

Scottish Lowlands Forest District

Kilpatrick Hills

Forest Design Plan – Appendices I-V

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Appendix I: Forest Design Plan Consultation Record

Public Consultations

Consultation with external stakeholders carried out has covered a broad range of subjects, including the recreation potential within the Kilpatrick Hills, environmental concerns, landscape impact, heritage features and impact on neighbouring landholders.

Nine focus groups covering a wide variety of users (Mountain Bikers, Hill Runners, Community Council Forums, Hill Walkers, Disabled Access Forum, Horse Riders, Youth Groups, Local Interest Groups, Anglers) were held in Dec. 2012 / Jan. 2013. The purpose of these was to determine for each group: the key attractions of the area, what could be done to enhance the appeal of the area, current or potential issues.

The Enhancing the Woodland User Experience Toolkit (EWUET) was implemented for the Kilpatrick Hills during summer/autumn 2012, and involved asking visitors to complete questionnaires and a series of accompanied walks. The feedback from these has been used to develop a potential action plan identifying potential recreation opportunities over the site.

In parallel to the Forest Design Plan, a Master Planning exercise for the wider Kilpatrick Hills area has been undertaken by FCS in conjunction with Barton Wilmore Consultancy. As part of this process, workshops were undertaken involving an extremely broad range of stakeholders (including a range of representatives from all three Councils covering the area, ScotRail, Police, Loch Lomond National Park, SNH, SEPA, RSPB, Woodland Trust, CSGN Support Unit, Clydebelt Local Historical Society, Bearsden & Milngavie Ramblers).

Four public consultation events were held during January to review the Design Concept proposals, and over 200 members of the public attended.

In addition, District staff have held initial meetings with West Dunbartonshire Access Forum, Clydebelt and the Kilpatrick Hills Management Group, and brief informal discussions with SNH and FC Conservancy have also been undertaken.

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Consultee	Date contacted	Date response received	Issue raised	Forest District Response
<p>Members of public at Clydebank Shopping centre consultation (137 people spoken to/showed interest in project)</p>	<p>18/01/2014</p>	<p>18/01/2014</p>	<p>A large number of issues raised in order to record these, issues were grouped together.</p> <ul style="list-style-type: none"> - More trees on low slopes, in favour of planting. Walks in hills regularly, sticks to main routes although some areas are very wet. - There was a large number of people concerned about too many paths taking away from wild feeling, got to be carefully managed - Potential for wind turbines was raised as a concern by a few people - Continued access to hills was a large issue for most people that we spoke to as users if the facilities, concern about deer fencing - A few people asked about the information that we had and what had been done to come to 	<p>All responses were given by staff on day of consultation based on information available & knowledge. Areas that have been identified on the lower slopes for planting are the most suitable to enhance the semi natural woodland that is already growing on the lower slopes. It was explained that these are just draft plans of potential path routes, a lot more work is required to establish what these routes will look like.</p> <p>Explained that all FC land has potential to be looked at for wind turbine, however Kilpatrick Hills is not currently on plan for turbines, should this change full planning consultation would be required. It was explained that if deer fencing is required in some areas that gates will be installed to allow continued access.</p> <p>It was explained that a large</p>

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			<p>these conclusions</p> <ul style="list-style-type: none"> - A question by majority of people was will there be a lot more trees than there is at the moment - Concern about more trees being planted on Kilpatrick Braes - A few people were interested in getting access over from East Dunbartonshire area - 2 people expressed interest in wither a MTB trail is planned for the area, would be happy to see this in the area. - A few people asked about planting near water and how water will be protected - There was a few enquiries about clear felling of areas, asking if stumps will be removed as sites look terrible after works - One couple expressed view that more information & advertising of the area is needed, 	<p>number of surveys had been carried out over the last 2 years to help us draw up the concept.</p> <p>People were shown the map and explained to them that the ratio of open ground to planted area would be similar to what is there now; it will just be in different and more suitable areas.</p> <p>CL explained that this is to enhance and conserve the semi natural ancient woodland. Under planting existing woodland.</p> <p>MB spoke to these people and explained that we are looking at the options with East Dunbartonshire Access Forum.</p> <p>MB explained that focus groups views that they like the different, wilder MTB experience at Kilpatricks. Also highlighted that FC is not planning to build any more MTB trails in future.</p> <p>GW & CL explained about the Forest Water guidelines and how these are in place to protect all watercourses, not just the reservoirs. Explained that stumps are not removed as this can cause other issues, but explained that trees would</p>
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			<p>suggestion of need to visitor centre</p> <ul style="list-style-type: none"> - Concern was raised by a few people about lack of parking around Gavinburn area - Everyone was generally happy with the overall concept 	<p>rot down over time.</p> <p>MB explained that a visitor centre is not in the short term plans for the area, though we will be looking to advertise the area more widely in the next couple of year.</p> <p>Was explained that as part of a wider look at the recreation in the area, we are looking at parking options in the area and may develop something dependant on the results.</p>
<p>Members of public at Edenmill Farm Shop consultation, Auchineden (32 people spoken to about project)</p> <p>Individuals & representatives from local community councils (Kilmarnock), Hill runners, Glasgow Mountain Bike club, hill walkers, Glasgow Natural History Society, Butterfly Conservation, Glasgow Museums, local residents and land owners.</p>	19/01/2014	19/01/2014	<ul style="list-style-type: none"> • Comments that access through plantations around the Black Loch is very difficult due to terrain and overgrowth of trees and vegetation. He used to access this area in the past but as forest has grown access has become more difficult. • The current forest blocks in the area can also be quite confusing as you follow a gap but it turns out to just be a finger and doesn't lead to anywhere (this is a common comment throughout today with regards to this section of the site). • Pleased to see that there will be more rides in the new plan to allow wider access through more remote areas of the site. • Mountain bikers (GMC) - pleased to be consulted on this process. 	

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			<p>Keen to have areas of broadleaf woodland incorporated into the plan as it makes a really good ride, particularly in autumn.</p> <ul style="list-style-type: none"> • Some sections of paths would require upgrading if used more frequently as would quickly become degraded. • General consensus this group would be more than happy to volunteer to help maintain sections of trail if materials and tools were provided (talk to Maggie Ferguson to talk over working completed at Mugdock). • Local resident (and on Kilmaronock Community Council)- keen to see what paths we are thinking of adding to the area- particularly the north of the site and circular path networks. Quite happy with what he saw at the session. • GNHS member (personal interest and representing several other groups as well)- pleased that the public are being consulted on this. • Access officer for Bearden and Milngavie Rambles- keen to see access points and proposed paths. Commented on diversion in place along Craig's and more signs need added as there has been some confusion. 	
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			<ul style="list-style-type: none"> • Hill walkers- generally fine with plans. Would be keen to be involved with coordinated litter picks on site as rubbish can collect often but a bit too much to take all the way back down from high points. • Hill runners- interest in John Muir Trail. Would be keen to avoid situation at Whangie where trail is a mess- churned up by cattle and people. • Many difficulties in accessing east/ north east of site due to terrain and trees. Would like to see some paths created here (as natural as possible). Pleased so far with plan as it will add variety to the site. Would like to see more access points created particularly in the above mentioned points of the site. • Would be good to be able to run from Milngavie up into Kilpatrick's more easily. • Local resident- interest in Geo caching and SSSI's. Derek has asked them to contact Lowlands's office about permissions for this. They have suggested looking at the DEFRA magic maps website. • Janet Beverage (neighbour to north west of site)- would prefer not to have Sitka/ productive planting around scheduled 	<p>CL said that the community consultations we were running were aimed to consult with everyone and were well advertised to the wider area so we would expect landowners to attend these sessions.</p> <p>On checking records after the meeting, both names are correct. We just Gallangad Burn long Cairn within our management plan for the SAM 23/1/2014 Design revised to pull planting back further than 20m UK Forestry Standard recommended distance. Planting mix amended to provide native woodland fringe around commercial areas to improve setting of monument.</p>
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			<p>ancient monument in north(beside her and FCS march fence)- spoils the setting and also in past was a black grouse lek but no longer due to dense trees in area.</p> <ul style="list-style-type: none"> • Janet was also wondering when we were consulting with neighbours and landowners surrounding the site. • Janet also mentioned there is often confusion in the name of some of the scheduled monuments. The Shiels of Gartlea and Gallangad. We know this as Gallangad Burn Long Cairn. • And also mentioned concern about windfarm • Janet was also concerned about the new forest road going in over the terminal moraine at the north of the site. She would prefer it if this was protected and also there was some more focus on the importance of the geodiversity on site. • Mountain biker- GMC- would be keen to see John Muir trail opened through the Kilpatrick's and also other networks on site- could possibly commute through these as works in Bonhill and 	
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			<p>lives to the west side of Glasgow.</p> <ul style="list-style-type: none"> Interested to know more about the face of the Kilpatrick's and what routes are available in this section of the site 	
Members of public at Napier Hall consultation, Old Kilpatrick (27 people spoken to about the project)	21/01/2014	21/01/14	<ul style="list-style-type: none"> - There was a number of people interested in the paths & upgrades, which ones will go in - Any attempt going to be made to link down to canal - What is happening with farming on the land - Expanding the native woodland on braes, that will be lovely - When is it all likely to start - Guides used to have a hut - Lots of people asking about what different types of woodland mean and the different types of trees likely to be planted - More trees downhill from the road up hill, doesn't have as much visual impact as expected - Proposed walking routes look good - Are you planting more trees 	<p>MB explained that there is still more work to be done on design of routes. Routes are incorporated into plan, so these are left open. We are looking to expand car park at sports field, so this could allow for this type of link. We will be planting in suitable areas, no long term plans for grazing leases.</p> <p>Explained that planting is likely to be 2015/16 – 2016/17</p> <p>Explained this had to be demolished as it was unused (due to anti-social behaviour) and was unsafe. CL & MB explained what the different types of woodland may look like and purpose of the variety of planting</p> <p>Explained that it more about repositioning the woodland cover, openspace will be</p>

