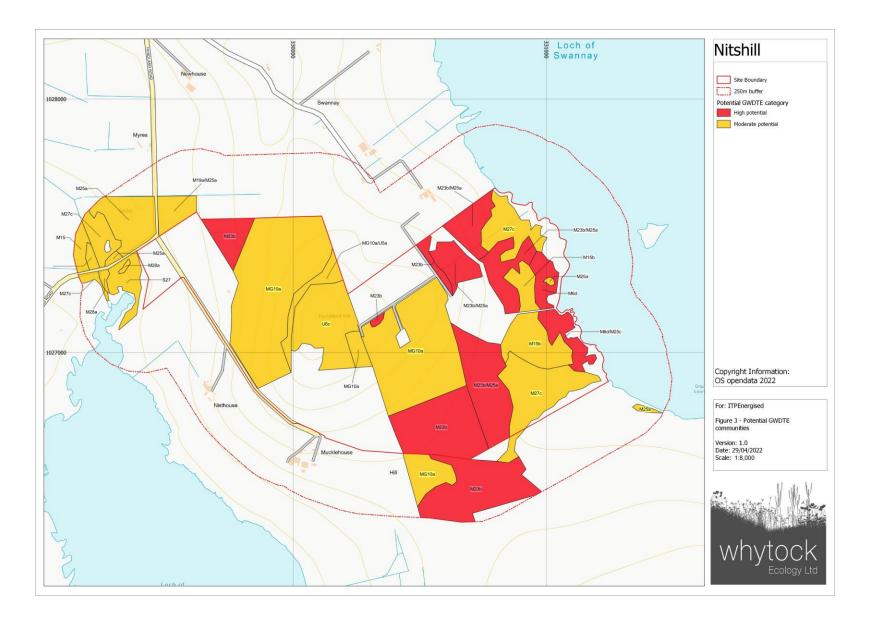


Figure 3: Potential GWDTE communities recorded on site

# Appendix C – Target Notes

#### **Table 3:** Target notes from surveys

Target Note Number	Comment	Grid Reference	
1	1 Seasonally flooded pools dominated almost exclusively by Juncus effusus		
2	2 Game crop - non-NVC community		
3	3 Old quarry		
4	Small area of open water	HY2927227406	
5	Recently tilled ground - bare soil	HY3037327259	
6	Quarry/midden	HY3058127462	
7	Slightly base rich water flow in channels with Scorpidium revolvens occasional. Bog pimpernel (Lysimachia tenella) recorded in this location but channels not well defined enough to assign to another NVC community	HY3106227143	
8	Recently tilled ground - bare soil	HY3057227757	
9	Schoenus nigricans occasional in wet heath/acid grassland. Quite degraded in having large, active drainage ditches, heavy grazing and severe poaching	HY2916527368	
10	M19 in favourable condition, though Molinia caerulea slightly more frequent than desired	HY2919627065	
11	M17 in good condition with high water table and typical assemblage for the community	HY3119826792	

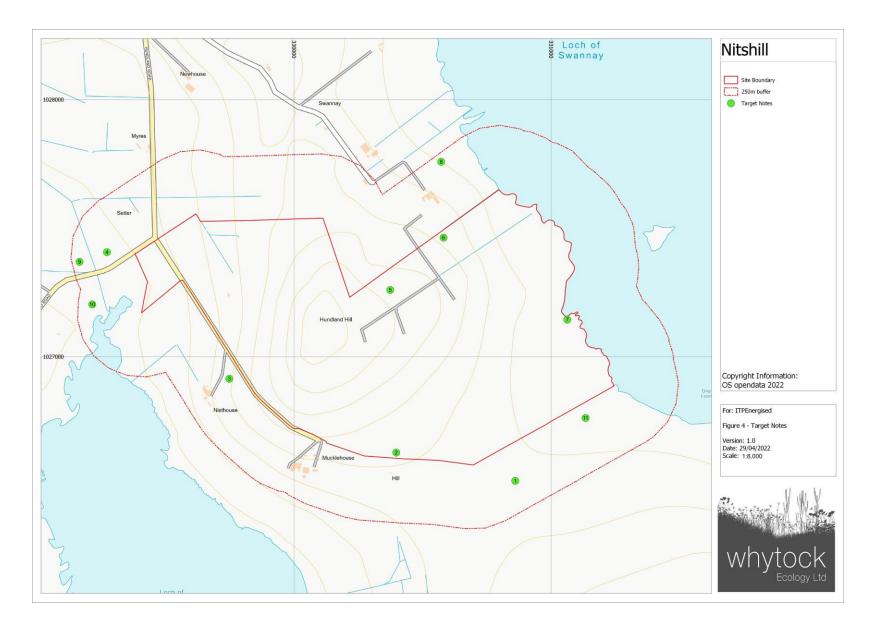


Figure 4: Target note map showing locations of each

## Appendix D – Annex 1 Communities

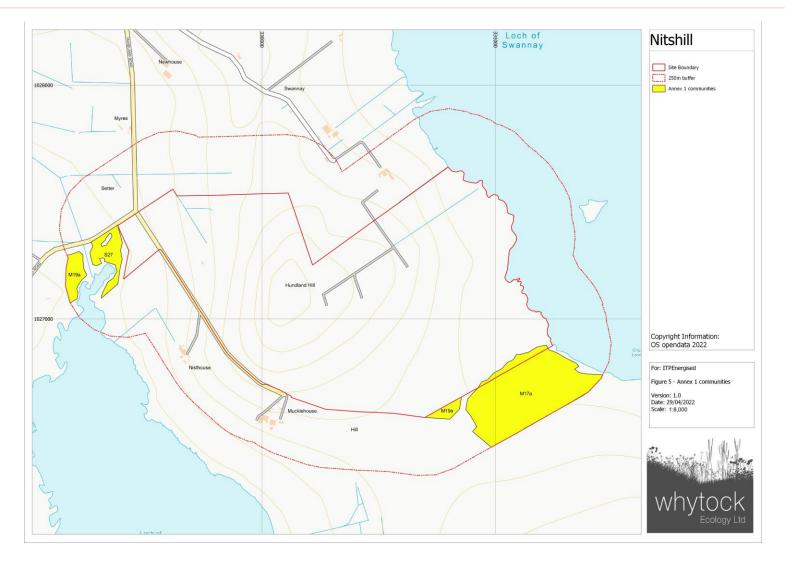


Figure 5: Communities recorded within the survey area that are considered to be of Annex 1 quality