



APPENDIX 4-5

HARVEST MANAGEMENT PLAN

Proposed Measures to Protect Social & Environmental Features & Considerations (Cont..)

<input checked="" type="checkbox"/> Water sampling	<input type="checkbox"/> Forest edge planting
<input checked="" type="checkbox"/> Install silt traps/barriers	<input type="checkbox"/> Environmental setback planting
<input type="checkbox"/> Drain blocking/slow-water dams	<input type="checkbox"/> Other (specify)
<input checked="" type="checkbox"/> Utilise brush mats along extraction routes	<input type="checkbox"/> Other (specify)
<input checked="" type="checkbox"/> Exclude machinery in areas adjoining aquatic zones, water abstraction points & water-related 'hotspots'	<input type="checkbox"/> Other (specify)

Ancillary Information (include relevant information to expand on above & to detail important aspects such as the sequencing of operations, the width of environmental setbacks & contingency planning. Ensure accurate cross-referencing and consistency with maps) *

Harvesting

This Harvest Management Plan (HMP) sets out the proposed harvesting and extraction procedures and will be updated as part of the felling licence application. Harvesting and extraction to be carried out during periods of dry weather to reduce soil compaction and rutting of tracks. All harvesting activities will be suspended during periods of prolonged rainfall or high rainfall. Proposed machinery will comprise a harvester and a low-ground pressure forwarder with a 14-tonne bunk capacity. Before commencement of felling all operators will be fully briefed of the harvest plan including potential hazards and environmental sensitivities and corresponding protective measures on site. Advance notice and safety signage will be erected prior to harvesting, and harvest boundaries will be clearly marked before operations begin.

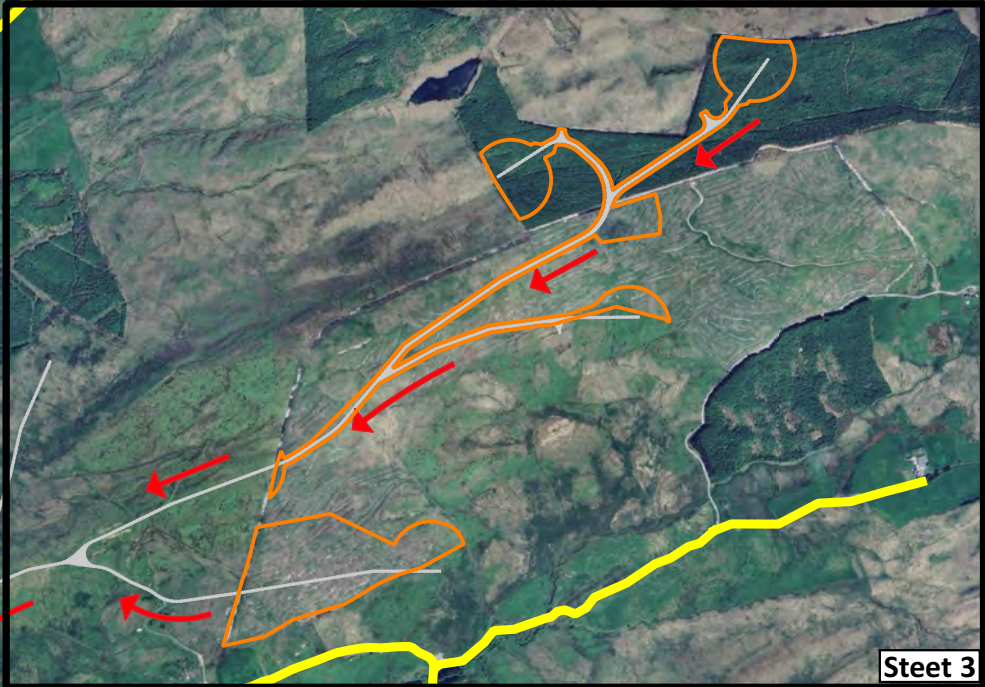
Brush mats will be used along all extraction routes, with corduroy rafts deployed to reinforce short sections of soft ground subject to high traffic usage. The extraction directions are marked with red arrows on the Harvest Plan Map. Particular attention will be paid to minimizing disturbance to ground surfaces, drains /streams, and biodiversity features. Brush, logs or debris will not be allowed enter the aquatic zones and relevant watercourses. Felled tree to be stacked in a responsible manner to prevent contamination of watercourses with organic rich leachate exuding from cuttings.