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			<ul style="list-style-type: none"> - What will happen to existing trails - There was a few people asked about windfarm potential on the site. However another member of the public suggested that the area is in the flight path for Glasgow Airport, was refused before - Is there going to be an information centre for public - Hope you are not going to build big paths, like the ones up north - Issues of increased public access through Gavinburn areas, anti-social behaviour by MTB, litter and parking - Planting beside water how close will it be - Concern about felling closer to 	<p>similar to what is already there. MB explained that these would be kept, that is the purpose of them being mapped at this stage. EM explained that all FC sites could be considered for windfarms.</p> <p>CL explained that there is no plans for this in the short time Explained that there will be some road, but not on the main face</p> <p>MB explained the potential solution to issue with parking, and that we are working the MTB to educate them about speed. We will do our best to manage litter. And could look at a wider education programme about responsible access. CL explained about Forest and Water Guidelines, trees need to be 20m back from edge. MB explained about hours would be adjusted to take into consideration residents, we will contact everyone affected before work starts</p>
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			<p>house</p> <ul style="list-style-type: none"> - Since FC have taken over there has been a huge increase in numbers of people, got to find a balance - Good to see a balance of open space - Broadleaf planting on face, will block views 	<p>and consult on work. Was explained that we have left open spaces to allow views, and as forest mature more views will open up. 3/2/14 Following review with FC Landscape Architect, design on lower slopes at Gavinburn revised to better incorporate view points</p>
<p>Members of public at Artizan Centre Consultation, Dumbarton (38 people spoken to about the project)</p>	<p>25/01/2014</p>		<ul style="list-style-type: none"> - Lily loch are you going to keep that area clear - A couple of people mentioned it would be nice to have the opportunity for disabled people to drive into the hills and park - Routes along the edge of water can be dangerous for partially sighted walker - Fantastic to see this happening and the area coming into management - Need to ensure that SSSI's are being protected - Where will the access for timber haulage at Auchineden be? 	<p>RC explained that due to the protection there would be no planting at Lily Loch Was explained that nothing has been decided on this, though it has been raised by other people</p> <p>Explained that talks are still on going about the route for haulage out of this area.</p> <p>Explained that these areas are not ear marked for any planting at present, but would be good to get more details.</p>

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			<ul style="list-style-type: none"> - Concern about the planting around holiday cottages, as the views are the reason people come to the cottage - Conserve marsh around Fin loch and Lily loch as it is important for wild flowers. Also some important woodland flora north of burncrooks. - Good to see link over to Dumbarton, could be potential to increase Dumbarton's economic potential as tourism draw 	(Subsequent meeting held with owner & CL)
Feedback questionnaire gathered at Clydebank Shopping Centre Consultation	18/01/2014		<ul style="list-style-type: none"> - Direct access to Cochno Reservoir from A809 at Craigton School - Keep paths as natural as possible - Would hate to lose sense of remoteness so close to city, as this is favourite thing - Would love a MTB trail, some different grades – Blue, red and black - Developing (natural) path network - Ensure that existing wildlife is protected by any new developments 	
Feedback questionnaire gathered at Edenmill Farm	19/01/14		<ul style="list-style-type: none"> • Consider drainage & on-going maintenance, many mountain bikers would volunteer services 	

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shop Consultation			<p>under instruction</p> <ul style="list-style-type: none"> • A midpoint shelter on the John Muir Way • Better provision of drained, built paths – much of the area is very wet & boggy • Drained trails, not necessarily signposted • Sympathetic signposting • Signage reminding not to leave litter. Improved parking. • Early provision of the footpaths • Variety and broken up nature of planting looks good • Easier access through the conifer forests • Like the ideas of a more natural feel • Easier access from Milngavie • Sheltered open areas for insects – glades & rider – managed so as to keep open • Mixed plantations – not all dense park pine forests – quite open, with light coming in. • Some cycle specific trails suitable for all abilities. • Extreme Mountain Bike Downhill trails 	
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<p>Feedback questionnaire gathered at Napier Hall Consultation</p>	<p>21/01/14</p>		<ul style="list-style-type: none"> • Natural positioning of trees • Alleviation of drainage issues on trial network • Comprehensive path network, no long term no-go areas • Extensive views in all directions, • Mixed planting for variety • Seating area to view the Clyde valley • From A82 I would not like to see any pine trees, broadleaf trees are ok • Circular walking routes • Riding tracks, I enjoy seeing the ponies in the field behind the school • Natural, no plastic structures 	
<p>Feedback questionnaire gathered at Artisan Centre Consultation</p>	<p>25/01/14</p>		<ul style="list-style-type: none"> • More natural growth • Maintaining the skyline would be nice, Duncolm, donut hill etc • Access that won't conflict walk/bike • Car access into the site will be a must to get punters in due to ascent/distance to site • More willow styles, natural play – rocks & stepping stones like Queen Elizabeth Forest Park 	

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			<ul style="list-style-type: none"> • Café & facilities in the future • Interpretation – Environmental art/Sculptures • Just to make sure access is reasonably clear for visually impaired but otherwise fit persons • Publish useful/clear maps of walking routes • Maintaining open views down Clyde • Multiuse paths, not over constructed or developed • Bird hides if a suitable location can be found • Pathways & routes • Top of plateau could tolerate woodland without spoiling anything • Good habitat for wildlife • Would like to see some attention paid to botanical considerations • Absolutely no wind turbines • Indicative route of John Muir Way at western end should follow the NCN 7 route to Ballagan and then through Balloch Country Park and not straight down the 	
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			<p>Auchencarroch Road</p> <ul style="list-style-type: none"> • Merkins Forestry – Harvesting route should be East Over Cameron Muir • Protection of existing moraine landscape, peat bogs and sites of ancient archaeological interest 	
Feedback Questionnaires received in post (3 questionnaires)	27/01/14		<ul style="list-style-type: none"> • Marked forest trails for children & a ranger service • Proper gates to prevent unauthorised use • Where possible, more linkage of existing and any new tracks, to give some circular walks or the ability to cross from one side of the area to the other. Currently most tracks are dead ends. 	
Email response (Mr McVey)	18/01/14	23/01/14	<ul style="list-style-type: none"> - Concern about new forest roads, restraint would be welcome for these and quarries - Issue of dumping and litter, no mention of this in plan. How are you going to deal with this. 	Response sent explaining that this will be dealt separately from the design plan and an outline of management methods was given.
Email response (Don Milton – BHS & West Dum Access Forum)	29/01/14		<ul style="list-style-type: none"> - The public consultations evenings in January suggested that a reasonable range of new roads/tracks are being considered which will both open up new areas and link existing access arrangements. 	Increased number of paths, path surfacing and signage are all being considered as potential options, with a view to usage by a range of users including horse riders.

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			<ul style="list-style-type: none"> - The plans also suggest a good mix of forest development with sensitive retention of open space that will be sympathetic to the nature of the land and retain good viewing points. - Where new roads/paths are being created, multi user access should be the aim, including surfacing that is suitable for horse riders. This does not mean full surfacing of tracks that are subject to limited use but, for example, surfacing of extraction roads with fine material to allow easy use for horses and cyclists. - Gates should be openable by all users including horse riders. - The plans on display suggested that new tracks would be created opening up the Birny Hills forest to the north, east and west of the Black Loch. This would open up an excellent new area for those taking access from the South with the potential to provide through routes towards Auchineden and the A809. It would also provide a sheltered area for exercise and recreation when the tops, such as Cochno Hill, may be unsuitable. Again, gates allowing horse access would be particularly 	
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			appreciated. -	
Alex Fleming (Owner of Gavinburn Cottages holiday properties) On-site meeting with Chris Little, Planning Forester	30/1/2014	30/1/2014	Owner concerned about potential impact of planting on views out from Gavinburn Cottages (primarily towards Erskine Bridge, and south west out along the Clyde), as these are viewed as a significant benefit by holidaymakers.	Explained that open ground left to accommodate views up from the Antonine Wall will keep view to Erskine Bridge open for the most part – small block at the southernmost edge of the site might potentially impeded slightly in 30+ years time. Designed open space immediately east of cottages, and sloping nature of terrain mean that views west out to the Clyde should not be significantly impacted. Visualisations will be generated to consider views from cottages and assess potential landscape impact, and if necessary some minor design changes may be possible.
Questionnaire feedback, received by post (1 received)	30/01/14		Better path to Black Linn from Overtoun through forest path along South side of Loch Humphrey. Excellent Plans to improve forests and habitats.	Increased number of paths, path surfacing and signage all being considered as potential options.
Questionnaire feedback, received by post (2 received)	03/02/14		A few seats here and there at suitable points Clearer route between slacks, Duncolm & over to Burncrooks without need to climb fences Restoration of the woodlands	The provision of some seating at suitable locations is being considered as part of the plan.

