

Acres – a Land Use Decision Support Tool

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What is Acres?

“a user-friendly tool for assessing the financial and environmental benefits of integrated land management”

- Funded by Ministry of Agriculture and Forestry
- A Scion and AgResearch collaboration
- 2½ year project with 1 year to go



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Key Concepts

- Provides strategic view of land management
- Integrates forestry with agriculture
- Models both financial and environmental outcomes
- Web-based, easy to use
- Freely available



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- Provides strategic view of land management
- Integrates both forestry and agriculture into same decision support system
- Models both financial and environmental outcomes – so not only discounted cashflow analysis, but also carbon sequestration and nitrate leaching
- Web-based, spatially-enabled, with a real focus on ease-of-use – recognising that our target users are not necessarily tech-savvy
 - There is a lot of complex modelling going on under the hood, and many dials which the user could tweak – however we are leaning heavily on extracting input variables from spatial layers, and providing sensible default values, but allowing the user to over-ride these where they have better information
- Will be freely available

Steering Group

- Environment BOP
- Hawkes Bay Regional Council
- MAF
- NZ Farm Forestry Association
- Landcorp
- Beef & Lamb NZ
- Future Forests Research Ltd



Development

- ArcGIS Server 10
- Silverlight user interface
- NZTM projection



Software Demonstration...



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Note that what you are about to see is an early prototype of the tool (probably only showing 10% of what the final tool will be capable of)...

Further development

- Complete model implementation
- Implement other spatial layers
- Shapefile import and export
- Interface with other applications
- Other 'hooks' - measurement tools, map printing
- Should be available July 2011



- Complete model implementation
- Implement other spatial layers – for instance climate layers, soils, productivity indices, extend aerial imagery coverage
- Shapefile import and export (e.g. for ETS submission)
- Interface with other applications – such as importing output from Farmax or Forecaster
- Also looking at adding in some other useful tools because we're aware that farmers don't need to use a strategic tool very often. If we provide them with some good useful tools, then this will keep them using the software in the meantime, and it won't be unfamiliar to them when they next review their land use. Things like printing maps for contractors, measuring new fencelines and so on.