



MEETING	<b>LCDB Governance Meeting</b>
DATE	<b>9 December 2011 1:00 pm</b>
ATTENDEES	MSI - Viv Smith (Chair), Sarah McDermott DOC - Allan Ross MfE – Len Brown, Karl Majorhazi MAF – Craig Trotter NZ Geospatial Office (NZGO) – Kevin Sweeney Regional Council Rep – Rob Phillips Landcare Research - David Pairman, Peter Newsome, James Shepherd
APOLOGIES	Peter will leave early
SUBJECT	<b>Land Cover Database Programme</b>

## 1. Introductions

As there were a significant number of new faces, we did a round of introductions.

## 2. Minutes of previous meeting and matters arising

- Action items from previous meeting reviewed – most completed. Exceptions:
  - Privacy issue with ETS had not been investigated. Generally felt that a case could be made for ETS relying on LCDB and if the projects are linked ETS data should be available for checking LCDB.
  - Terms of reference had not been revised – Viv to take the lead on this. There was some later discussion around combining governance function with NZOR but probably not closely enough aligned to make sense. Also, discussed later if this group's function is Governance or Guidance and implications from the MSI contract.

**ACTION:** Craig and Len will come up with suitable wording to formally link ETS and LCDB in order to enable data collected for ETS to be used by MAF for checking LCDB.

**ACTION:** Viv will look into governance issues and revise the draft terms of reference.

## 3. Mapping status - Peter

- Satisfactory progress (see peter's Gantt chart), Waikato a bit slow (very demanding).
- Six regions completed for checking and another three before Christmas.
- Have discovered a positional error affecting South-Westland and some other areas to a lesser extent. Likely to have come from use of aerial photography. Unfortunately we have done some map edits before fixing original using rubber sheeting.
- Len enquired about checking process and at what level we are engaged with the Councils.

**ACTION:** Landcare will solve registration problem, Peter report next meeting, keep checking agencies informed of any implications.

**ACTION:** Len will investigate a higher level engagement with regional councils (CEOs?) to make sure land monitoring units have the resources.

#### **4. Communications status – David (see PowerPoint)**

- Have contact names in each checking agency apart from MAF
- Not so much progress on stakeholder group – only two names so far
- Newsletter circulated; Web site up and running – including distributing data for completed regions.
- James Barringer to attend next Land Managers Group meeting

**ACTION:** Craig to supply MAF contacts to coordinate checking.

**ACTION:** David to provide a written description of character for Stakeholder/technical Group – how and how often it will meet, function etc. and circulate to Governance Body with a deadline for additional suggested names of members.

**ACTION:** To ensure engagement, David and Rob will do the rounds of contacts with collegial offer of help after Christmas.

**ACTION:** David to check with Jeromy Cuff re presentations to Land Monitoring Group.

**ACTION:** Kevin will check in LINZ to see if anyone is in a position to check LCDB mapping.

#### **5. LCDB and the geospatial Strategy – Kevin**

- Some background on the Geospatial office and its relationship to LINZ.
- Explained the work program of the National Geospatial Strategy and the fundamental data layers that have been identified (see Kevin's Fundamental data PowerPoint). Based in European Inspire project (13 themes). Steward/Custodian model.
- LCDB will be a fundamental data set even if not explicitly named on diagram.
- Some further discussion on legal and other implications of being named as a fundamental data set and what the Geospatial Office provides – not equipment or dedicated people.
- Geospatial Office will provide guidance for stewards rather than assume ownership. Also perhaps technical assistance in defining schema for data interoperability (Richard Murcott).
- Questioned how fundamental data relates to Nationally Significant Databases supported by MSI.
- Discussion on the similarity between LCDB and Topo maps (vegetation) – should these be consistent.

**ACTION:** Kevin to investigate if there should be relationship between LCDB and Topomaps – implications.

**ACTION:** Kevin, provide name for new appointment to Fundamental Data Leader position as a representative on Stakeholder/technical group.