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			<p>overlooking the Clyde on the southern slope. How about building artificial osprey nest overlooking the Clyde in the mixed woodland.</p>	
Ian Fernie	13/02/14		<p>Provision of information boards on local geology and wildlife together with the recent social and economic history of the hills; viewpoint indicators at appropriate locations.</p> <p>I believe the lower slopes rising to the escarpment of the the south-western elevation of the hills as they are viewed heading westwards on the A82 trunk road and tourist route, and north over the Erskine Bridge provide the critical viewpoint and iconic image of these hills forming an outlier of the Highland Boundary Fault. In view of this I strongly endorse proposal to treat this escarpment area, described as <i>"a visually sensitive diverse and often dramatic landscape"</i> with a light touch involving limited and sporadic planting of native species to generally manage and reinforce the scattered remnants of the previous mainly oak based natural woodland.</p>	<p>Landscape sensitivity has been one of the key considerations in the design of the woodland above Gavinburn.</p>
Questionnaire feedback, received by post (1 received) Harry Macanespie	15/02/14		<p>Suggest identifying viewpoints and clearing conifers which have grown up in recent years to block wonderful</p>	<p>A series of viewpoints across the site have been identified, and the woodland</p>

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			views. For example I would suggest you extract spruce which are growing up to block magnificent view from crag edge at grid reference 506 768 (Sheet 64)	shape designed accordingly to incorporate these as the trees grow. Not entirely clear from the grid reference which crag is referred to, but the south side of this loch is planned to have the spruce felled and restocked with a mix of native broadleaves and open ground.
Questionnaire feedback, received by post (1 received) Brian Knox	11/03/14		Sign posts for the main routes, good paths for walkers, cyclists and a bridleway for horses. In years past I have walked from my house over the hills past loch Cochno, to the Stockiemuir Road at Hilton Park Golf Course, it would be nice to have a designated path on this route.	Increased number of paths, path surfacing and signage all being considered as potential options.

Statutory Stakeholders

In parallel with the public consultations undertaken, responses were also received from statutory stakeholders following the EIA Screening meeting / design concept scoping undertaken in January 2014.

Consultee	Issue raised	Forest District Response
East Dumbartonshire Council	Not sure that all the required surveys have been done. Species such as water vole could be affected by riparian planting.	At present water vole are not known to be present on site and this was not picked up when otter survey done. We are potentially partnering with Scottish Canals to improve water vole in the areas of the Clyde and will get more survey information then, some of this habitat work will include removing non-native tree regeneration from water margins. We try to avoid managing for one species but the work should benefit otter, water vole and black grouse. We have a District water vole strategy and will follow F&W guidelines . As water vole populations fluctuate and move rapidly survey work for water voles

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	<p>Adders could also be adversely affected.</p> <p>Breeding bird survey does not identify the locations of the birds.</p> <p>Phase 1 Habitat Survey would need to be done.</p> <p>Hydrological survey would be useful. More information on planting on deep peat and management of this needed.</p> <p>Would like to know what the buffers would be for otters.</p> <p>How are species affected by path creation going to be protected?</p>	<p>will be carried out by FCS Environment staff during the course of pre-operational coupe checks for environmental constraints and this is picked up at the work plan stage. Suitable water vole habitat is most likely to occur in the uplands in areas where the average gradient is no more than 3% and where extensive, thick deposits of peat are present.</p> <p>We try to avoid managing the habitat for one species. Reptiles require a structurally diverse habitat which includes woodland edges and open space, they prefer to be close to vegetation cover and the current plan will increase the mosaic of habitats and edges, while maintaining large areas of connected open habitat (large areas of open area are required by adders, large is not defined in habitat management handbook). Particular vegetation species are less important than the physical conditions they create - the more diverse the vegetation structure the more suitable it is for reptiles. Woodland edge provides additional microhabitats and potential prey species. Reptiles and black grouse are likely to increase at the point of new planting as this is a successional habitat, but could decline once this stage is over. Populations may fluctuate as harvesting and planting is carried out and thereby provide opportunities for such species.</p> <p>FC holds information on known breeding sites and sightings of birds and this may be accessed on request.</p> <p>A phase 1 habitat survey is not required. There is a NVC survey for open habitats and the FC subcompartment database identifies the landuse/habitat of the remaining parts of the site.</p> <p>Although a Hydrological survey might be of use in some areas to evaluate the impact of planting, the scale and density of native planting, in conjunction with adherence to all Forest and Water guidelines, was felt to be sufficiently minimal in impact for this not to be necessary.</p> <p>All buffers around watercourses, standing water and in</p>
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		<p>respect of relevant species will follow standard Forest and Water guidelines</p> <p>Scrub planting will be created around parts of the reservoirs which will benefit otters to screen them from disturbance by path users.</p> <p>Black grouse leks will be surveyed and some will be monitored. Paths will be directed to be at least 50m away from leks were possible (although this is not always successful as the lek positions may change).</p>
West Dunbartonshire Council	<p>New roads being built will draw more people into these areas. May be an issue with roads just stopping within blocks, as may cause issues with public creating their own desire lines into environmentally sensitive areas. May also exacerbate issues with anti-social behaviour such as quad bike use. WDC can work with FC in managing the creation of new roads and need more information about potential new paths. Areas such as Dennistoun Crags have sensitive bird species, just stopping a road close to here may encourage quad bikers into this area.</p>	<p>Full details of current and proposed recreational routes have been mapped out as part of the FDP. Intention has been to create 'looped' routes wherever possible to avoid issues with creation of desire lines in environmentally sensitive areas.</p>
Stirling Council	<p>Stirling Council, as planning authority, are aware of ongoing issues regarding the upkeep and maintenance of the shared private access road (shown as an existing access) serving Auchinenden Farm, the Burncrooks Reservoir and Treatment Works and various other private properties. It is though noted a new access road is proposed commencing to the east of the treatment works and meeting the A809 Drymen Road in the vicinity of Garvel Bridge. Though this does seem to follow the alignment of an existing track confirmation should be sought from Stirling Council as to whether this potential 'engineering operation', being on privately owned land, can be deemed permitted development or otherwise requires formal planning permission.</p> <p>It is noted also a proposed access road runs to the north of Aucheneck House. Again this follows an established track, though also involves realignment and formation of</p>	<p>SLFD already in consultation with Stirling Council over new access routes.</p> <p>All work will be carried out in accordance with Code of Practice for Timber Haulage. Felling proposals within FDP provide a broad indication of felling operations which are then further refined during work plan process. Community Ranger will consult with local Community</p>

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	<p>a new junction north of Craighat Farm on the A809 Drymen Road. Again it should be confirmed if planning permission would be required for these works.</p> <p>In terms of impacts on public roads in Stirling all work should be carried out in accordance with the Code of Practice for Timber Haulage and a full consultation exercise undertaken with the local community at the appropriate time. The local Community Council and local residents must be informed at the appropriate time of proposed extraction dates, times, frequency of movement with appropriate liaison to address any concerns.</p> <p>The proposed John Muir Trail will eventually pass through Auchineden Estate. This along with the Finnich Toll route will likely remain the most important ways of accessing the area. Both of these are recognised in the supporting mapping and summary of the proposals. Exiting routes in to the Kilpatrick Hills from the Stirling Council area should not be closed off and be appropriately managed during forestry works, so as to ensure access is retained or a suitable diversion created.</p> <p>Opportunities to improve existing access should be taken, but it is recognised that opportunities to create new accesses into the hills are limited by the surrounding road network.</p>	<p>Council as appropriate once final felling operations have been clearly defined.</p> <p>Whenever any recreation routes are closed for operational reasons, Community, Recreation & Tourism (CRT) team liaise with appropriate external bodies as to required signage, alternate routes etc.</p> <p>Full details of current and proposed recreational routes have been mapped out as part of the FDP.</p>
SNH	<p>Dumbarton Muir SSSI – risk of seeding onto blanket bog</p> <p>Dumbarton Muir (Lily Loch) SSSI – Long established livestock grazing of the open moor has helped maintain the bog, which could be adversely affected by the cessation of grazing.</p> <p>Substantial areas of afforestation could overlap with</p>	<p>Buffer zone has been incorporated into design to keep new planting back a suitable distance from designated area, and will be actively managed for control of natural regeneration.</p> <p>In the short term (i.e. the next 5-10 years) the intention is to operate a minimal management regime on the extensive upland areas of open ground in order to allow the vegetation to recover from the previous intensive grazing. The resulting variation in vegetation height and density should increase the mosaic of habitats available, to the benefit of species already present on site such as Black grouse. In the longer term it is likely that a low</p>

