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UEMP ANNUAL CONFERENCE

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Presentation Overview

Introduction

Terms of Reference

Progress Report

Future work programme

Conclusion



- A Wetland Audit was undertaken by COJ
- The objective was to:
 - provide information on the location and nature of wetlands to inform spatial planning and urban development
 - ensure the protection and sustainability of wetlands and associated water resources, and
 - promote an integrated approach to development and the protection of the environment.



- Recommendations included:
 - Prioritizing the conservation of wetlands outside the urban edge;
 - Prioritizing the rehabilitation and conservation of wetlands which are upstream of areas at risk of flooding and storm water impacts; and
 - Prioritizing the conservation of wetlands, which support important aquatic eco-systems and biodiversity.
- The study also identified certain operational and urban maintenance actions,
 - Including upgrading and maintenance of failing infrastructure,
 - the upgrading of storm water infrastructure in a manner that would benefit wetlands.



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Terms of Reference



- COJ identified a need to refine the wetland audit and to develop a wetland protection and management plan within the Johannesburg Metropolitan area.
- The scope of this second phase include:
 - Consolidation and refinement of the information from the wetland audit and other sources of information;
 - Classification of wetlands according to their health, conservation status and role within the City;
 - Determination of conservation priorities and targets in the municipality, taking cognizance of loss of wetland types etc;



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- Identification of critical buffers, linkages and/or feeder systems that need to be protected or restored (e.g. Groundwater systems, perched aquifers, seeps zones, springs and etc.);
- Determination and recommendations on priority management, mitigation and/or rehabilitation interventions necessary to ensure the viability of city-wide sustainable wetland systems to provide environmental goods and services;

Specific conditions



- The final product must be compatible with the Gauteng Biodiversity Conservation Plan and with the COJ Regional Spatial Development Plans;
- The product must include a GIS map with all polygons of wetlands larger than 0.5 ha
- The wetlands must be classified based on the classification system used for the National Wetland Inventory.
- Each wetland polygon must indicate the current status, functions and values (social, economic and cultural), noteworthy species (e.g. red data species, important habitat),
- At least 30% of wetlands in the inventory should be ground truthed;
- The product must assist the municipality in land use planning;
- Relevant mapping methods must be used. Fine scale mapping of wetland in urban areas must also be taken as a priority; and
- Where possible, 1:100 year flood lines of each wetland must be mapped and indicated in a different colour to the wetland polygon