#### **6. DOC's requirements and vision for LCDB - Allan**

- LCDB is central to DOC needs, must be freely available, accessible, prompt and reliable.
- Consistent (assumed) time stamp for releases is important.
- Discussed long term funding and finding a permanent funding home for LCDB – this is a function of this group to consider. Allan felt long term should be from core CRI funding. Some discussion on core funding for nationally significant data bases – would LCDB displace something else if funded this way.
- Discussion on joint governance with other projects (e.g. NZOR) – probably too complex and a distraction as projects not close enough. Are there other groups?

**ACTION:** Viv to check on when/how/if list of nationally significant databases is reviewed.

#### **7. Research plan – James (see James' PowerPoint)**

- LCR approach is limited by the past – not green-fields mapping
- Some research being done this year but priority is operational to produce LCDB-3 and higher proportion of research in future years.
- Aim for more automation (original LCDB-1 0%, should be able to achieve 50% and eventually 90%). Note this will probably manifest as improved accuracy/detail rather than cheaper. Will never reach 100% automatic.
- Smart editing
- Use a hierarchical approach – in future don't just define new classes, but initiate specific mapping projects to sub-classify broader classes such as urban or wetland to meet specialised customer needs.
- Craig commented – Base product needs to be highly reliable.
- Some discussion around add-ons. As above take sub-classification approach, funded by special interest organisations or groups.
- James talked about segmentation and unit classification approaches using a fuller set of attributes than a single pixel can give – e.g. texture, size, shape.
- Assured Kevin that we are not reinventing wheel and are well connected with international developments of this type especially the Definiens / eCognition software package.
- Showed effect of polygon smoothing (see PowerPoint), but didn't have enough time to cover methodology in detail.

**ACTION:** James will give a fuller presentation next time on current methodology.

#### **8. MfE's requirements and vision for LCDB - Len**

- LCDB needs to be open, CC license, web services, and downloadable.

- Classes should be understandable and not have confusing definitions (as with LUCAS work).
- LCDB needs to evolve compatible with needs of Framework for Climate Change. Sees the LCDB and LUM being brought together and done as a single classification in future.
- Must be date stamped – the deemed date is more important than actual date, i.e. we want clear time steps of nominal dates not a continuous evolution.
- Accuracy provided by a confusion matrix.
- It could be harder to get image money beyond the current 2012/13 collection as the next reporting period is 2020.

#### **9. MAF's requirements and vision for LCDB – Craig (see Craig's PowerPoint)**

- LCDB important for MAF for; international reporting, environmental management, and ETS type schemes. Craig elaborated on usage and issues within these categories.
- Poplars/willows shouldn't be mixed with other planted hardwood.
- Growing importance of riparian planting.
- Preference for thematic accuracy over the number of classes. Backed up comments made earlier that our approach should be to get broader classes accurate and then do special purpose sub-classifications within those areas where necessary.
- Wanted to ensure that filtering/amalgamation operations are transparent and **reversible** – this could amount to simply keeping a copy

#### **10. Regional council requirements and vision for LCDB – Rob**

- LCDB is a key dataset for; land use change, biodiversity, resource management act responsibilities.
- Excited about future research vision
- Pointed out that regions will have a variable effort in checking.
- Emphasised that the technical group needs to meet in person to get good buy-in.
- Len asked how much it would take to do a 1990 LCDB. Discussed but felt there may not be a wider demonstrated need. Put in front of technical committee once formed.
- Karl asked about Farms Online

**ACTION:** David put 1990 LCDB concept to Stakeholder/Technical Group once formed.

#### **11. Extent of research availability publically – David (see PowerPoint)**

- LCDB product will be available under one of the creative commons licenses. It may depend on how much control we want on enhancements others may generate. Don't really want the product forked – could try and control with license or just make it really convenient to feedback errors.
- Landcare will make research available through normal channels; papers, presentations, reports etc.
- NOT likely to develop software or even work-flows to the point where they could be distributed and supported externally. Very expensive and not really our expertise.
- Open source approaches could make some components more accessible.

- Generally motivated by the science and seeing it applied.
- Research component positions Landcare well to maintain NZs centre of excellence in this area and to obtain fee-for-service contract work here or internationally.
- Questioned on backup/disaster recovery aspects of the LCDB and its generation.

**ACTION:** David report back on backup/disaster recovery situation.

Meeting closed 4:33 pm