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	<p>deep peat, especially on the flanks of Knockupple Hills, and between Fynloch Hill and Loch Humphrey, causing progressive, permanent loss of priority bog and heath habitats.</p> <p>Potential significant effects on the landscape character and visual amenity of the forest due to changes in woodland and open ground distribution.</p>	<p>level grazing regime may be implemented to help manage the open habitat.</p> <p>The areas of deep peat as mapped only provide a broad indication of peat depth, since the data was obtained by surveying sample depths on a 100m grid and using GIS-based modelling to interpolate peat depths across the wider area. Planting areas as indicated are therefore approximate (and include substantial percentages of open ground) to allow micro-siting according to local ground conditions in order to avoid planting on areas of deep peat.</p> <p>From a landscape perspective, the impact of the woodland creation proposals will be most significant in two broad areas – the central plateau and the south facing Kilpatrick Braes.</p> <p>The former is characterised by a sense of wildness, and the intention is to compliment this through the establishment of native woodland in organically shaped areas which reflect specific habitat opportunities, in order to create woodland which is both visually and ecologically diverse, and which will enhance the sense of wildness in the interior. Felling and restocking of the existing plantations offers the potential to integrate better with these new woodland creation areas, providing a more natural transition between the forest blocks and the open moorland.</p> <p>The southern slopes are the most significant location in terms of landscape and visual sensitivity - due in part to their diversity and high visibility, and also because they contribute to the setting of a number of important features, including both the Clyde Estuary, Forth and Clyde Canal and the Antonine Wall World Heritage Site and its associated buffer zone. Careful design of the proposed planting on the slopes immediately above the course of the Antonine Wall helps to preserve views out through the use of open ground, lower density planting and shrubs.</p> <p>The proposals for the wider southern slopes (which fall</p>
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		<p>within the associated buffer zone) have been carefully designed to respect the cultural context of the area and to maintain a balance between woodland and open space, retain views of the tiered cliff faces and skyline, and contribute to landscape diversity.</p> <p>Best practice has been informed by the Forest Landscape Design Guidelines, Creating New Native Woodland Bulletin, Landscape Impact Assessment and the full involvement of the FCS Senior Landscape Architect.</p>
Historic Scotland	<p>Frontiers of the Roman Empire (Antonine Wall) World Heritage Site (WHS) - The pastoral and lightly wooded south facing slopes of the Kilpatrick Hills are one of the main landform features that have influenced the definition of the Frontiers of the Roman Empire (Antonine Wall) World Heritage Site and its Buffer Zone, and create a unique landscape setting for this section of the Antonine Wall. Northward views from the monument towards the ridge and slopes form an important element of its setting, and the planting of woodland too close to the line of the Antonine Wall or the planting of areas of dense woodland would therefore be problematic. This would have the potential to represent a significant adverse impact on the setting of the scheduled monument / world heritage site.</p> <p>Lang Cairn, chambered cairn and cairn, Gallangad Muir (Index no. 2329) - Although not within the FDP area, the scheduled area of the monument is coterminous with the boundary of an FCS plantation.</p> <p>Gallangad Burn, long cairn 790m NE of junction with Knockupple Burn is located within the FDP area and appears to currently be located in a clearing in an extensive area of conifers, affording limited views to and from the long cairn.</p>	<p>In consultation with Historic Scotland, design has been suitably modified to address concerns by:</p> <ul style="list-style-type: none"> • Avoiding planting on the course of the wall • Preserving key views from the course of the wall towards the slopes and ridges of the Kilpatrick Braes • Avoiding planting blanket blocks of conifers that would impact on the landscape character of the buffer zone <p>Edge of adjacent conifer plantation is to be pulled southeast-wards, and the area immediately to the south of the monument reverted to open ground. In addition a transitional fringe of native woodland will be interspersed between open ground and the restocked conifer areas.</p> <p>Area around the cairn will be reverted to open ground as part of the design plan proposals, significantly improving the setting.</p>
SEPA	<p>Activities which pose a risk to the water environment without suitable mitigation include afforestation, deforestation, road construction and material being quarried for use. In addition to the lochs and reservoirs</p>	<p>The design proposals, and all future operations, will adhere to all relevant UK Forestry Standard guidelines relating to Forests & Water in order to mitigate against any potentially adverse impacts on watercourses, water</p>

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	<p>noted in the consultation letter, the sensitive water environment features which could be impacted by the plan include</p> <ul style="list-style-type: none"> • SSSI Dumbarton Muir: SNH designation Blanket bog, raised bog; • SSSI Loch Humphrey Burn SNH designation paleontology paleobotany; • Drinking water protected area • Freshwater fish directive Salmonoid monitoring area • watercourses such as the Gallangad Burn, Catter Burn, Auldmurroch Burn, Duntocher Burn and numerous minor burns. It should be noted that the principle of no deterioration applies for Water Framework Directive classed and unclassified waterbodies. 	<p>bodies or priority open habitats reliant on hydrology to maintain their condition (e.g. blanket bog). Riparian corridors will incorporate suitable buffer zones, and where relevant will entail conversion of existing conifer plantation to a mixture of native woodland and open ground in order to encourage a more diverse habitat.</p>
<p>Scottish Water</p>	<p>Site is within the catchment of a number of water abstraction sources, designated as Drinking Water Protected Areas under Article 7 of the Water Framework Directive (WFD). The aim of Article 7 is to avoid deterioration in the water quality that would result in a change to the water treatment process. Water Treatment Works (WTW) are designed to a raw water quality envelope. Any alterations to raw water out with this can result in the WTW being unable to treat the water to the required level to comply with Drinking Water Standards. In order to continue to comply with the Drinking Water Standards, this could result in alterations to the treatment process, possible additional use of chemicals and energy, upgrades or alternative supplies. This could therefore result in the DWPA failing to meet Article 7 of the WFD.</p> <p>The key sources and catchment areas are Greenside Reservoir (including Fyn Loch and Loch Humphrey), Cochno Loch, Jaw Reservoir, Kilmannan Reservoir (including Lily Loch) and Burncrooks Reservoir. These sources supply Burncrooks WTW. Some of the proposed roads, quarries and afforestation, not the deforestation, fall within these catchments. There are currently water</p>	<p>The design proposals, and all future operations, will adhere to all relevant UK Forestry Standard guidelines relating to Forests & Water in order to mitigate against any potentially adverse impacts on watercourses, water bodies or priority open habitats reliant on hydrology to maintain their condition (e.g. blanket bog).</p>

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	<p>quality issues due to colour and high organics in the water entering the Burncrooks WTW. Any further deterioration will have a significant impact on the treatment process and water supply.</p> <p>Other areas of the proposed development and activities including the deforestation area, fall within the catchment for Loch Lomond. Burncrooks Reservoir and catchment is also part of the Loch Lomond catchment. Loch Lomond is a large catchment, compared to those feeding Burncrooks WTW and there is a greater distance between the proposed activity and the abstraction point at Ross Priory. The impact of this development, therefore, has a lower risk to this abstraction.</p> <p>Scottish Water no longer abstract from Greenland Reservoirs, Black Linn Reservoir and Overtoun Burn.</p>	
WoSAS	<p>Forest plan covers an extensive area of ground and will include a number of proposals that may have the potential to affect archaeological material.</p> <p>Chambered cairn recorded from the eastern side of Gallangad Burn, at NGR 245805, 680705 falls within an area of potential deforestation. It is also shown as being in the vicinity of an existing quarry, which I am aware has been proposed for re-use and expansion. I would suggest that particular consideration should be given to the potential effect of these proposals on the cairn, both in terms of direct impacts that could affect its survival, and indirect effects on its setting.</p>	<p>Extensive survey work has been undertaken on open areas, with a walkover survey and desk based assessment of the newly acquired central area undertaken in 2012, and a follow up report in 2013 tied in this survey with other archaeological surveys undertaken over the wider site to assess the local and regional context of the findings.</p> <p>A suitable buffer will be maintained around all non-scheduled archaeological features, which will be kept open and free of trees. All operations in the vicinity of such features will be conducted in accordance with UK Forestry Standard Guidelines on Forests and the Historic Environment, with suitable steps taken to ensure their protection.</p> <p>Area around the cairn (which is already managed in accordance with an Historic Scotland-approved management plan) will be reverted to open ground as part of the design plan proposals, significantly improving the setting.</p>
RSPB	<p>There are no real significant issues.</p> <p>Potential issues are how bird life on deep peat may be affected; Short eared Owl and Hen Harrier like openness - new planting may affect the birds perception of openness. Sporadic breeding recorded of Merlin, Hen Harrier, Short Eared Owl.</p>	<p>No new planting envisaged on deep peat. The planned increase in native woodland areas, particularly by expanding forest habitat networks and riparian habitats, will help to diversify the available habitat range in order to benefit a wide range of bird species.</p>

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	<p>Previously had Divers breeding on some lochs. Diver rafts and Osprey platforms would be of benefit.</p> <p>The other issue is how the open habitats are planned to be managed, will grazing stock be removed?</p>	<p>Diver rafts are not being considered during the current length of the FDP as they may be disturbed by operations. They may be considered in future. We will not be putting up osprey platforms. Currently the osprey have been nesting in broken snags (evidence form more than one year) and have chosen a site themselves were they will be minimally disturbed. There is enough suitable snapped tops from windblow that platforms are unnecessary</p> <p>In the short term (i.e. the next 5-10 years) the intention is to operate a minimal management regime on the extensive upland areas of open ground in order to allow the vegetation to recover from the previous intensive grazing. The resulting variation in vegetation height and density should increase the mosaic of habitats available, to the benefit of species already present on site such as Black grouse. In the longer term it is likely that a low level grazing regime may be implemented to help manage the open habitat.</p>
<p>FCS Landscape Advisor</p>	<p>Through own limited research of area it seems to be a relatively sensitive established landscape which has gone through sequence of development. It is not just one simple site, different characteristics - valley, ridge and open and larger scale in the north. District is working with Alison Grant to look at the scale of the site. Important to consider the visual landscape from resident, visitors and passing traffic perspectives. Need to consider where the main views are from, to allow perspectives to be tested.</p> <p>Other elements of concern are roads and quarries. How will new roads be established and what will the initial effect be on landscape and environment?</p>	<p>Perspectives from key viewpoints have been provided with FDP to help understanding of landscape impacts.</p> <p>The proposed additions to the internal road network are predominantly confined to the existing woodland areas, and as such are unlikely to have a significant visual impact. No new roads are being proposed on the south facing slopes. Issues to be aware of, which can be addressed during the restocking design are the potential for distinct, parallel sided roadlines within the forest, and the potential on steeper ground for embankments and cut faces to create more intrusive lines within the landscape for a period of time.</p> <p>The quality of bog and other UK BAP habitats was found to vary considerably across the site, but there are</p>

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		<p>substantial areas in good condition which would be better left unplanted – these have been taken into account when assessing for new roading (in combination with the peat depth survey). As a result of this, and of extensive surveys carried out by FC Civil Engineers, there are no plans to install any road infrastructure across the central plateau.</p> <p>Proposed quarry sites are primarily located within existing forest blocks, and are all unlikely to be visible from the wider landscape.</p> <p>Best practice will be demonstrated through the use of the FC Civil Standard (civil engineering quality and specification standard) and Forest Landscape Design Guidelines.</p>
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Appendix II: Tolerance Table