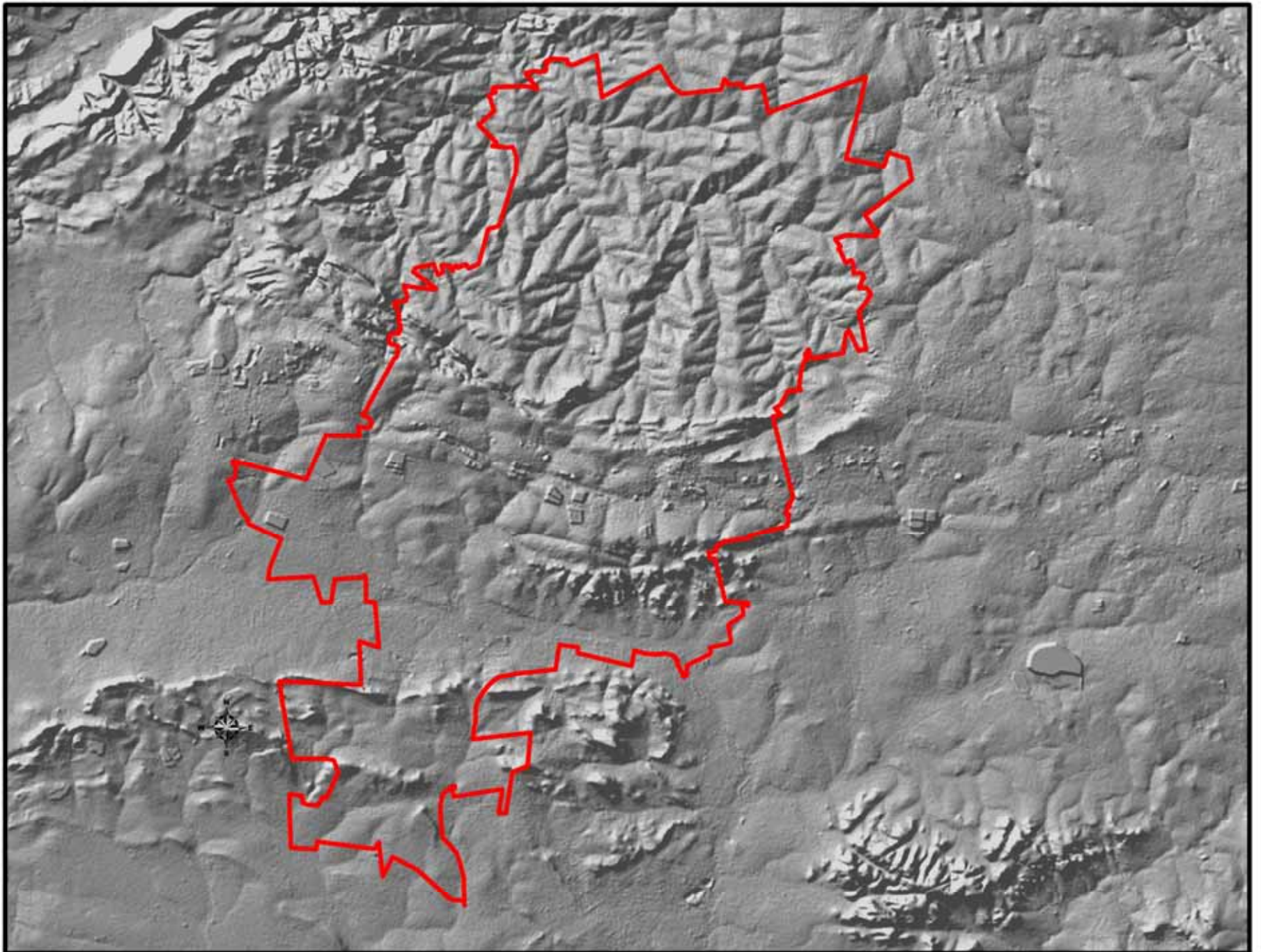


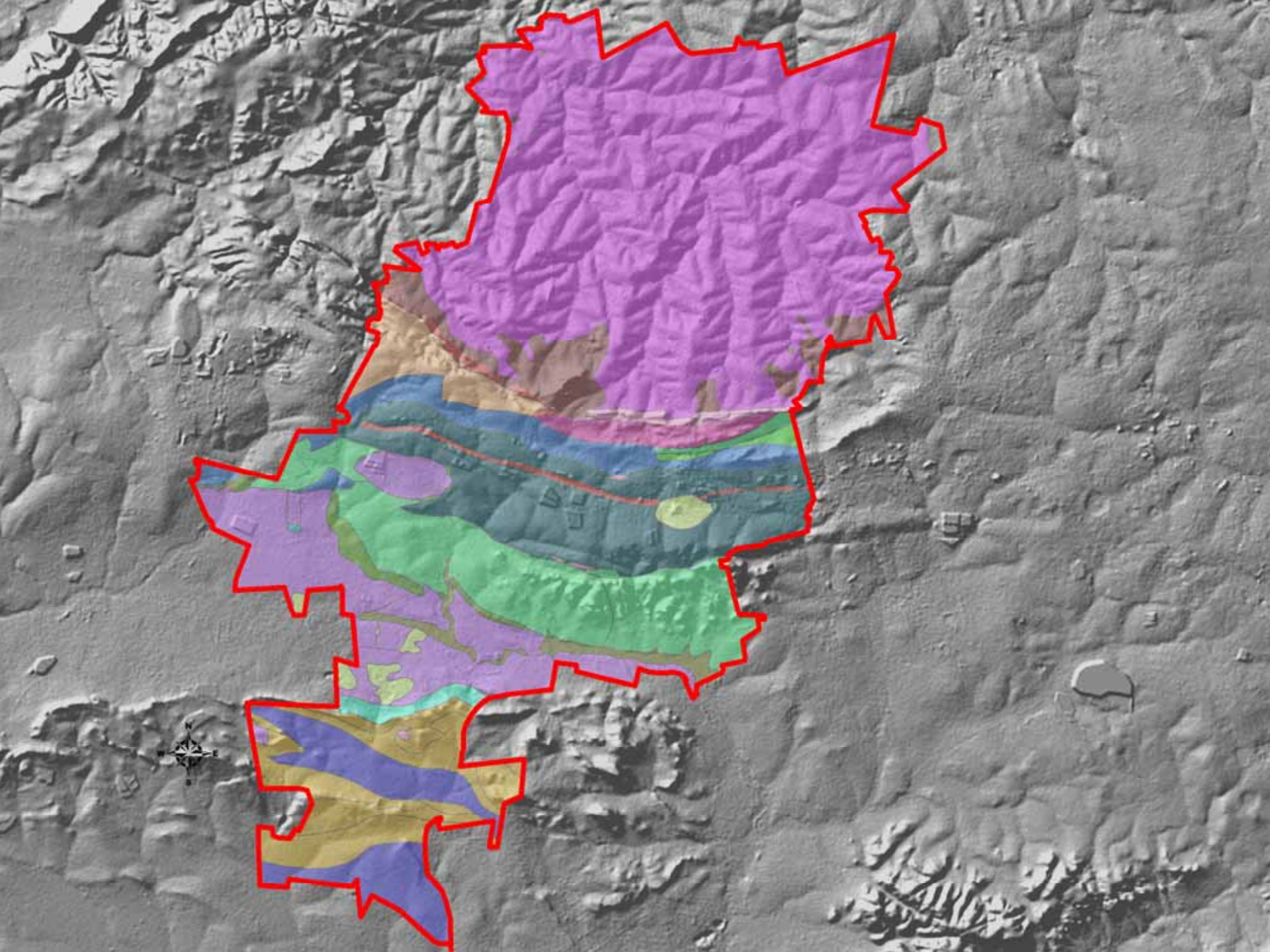
- Wetland Consulting Services (Pty) Ltd was appointed to conduct the second phase
- An initiation meeting
- Background data was provided by COJ

