Table 4 Vegetation Cover (Grass vegetation)

	DATA OPTION 1: Landsat ETM	**DATA OPTION 2: Quickbird 2**
Spatial Dimensions		
Area to cover	185km x 185km per scene	12km x 12km per scene
Mapping unit	15m panchromatic 30m multi-spectral	068m panchromatic 4.0m multi-spectral
Positional accuracy	Dependent on geo-referencing process	Dependent on geo-referencing process
Temporal Dimensions		
When	Approx 9.45am	Approx 10.45am
How often	Every 16 days	Minimum every 4 days
Variable to map	Vegetation-cover type to genus or species level	Land-cover or vegetation-cover type
Environmental Restrictions	Cloud cover Overstorey shrub and tree cover and its seasonal variation. Seasonal variation	Cloud cover Overstorey shrub and tree cover and its seasonal variation. Seasonal variation
Processing technique **(Output)**	Image classification or feature detection (Vegetation type map and target features) Note: The ability to map specific targets will depend on their growth form and extent.	Image classification or feature detection using segmentation and classification (Vegetation type map and target features) Note: The ability to map specific targets will depend on their growth form and extent.
Resources – Hardware and Software	PC Image processing software GIS with image classification module (e.g. ARCGIS Image Analyst)	PC Image processing software GIS with image classification module (e.g. ARCGIS Image Analyst)
Resource – Personnel	Trained in image classification Experience with Landsat data Knowledge of area to be mapped	Trained in image classification Experience with high spatial resolution data Knowledge of area to be mapped
References: Note these are some example references	Lauver and Whistler (1993) Zha et al. (2003)	Arroyo et al. (2010)

Arroyo, L. A., Johansen, K., Armston, J. and Phinn, S. (2010). "Integration of LiDAR and QuickBird imagery for mapping riparian biophysical parameters and land cover types in Australian tropical savannas." Forest Ecology and Management, 259, 598-606.

Lauver, C. L. and Whistler, J. L. (1993). "A hierarchical-classification of Landsat TM imagery to identify natural grassland areas and rare species habitat." Photogrammetric Engineering and Remote Sensing, 59(5), 627-634.

Zha, Y., Gao, J., Ni, S. X., Liu, Y. S., Jiang, J. J. and Wei, Y. C. (2003). "A spectral reflectance-based approach to quantification of grassland cover from Landsat TM imagery." Remote Sensing of Environment, 87(2-3), 371-375.