	Adjustment to felling coupe boundaries	Timing of restocking	Change to species	Windthrow response	Adjustment to road lines
FC Approval not normally required (record and notify FC)	<10% of coupe size.	Up to 5 planting seasons after felling (allowing fallow periods for hylobius).	Change within species group E.g. Scots pine to birch, Non-native conifers e.g Sitka spruce to Douglas fir, Non-native to native species	Low sensitivity area Where windthrow represents more than 50% of the crop the area including standing trees may be felled plus up to 5Ha beyond in order to seek a windfirm edge.	Low sensitivity area Creation of turning points/loading bays. Deviation of <100m either side of predicted centre line. High sensitivity area Deviation <75m in either direction from centre of road/track.
Approval by exchange of letters and map	10-15% of coupe size.	5 years +	Change of coupe objective that is likely to be consistent with current policy (e.g. from productive to open, open to native species).	Low sensitivity area As above to include 5-10 Ha of standing crop to seek a windfirm edge. Areas where windthrow represents <50%. High sensitivity area Areas where windthrow represents >50%.	Low sensitivity area Deviation of 100-150m in either direction from centre of road/track. High sensitivity area Deviation of 75-100m in either direction from centre of road/track.
Approval by formal plan amendment	>15% of coupe size.		Major change of objective likely to be contrary to policy, E.g. native to non-native species, open to non-native,	Low sensitivity area As above. Windblown area + an area >10 Ha to find a windfirm edge. High sensitivity area Felling of standing trees beyond the area of windblow.	Deviations exceeding the above.

Appendix III. Design Plan Brief & Objectives

The work of Forestry Commission Scotland (FCS) is guided by the Scottish Forestry Strategy 2006, which sets out seven Key Themes:-

- Climate Change
- Timber
- Business Development
- Community Development
- Access & Health
- Environmental Quality
- Biodiversity

From this Strategy, Scottish Lowlands Forest District prepared the Scottish Lowlands Forest District Strategic Plan 2009-2013 which draws on the most important strands of the Key Themes relevant to the forest areas we manage and sets out the policies and objectives under which other District plans are prepared and monitored.

In preparing the Brief and Objectives for this Forest Design Plan (FDP), issues were grouped under these Key Themes and assessed for their importance. Those relevant are set out in Table 1 below.

Table 1. Relevant issues under the SFS Key Themes

SFS Key Theme	Issues assessed as relevant by staff team for the Kilpatrick Hills FDP	Scottish Lowlands Strategic Plan Reference
Climate change	<ul style="list-style-type: none"> • Carbon sequestration – increasing the area of new woodland in accordance with Scottish Government targets • Adapting to Climate Change – with site suited species choices and habitat connectivity 	1.05, 1.06
Timber	<ul style="list-style-type: none"> • Productive forestry with quality timber production • Quality broadleaf production • Improvement of access road quality • Timber Transport – gaining strategic accesses across private ground. 	2.06, 2.07, 2.09, 2.11, 2.13

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Community development	<ul style="list-style-type: none"> • Develop a community engagement approach that considers the immediate neighbours, key users groups and the wider north Glasgow and West Dumbartonshire area. • Promote educational use of the Kilpatrick Hills • Develop partnerships that result in proactive management and promotion of the Kilpatrick Hills • Importance of WIAT area for immediate community 	4.01, 4.02, 4.03, 4.05, 4.06, 4.07, 4.09, 4.10, 4.12, 4.13, 4.15, 4.16, 4.17, 4.20, 4.25
Business Development	<ul style="list-style-type: none"> • Development of skills projects • Work with Others, including Kilpatrick Hills Management Group to develop tourism and day visits to Kilpatricks • Income diversification, including consideration of agriculture 	3.01, 3.03, 3.05, 3.06, 3.07, 3.13
Access & health	<ul style="list-style-type: none"> • Develop a prioritised approach to management of recreation in the Kilpatrick Hills. • Work with Communities, Council and Police to manage antisocial behaviour • Make access to Kilpatrick Hills easier Use the • Kilpatrick Hills as a Healthy Living destination 	5.01, 5.02, 5.03, 5.04, 5.06, 5.08, 5.10, 5.13, 5.15, 5.15
Environmental quality	<ul style="list-style-type: none"> • Scheduled monument • Unscheduled monuments (archaeological remains) • Reservoirs 	
Biodiversity	<ul style="list-style-type: none"> • Native woodland and potential to expand Species Action Plan species – Black Grouse, nesting birds • Deer Management 	

Following the analysis above, Table 2 sets out the Brief and Objectives agreed for developing the management proposals for the Kilpatrick Hills.

Table 2. Initial Brief and Objectives for developing management proposals

Brief	Objectives
Creating new woodland and diversifying existing woodland to contribute towards carbon capture targets and increase diversity	<ul style="list-style-type: none"> • Make a major contribution towards national carbon capture targets (increase Scotland's woodland cover to 25% by 2050, 1,000ha/ year) by creating new woodland • Plant conifers & broadleaves for timber production where site conditions are suitable • Improve access (both external and internal) for timber

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	<p>production by extending the existing forest road network, utilising existing on-site quarries for material wherever possible.</p> <ul style="list-style-type: none"> • Maintain and enhance the resilience of the forest and its associated ecosystems by introducing diversity and sustainability • Expand native woodland with an emphasis on strategic habitat network connectivity • Sustainably manage the Deer Populations (Red and Roe) so as to minimise their negative impact. Aim is to have less than 10% leader browsing damage on all P1 year coupes. • Ensure forest management takes account of carbon capture efficiencies by producing durable timber products
<p>Develop the Kilpatrick Hills into a Destination Site, consider current and future user needs</p>	<ul style="list-style-type: none"> • The development and promotion of high quality access and recreation opportunities within the Kilpatrick Hills; • Management of the Kilpatrick Hills to maintain and improve the quality of habitats and landscapes and people's enjoyment of them; • Sustainable land management of the Kilpatrick Hills to contribute to the local economy, whilst providing opportunities for volunteering, training and employment; • Greater awareness of the recreational opportunities and natural heritage importance of the Kilpatrick Hills; • The development of strong links with formal education and lifelong learning; • The strengthening of links between communities and their local environment, creating new opportunities for people to become involved in planning and managing the area;
<p>Preserve important landscape and historic features</p>	<ul style="list-style-type: none"> • Preserve the most important views within the site and enhance where possible; in particular the Antonine wall. • Protect known historic features and enhance awareness of key historic features.
<p>Increase biodiversity value</p>	<ul style="list-style-type: none"> • Increase the diversity of open and native woodland habitats to benefit existing species such as black grouse, osprey, cuckoo and pearl bordered fritillary. • Develop a management plan for black grouse in the Kilpatricks. • Increase woodland cover, to expand the extent and secure the resilience, of the current broadleaved & yew woodland habitat network. This network is the highest ranking network for potential to restore in Central and South Scotland (integrated habitat networks), and extends from north of Loch Lomond through to Milngavie and the Campsie's and as far as Kirkintilloch. • Expand current native woodlands and create new native woodlands to reduce the fragmentation of the native

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	<p>woodland network.</p> <ul style="list-style-type: none">• Where plantation forest retains surviving blanket bog vegetation, restore to open habitat where appropriate• Maintain and improve key feature and habitat condition (including geology) at sites such as SSSIs and identified priority habitats.
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Appendix IV - Maps

The following maps are referenced within this design plan:

- 1 – Location
- 3.1.1 – Peat Depth
- 3.1.1 – Soil Groups
- 3.1.1 – Soil Moisture Regime
- 3.1.1 – Soil Nutrient Regime
- 3.1.2 – Climate
- 3.1.3 – DAMS
- 3.2.1a – Species
- 3.2.1b – Age Class
- 3.2.1c – Yield Class
- 3.4.1 – SSSI Locations
- 3.4.2 – Priority Habitat Types
- 3.4.3 – Ancient Woodland
- 5.1.1 – Felling Phases
- 5.1.2 – Thinnable Areas
- 5.1.5 – Proposed Access
- 5.2.1a – Future Species
- 5.2.1b – Future Woodland Habitat
- 5.2.1c – Future Spacing
- 5.7.2 – Current + Future Routes

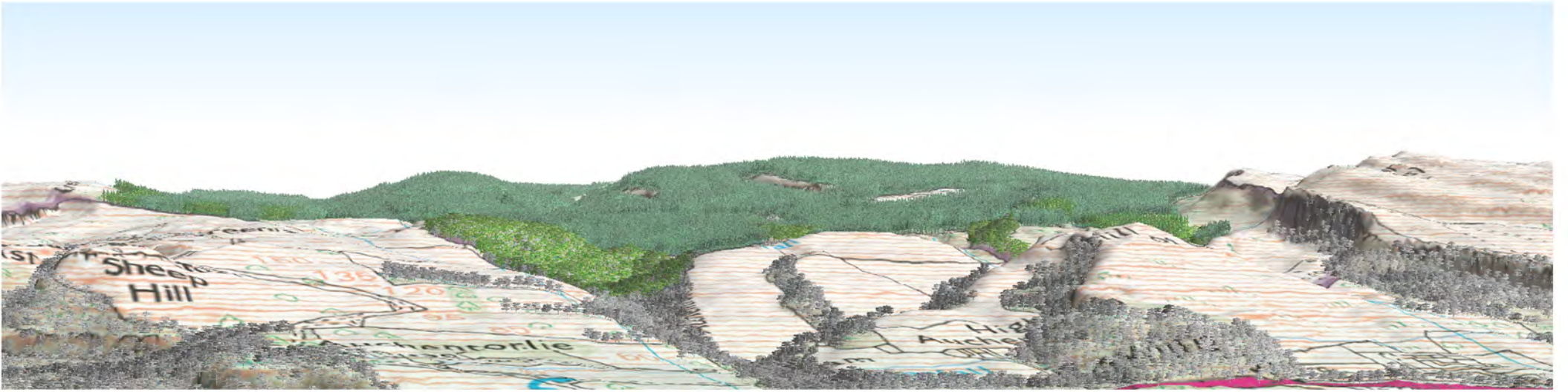
Appendix V - Visualisations

The following visualisations have been created to help provide an approximate indication of how the landscape may change over time:

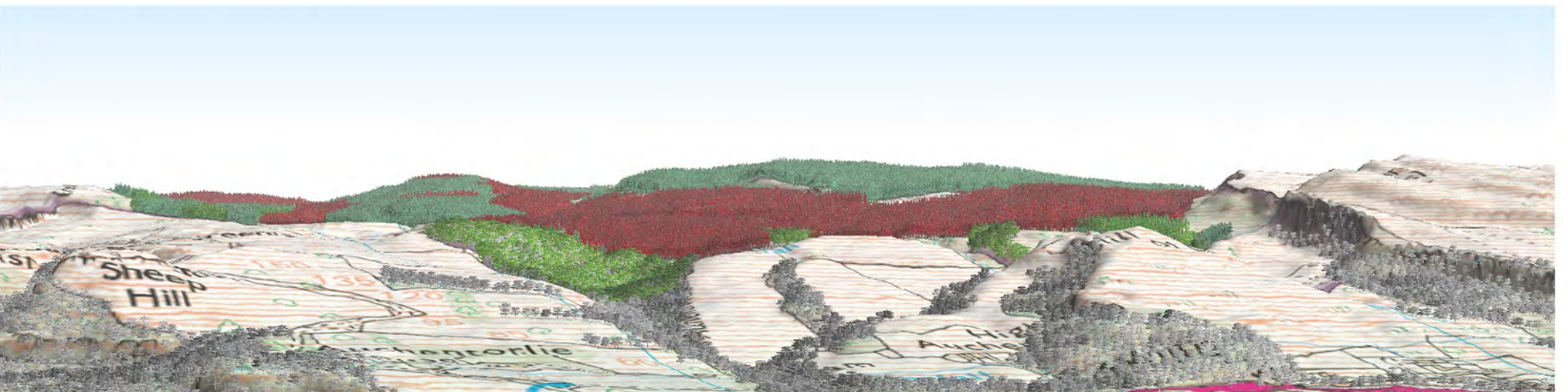
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- Auchineden from Carbeth
- Auchineden from Cochno Hill
- Kilpatrick Braes from Mar Hotel
- Merkins from The Whangie



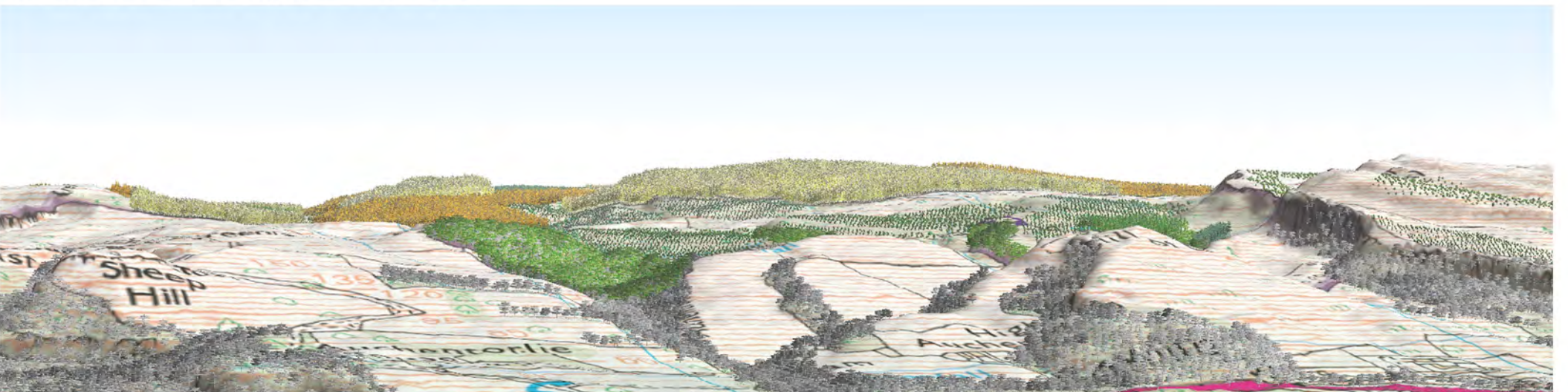
Auchentorlie viewed from Bishopton 2014



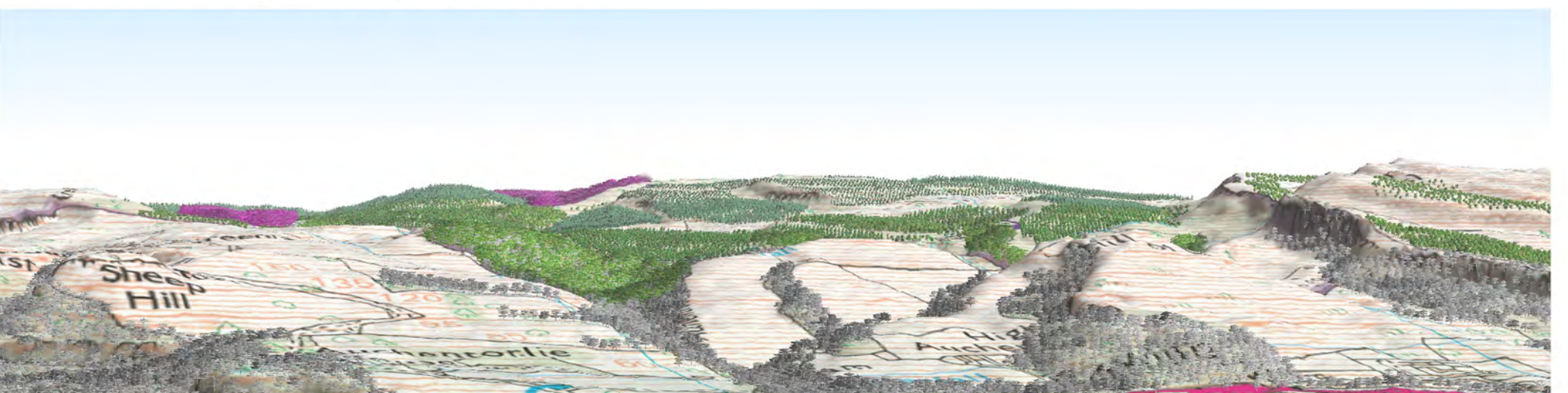
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Auchentorlie Phase 1 Felling Visualisation - 2020



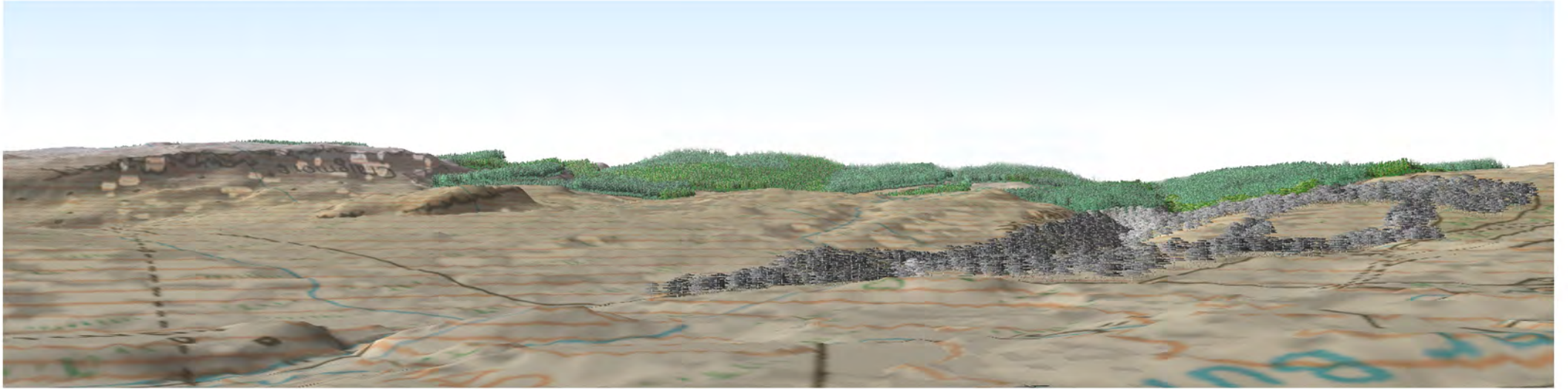
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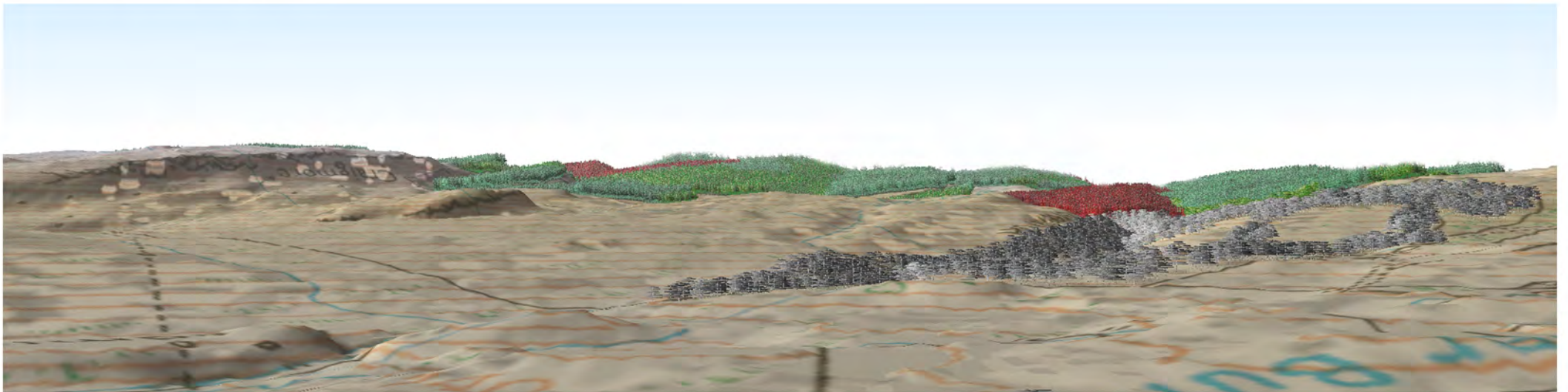
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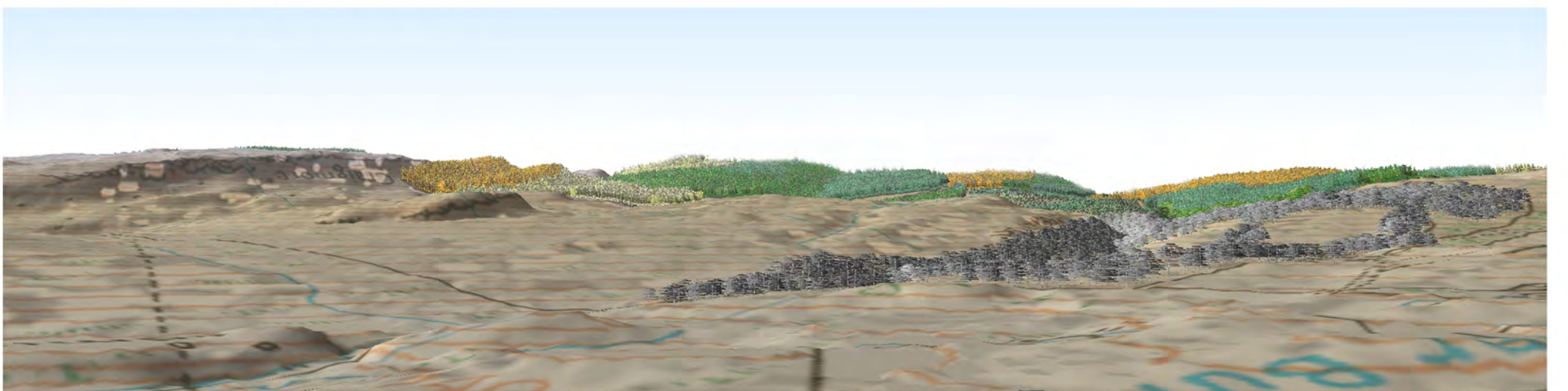
Auchineden viewed from Carbeth 2014