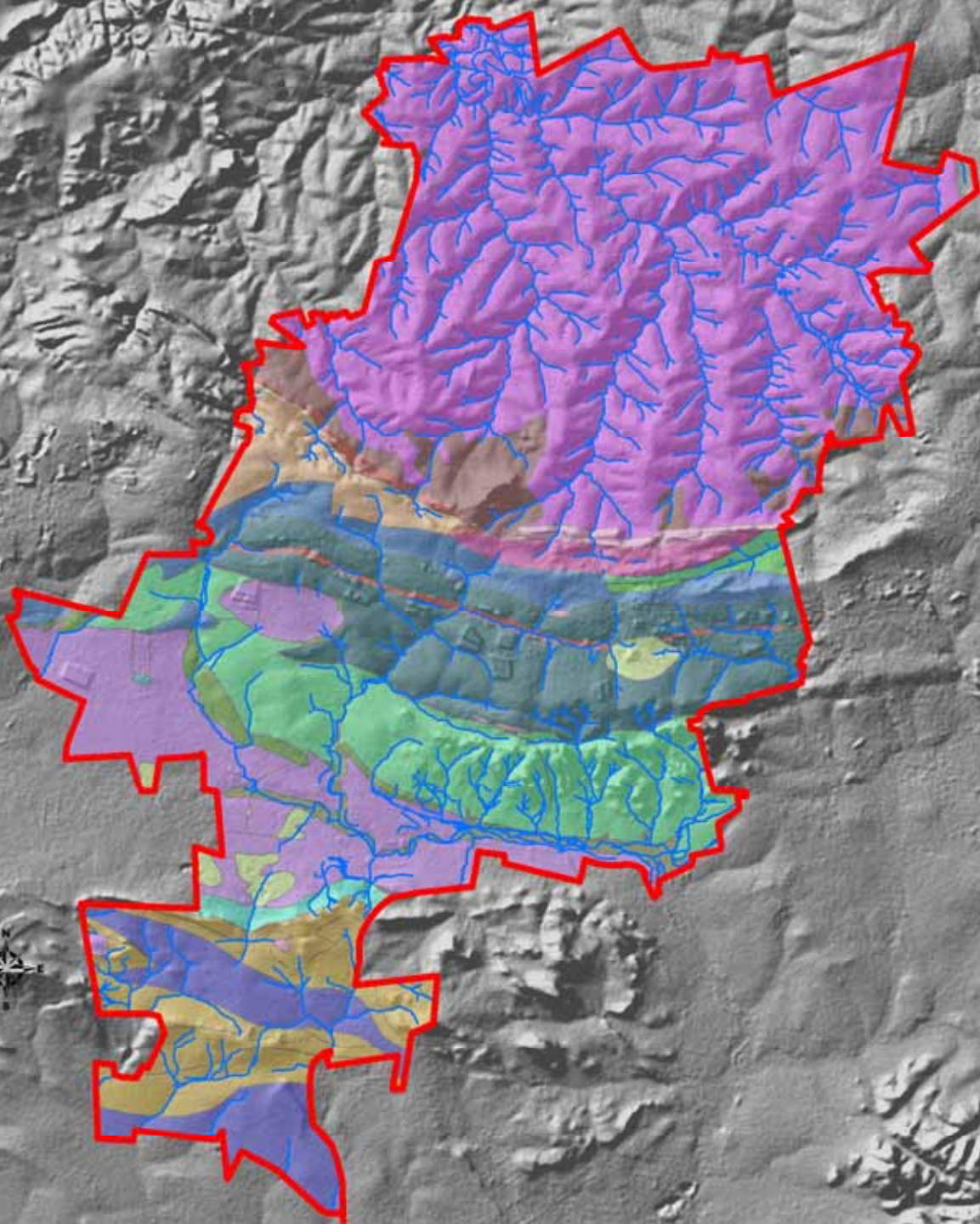
Progress to date



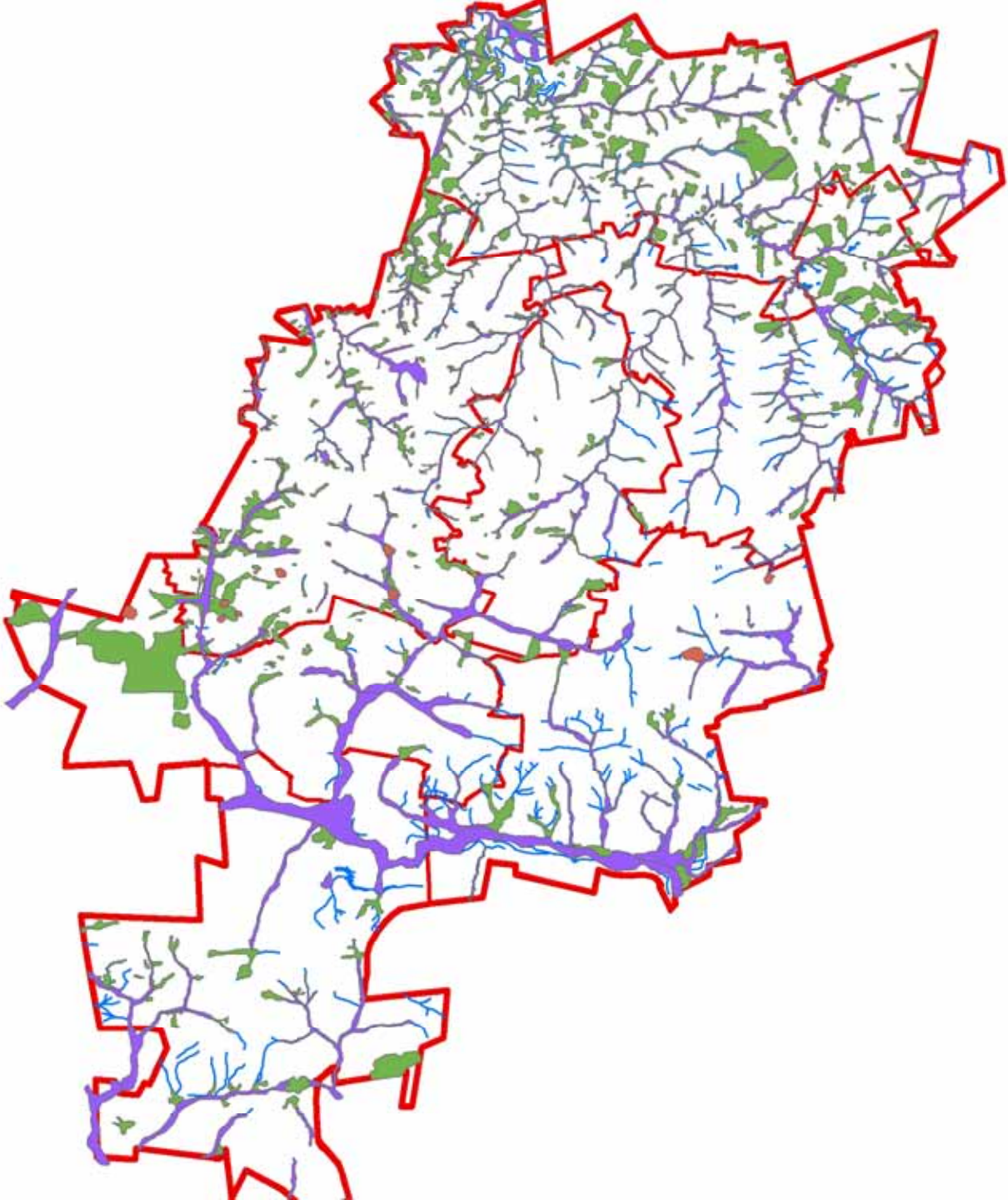
- Desktop delineation and classification of wetlands
- Preparing GIS database