Sediment traps will be installed within relevant watercourses before harvesting commences, at strategic locations identified on the ground. Sediment traps will be monitored and maintained (i.e., cleaned out and/or added to, as appropriate) throughout felling, extraction, and periodically thereafter, until the site stabilises. There will be a 20m buffer around aquatic zones (10m either side) and 10m buffer around relevant watercourses (5m either side) identified in maps. Existing drains will be incorporated and enhanced where necessary and will integrate with the proposed renewable energy development's drainage system.

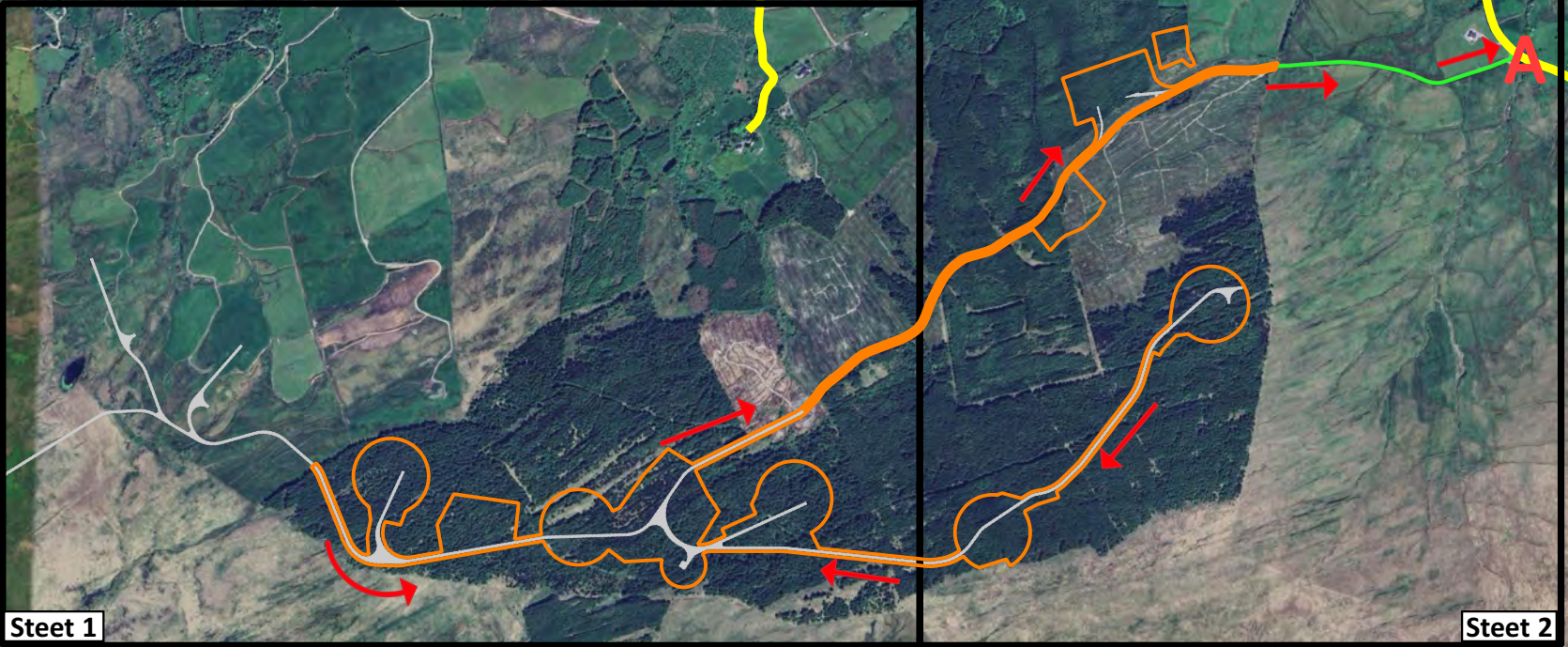
Onsite supervision will be present during operations to ensure that felling and extraction are carried out appropriately and that water protection measures are adequate and remain effective throughout, and to trigger contingency measures, if necessary (e.g., to cease operations if rainfall creates a risk of sediment mobilisation and runoff). All staff must always wear high visibility jacket and hard hat. All personnel on site must have appropriate Health and Safety training. All felling/harvesting operations to comply with the Forest Harvesting and the Environment Guidelines and Forestry and Water Quality Guidelines.

Access to site - The roads planned for the wind farm will be used for access and haulage purpose. Timber will follow extraction arrows, leaving site along R585.