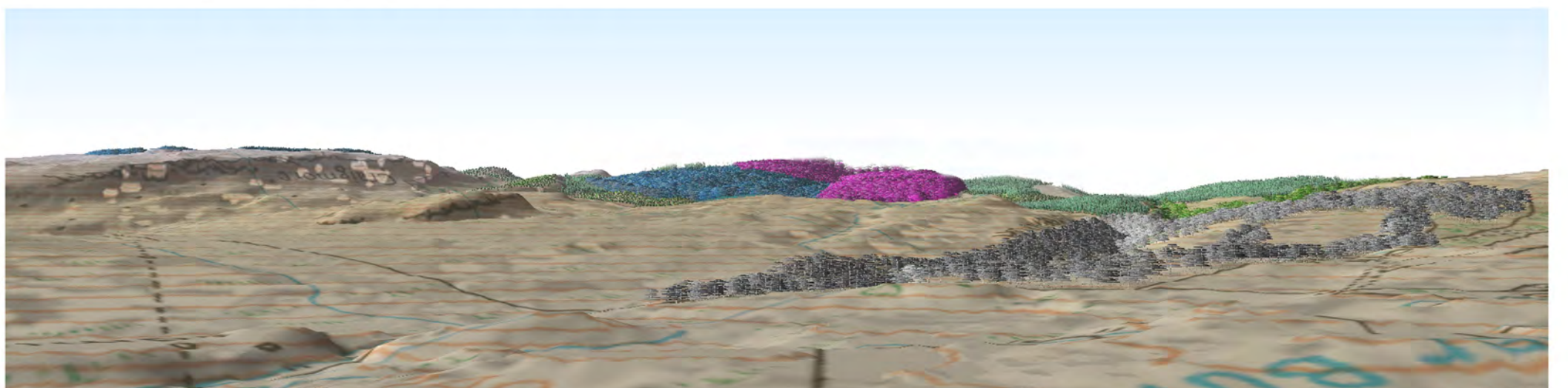
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Auchineden Phase 1 Felling Visualisation - 2020



Auchineden Restock, Phase 2 + 3 Felling Visualisation - 2030



Auchineden Restock, Phase 4 + 5 Felling Visualisation - 2040



Auchineden viewed from Cochno Hill 2014



Auchineden Visualisation - 2014



Auchineden Phase 1 Felling Visualisation - 2020



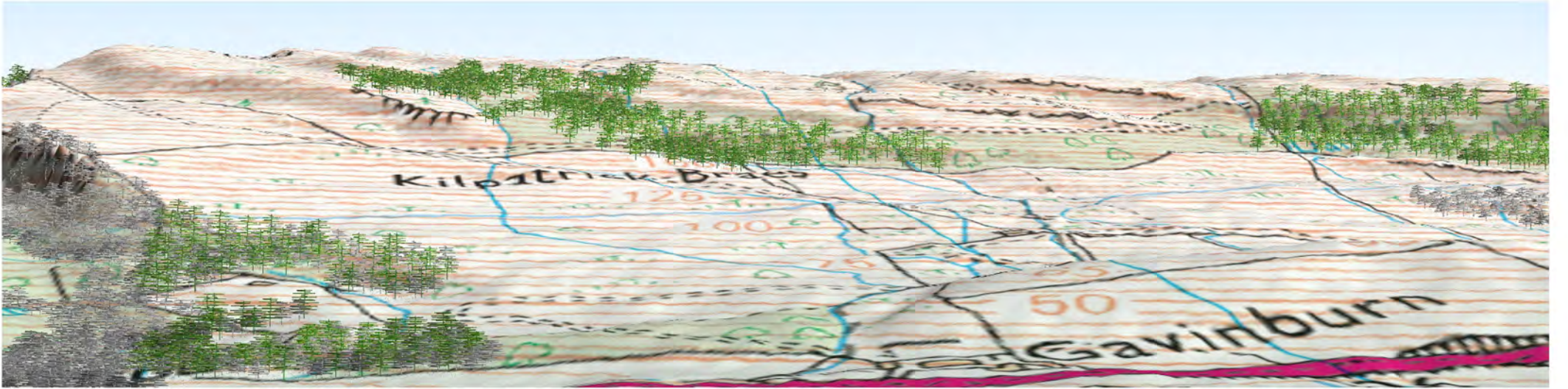
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Auchineden Restock, Phase 4 + 5 Felling Visualisation - 2040