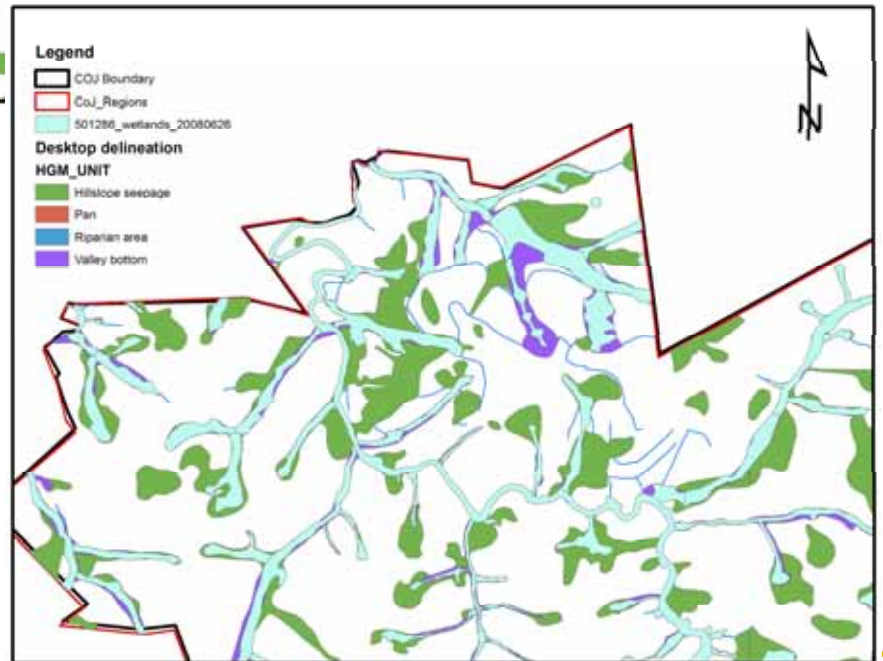
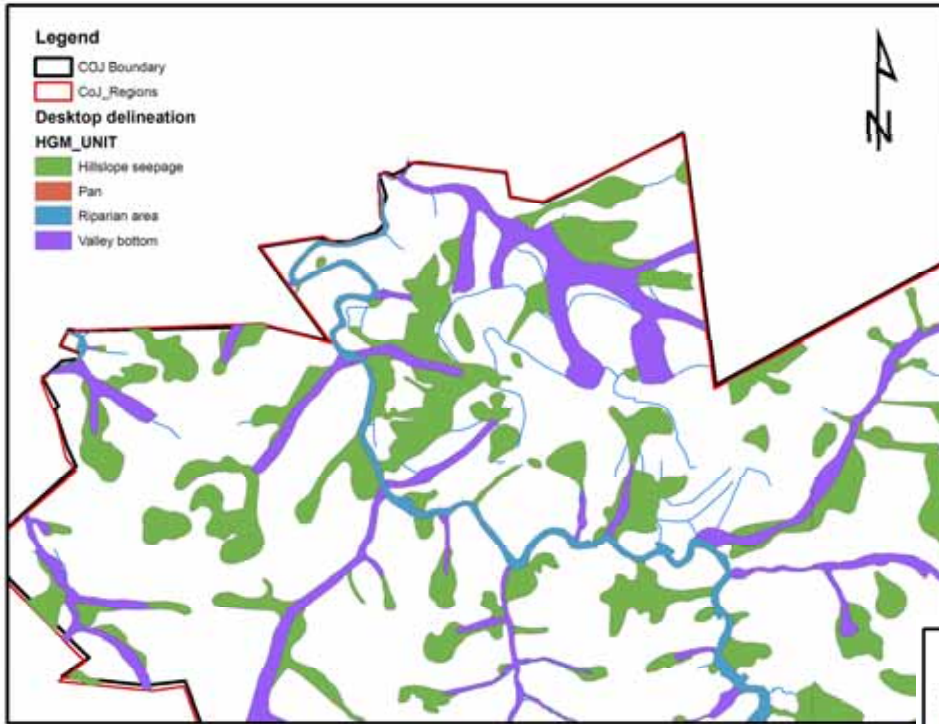