Harvest Management Plan Overview Maughanaclea Renewable Energy Development









Steet 3



Steet 1

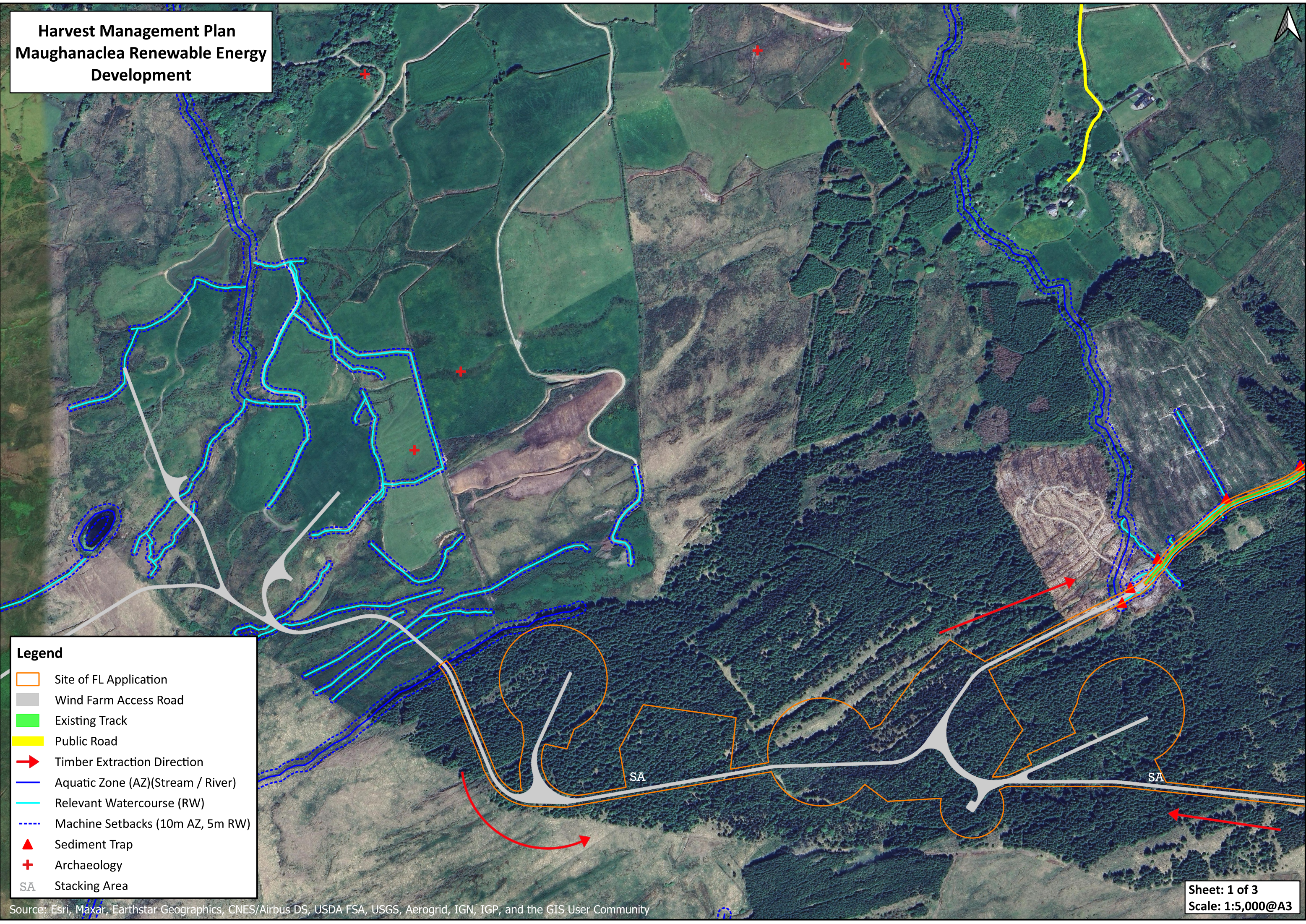
Steet 2

Legend

-  Site of FL Application
-  Site Access Point
-  Wind Farm Access Road
-  Existing Track
-  Public Road
-  Timber Extraction Direction