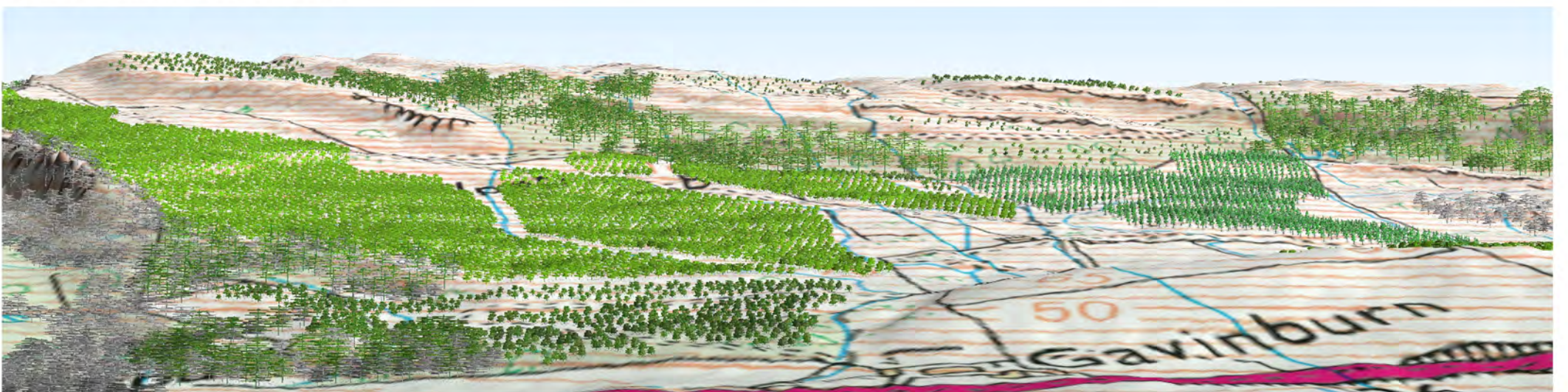
Kilpatrick Braes 2014



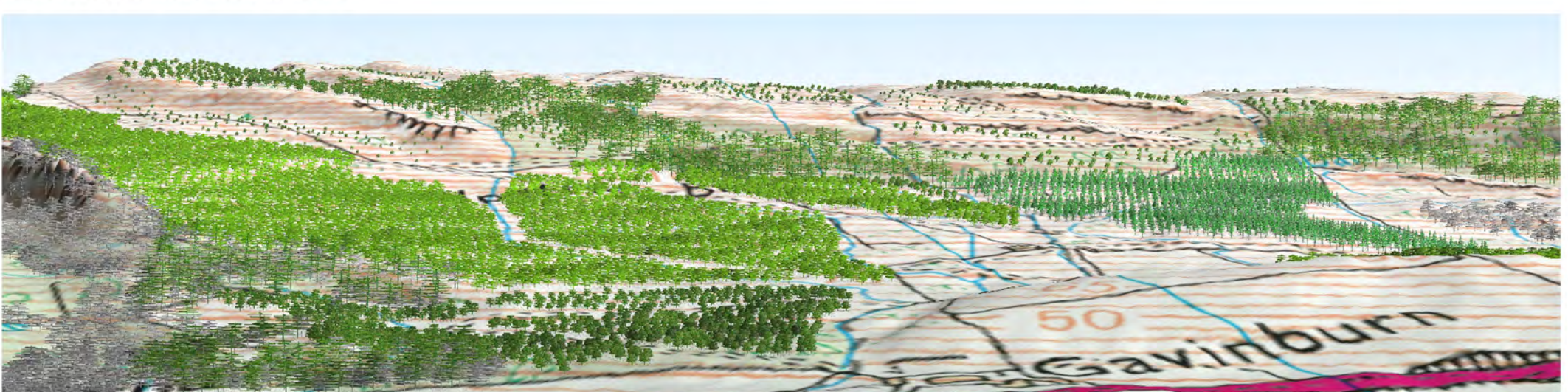
Kilpatrick Braes Visualisation - 2014



Kilpatrick Braes Visualisation - 2020



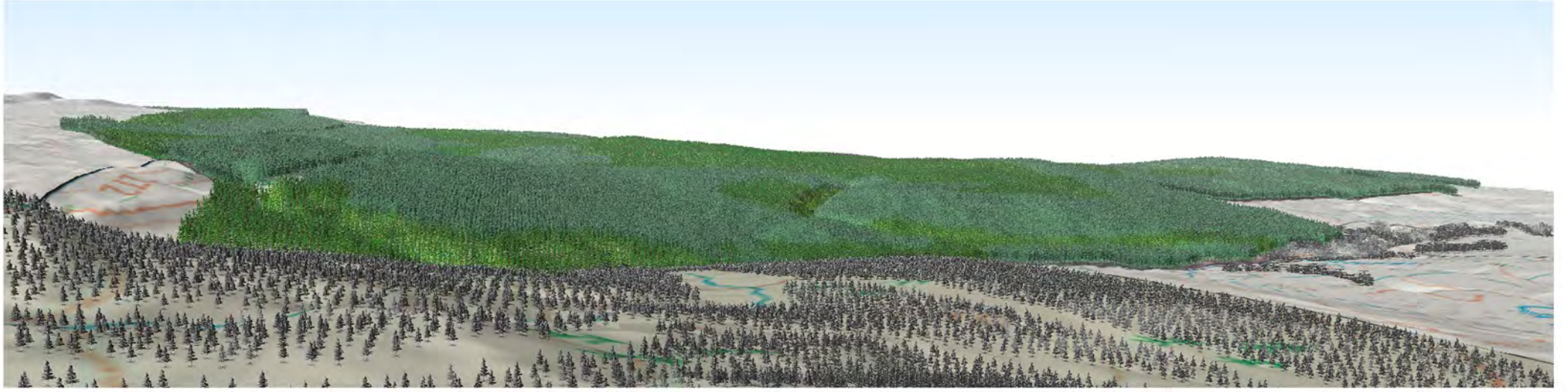
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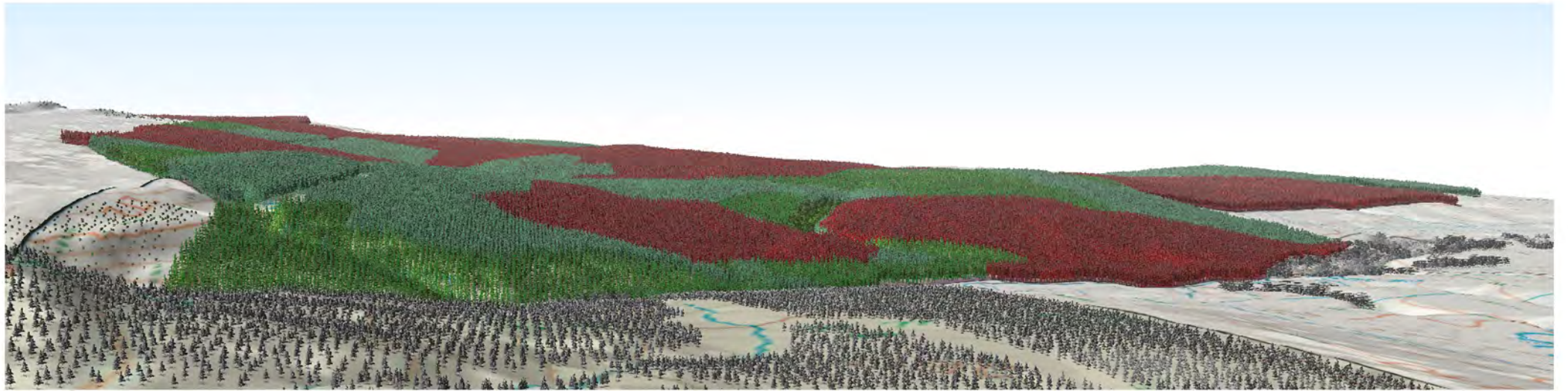
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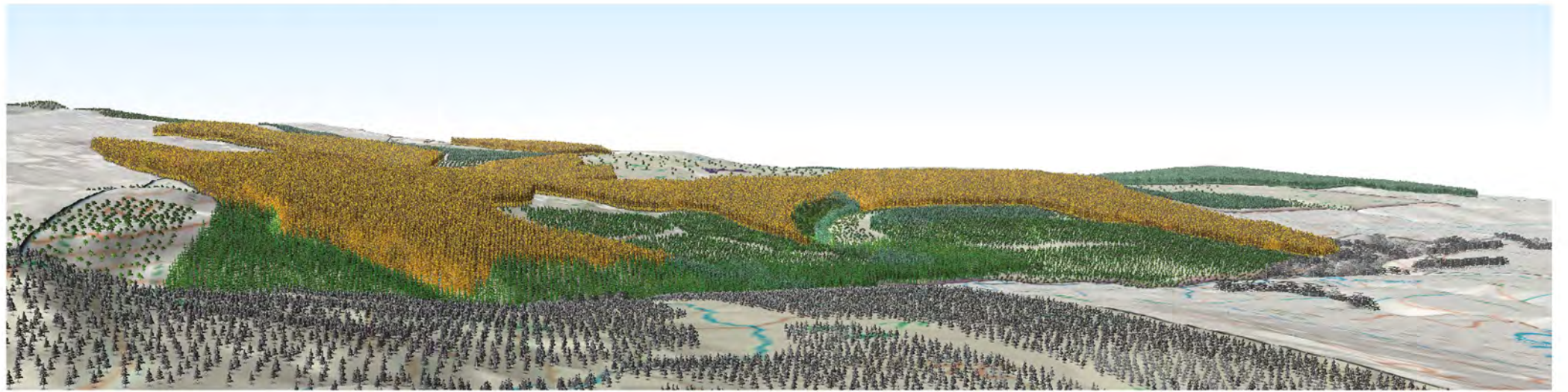
Merkins viewed from The Whangie 2014



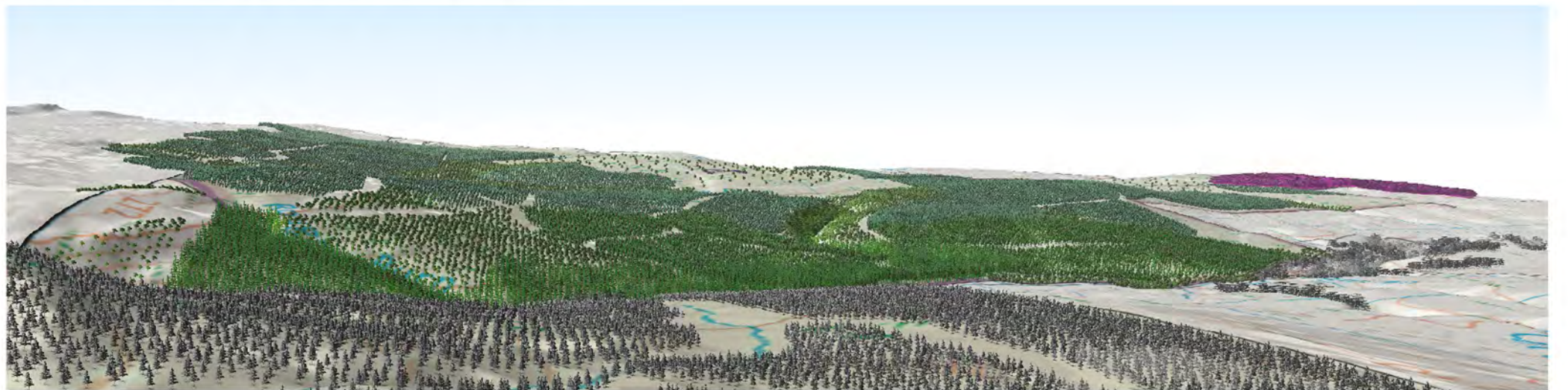
Merkins Visualisation - 2014



Merkins Phase 1 Felling Visualisation - 2020



Merkins Restock, Phase 2 + 3 Felling Visualisation - 2030



Merkins Restock, Phase 4 + 5 Felling Visualisation - 2040