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COJ Boundary

Desktop delineation

IGM_UNIT

Hillslope seepage

Pan

Riparian area

Valley bottom

Geology

Lithology

Alluvium

Amphibolite, gabbro

Andesite

Basaltic lava

Breccia, conglomerate, greywacke

Diabase

Diamictite, shale

Dolomite, chert

Ferruginous shale, ferruginous quartzite

Ferruginous shale; ferruginous quartzite

Mafic & ultramafic rocks

Quartzite with interbedded shale

Quartzite, chert, breccia

Quartzite, conglomerate

Quartzite, conglomerate shale

Quartzite, conglomerate, shale

Quartzite, greywacke, conglomerate

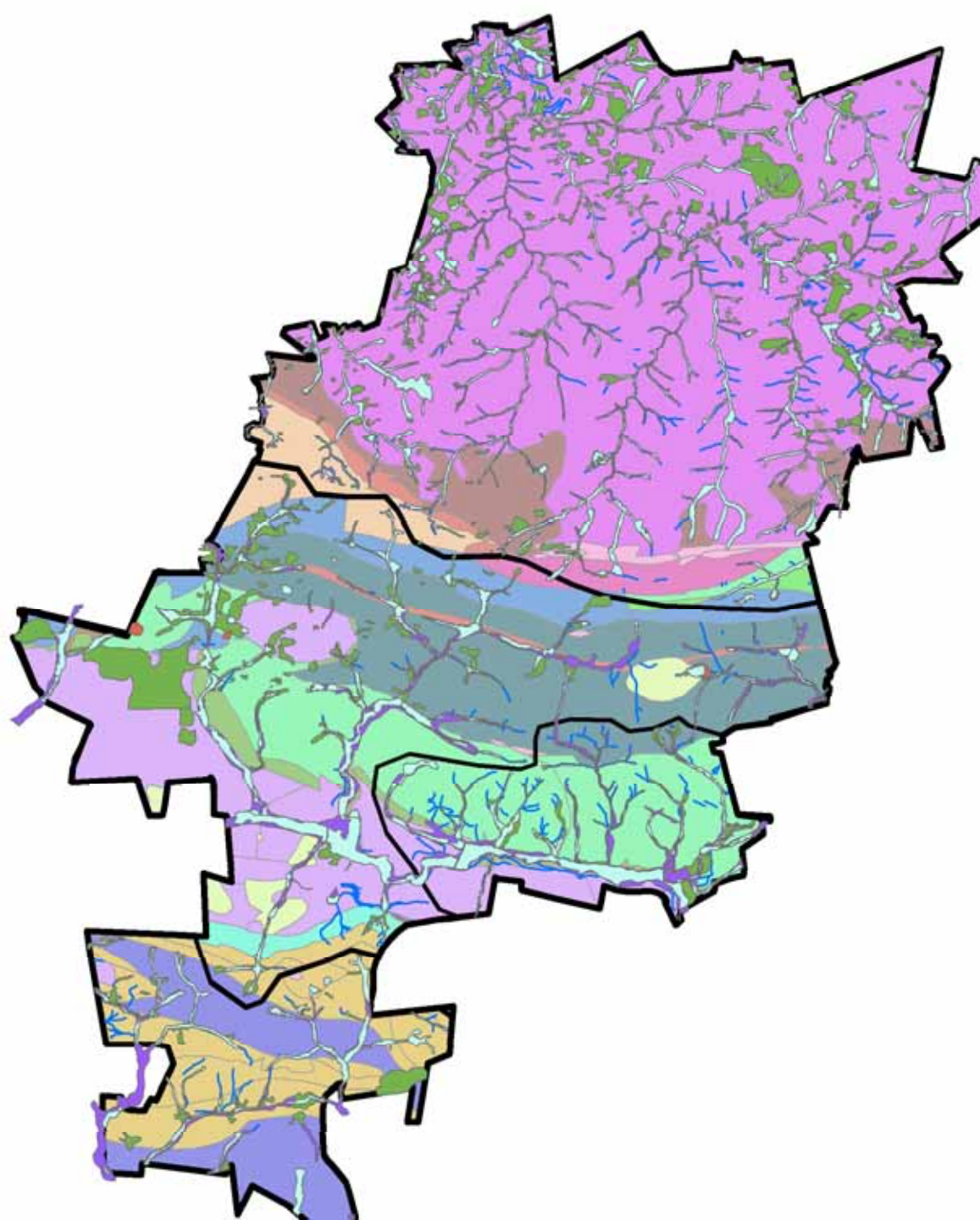
Sandstone, shale

Shale, Quartzite

Shale, quartzite

Syenite

Undifferentiated granites



Future work plan



- Identify priority wetlands (based on GIS selection) Complete by 22nd May
- Ecological State and functional assessment of wetlands Complete by 25th May
- Define desired future role of selected wetlands Complete by 31st May
- Define management strategies required to ensure identified role Complete by 14th June



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