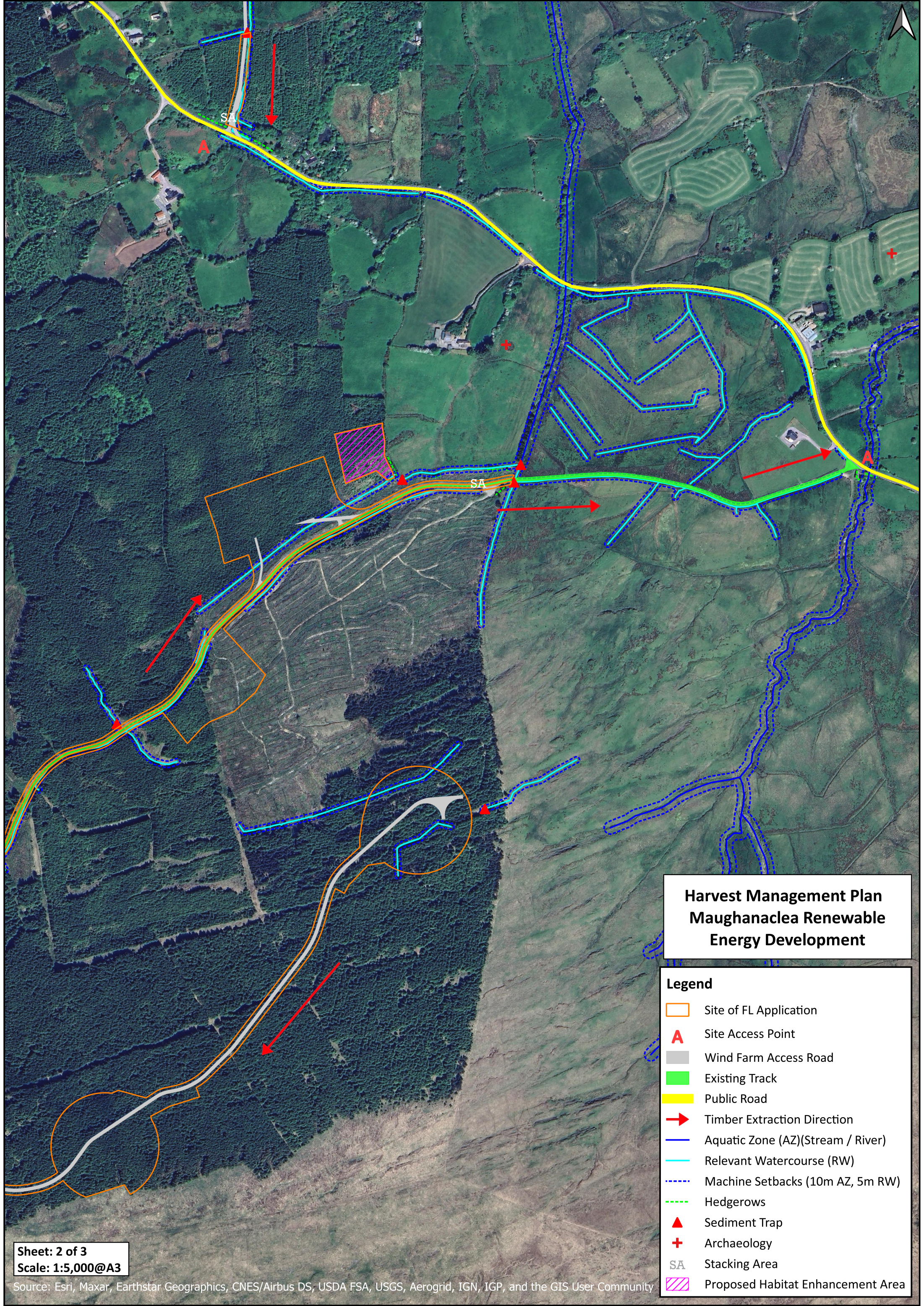
Sheet: Overview
Scale: NTS@A3

**Harvest Management Plan
Maughanaclea Renewable Energy
Development**



Legend

- Site of FL Application
- Wind Farm Access Road
- Existing Track
- Public Road
- Timber Extraction Direction
- Aquatic Zone (AZ)(Stream / River)
- Relevant Watercourse (RW)
- Machine Setbacks (10m AZ, 5m RW)
- Sediment Trap
- Archaeology
- SA Stacking Area



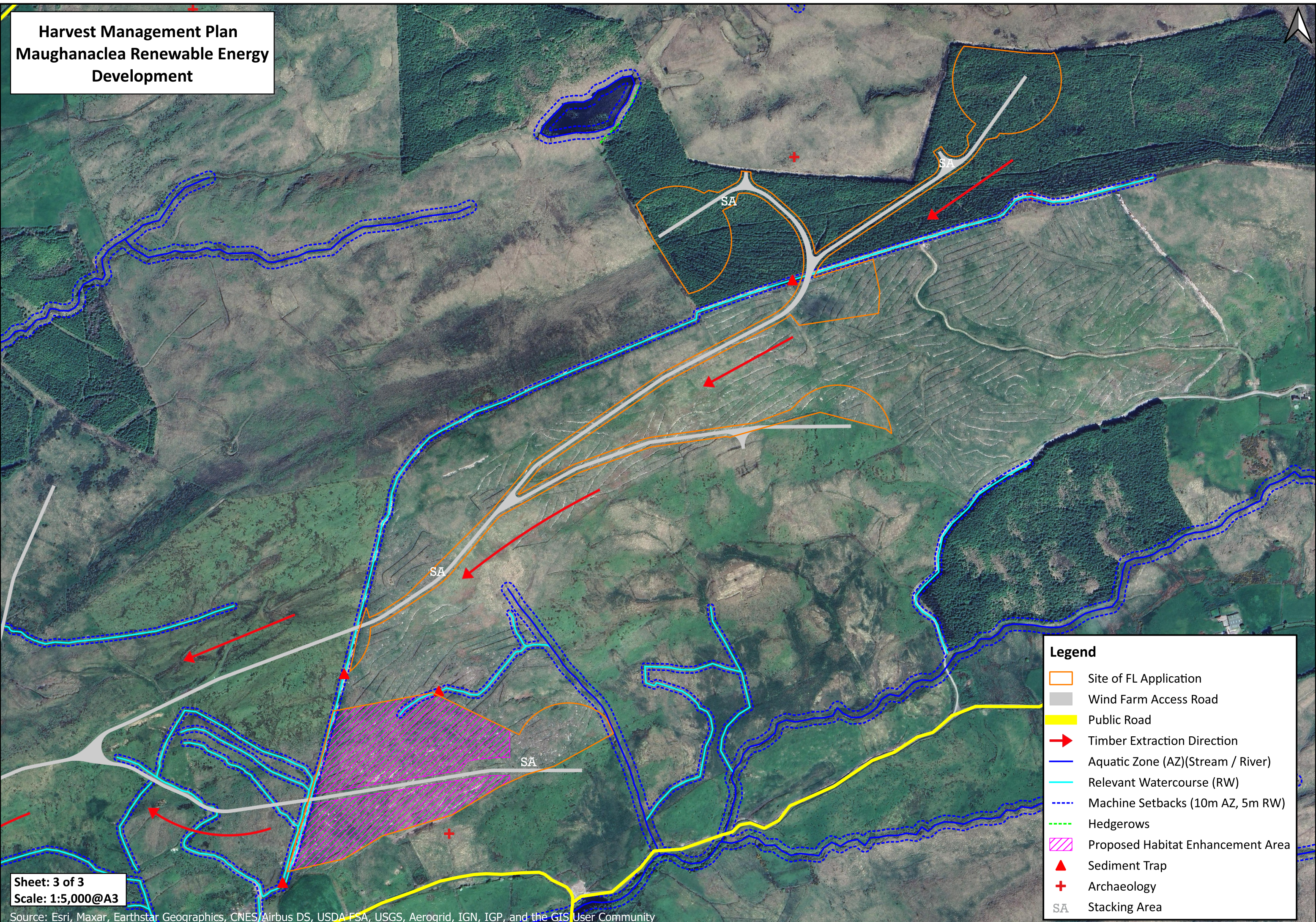
Harvest Management Plan Maughanaclea Renewable Energy Development

- Legend**
- Site of FL Application
 - A Site Access Point
 - Wind Farm Access Road
 - Existing Track
 - Public Road
 - ➔ Timber Extraction Direction
 - Aquatic Zone (AZ)(Stream / River)
 - Relevant Watercourse (RW)
 - Machine Setbacks (10m AZ, 5m RW)
 - Hedgerows
 - ▲ Sediment Trap
 - + Archaeology
 - SA Stacking Area
 - Proposed Habitat Enhancement Area

Sheet: 2 of 3
Scale: 1:5,000@A3

Source: Esri, Maxar, Earthstar Geographics, CNES/Airbus DS, USDA FSA, USGS, Aerogrid, IGN, IGP, and the GIS User Community

**Harvest Management Plan
Maughanaclea Renewable Energy
Development**



Legend

- Site of FL Application
- Wind Farm Access Road
- Public Road
- Timber Extraction Direction
- Aquatic Zone (AZ)(Stream / River)
- Relevant Watercourse (RW)
- Machine Setbacks (10m AZ, 5m RW)
- Hedgerows
- Proposed Habitat Enhancement Area
- Sediment Trap
- Archaeology
- SA Stacking Area

Sheet: 3 of 3
Scale: 1:5,000@A3

Source: Esri, Maxar, Earthstar Geographics, CNES/Airbus DS, USDA FSA, USGS, AeroGRID, IGN, IGP, and the GIS User Community