



PROGRESS REPORT TWO – FEBRUARY 2008

Maroondah City Council, Knox City Council and Shire of Yarra Ranges

PART A: PROJECT AND FUNDING RECIPIENT DETAILS

Project Name: Regional Learning to Local Action – Getting to Know, Engaging and Mobilising our Community

Project Manager's Name: Rebecca Haig

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Name of Funding Recipient: Maroondah City Council (as aupice for partner Councils Knox and Yarra Ranges)

Address of Funding Recipient: PO Box 156

Suburb: Ringwood

State: Victoria Postcode: 3134

ABN of Funding Recipient: 98 606 522 719

Name(s) of Approved Subcontractors:

Name of Approved Subcontractor(s)	Activity (or part thereof) to be undertaken by Subcontractor(s)	Terms and Conditions relating to use of Subcontractor(s)
Swinburne University – Centre for Regional Development	Purchase of expertise and research capabilities	N/a

Have any of the Project and Funding Recipient Details changed? Yes No

PART B: DETAILS OF ACTIVITY PERFORMANCE

Period covered by this report: From: October 31 2007 To February 29 2008

What milestone does this report relate to?

Opportunities for use of web based tools to increase community engagement

The LAP grant focusses on community engagement, in particular on the “hard to reach”. It has evolved to have a behavioural change focus, with climate change being the underlying theme for the literature review and indicators to action document.

Research into community engagement showed that the best way to engage with the community is to have a targeted approach, consistent with engaging the hard to reach and behavioural change models.

A major component of the LAP grant was devoted to exploring the use of e-democracy as a tool to empower communities. However, an e-democracy or e-forum in its current form has limited applicability to engage communities of the outer east. Uptake of this application at other local governments has been limited (e.g. Darebin Shire Council). Membership is non-targeted and there are also concerns relating to text-only media as being exclusive to those with limited language and spelling capabilities. In addition, recent questions related to community preferences when communicating with council showed that on-line discussion groups were the least favourite mode of communicating with councils in the outer east (supplementary questions to the Community Indicators survey 2007).

Shortcomings of e-democracy in its present form are attributed to it being information driven rather than engaging. In the future, this application is envisaged to be much more engaging, encompassing interactive elements such as mobile telephony and other as yet undeveloped technologies to be teamed with a website.

After research and discussions with Swinburne’s Multimedia/Games Unit and the Project Team, an alternative web-based method to engage with the community of the outer east was to develop a serious game. Gaming technology for serious purposes (educational, training, marketing or recruitment) has been developing since the late 1990’s (Purdy, 2007) (although the first serious game was launched in 1980 (Wikipedia, 2007)) and is at the cutting edge of web based applications. Serious games are often 3D first person simulations and because of their interactivity, they immerse the player into a scenario, allowing the player to explore options and through doing so, facilitates deeper learning (Purdy, 2007). Government agencies, corporations and marketers have embraced this media and its associated “experiential learning”.

For example, The US Army invested \$50 million to create the Institute for Creative Technology at the University of Southern California to improve realism of military simulations for recruitment and training (Smith, n.d.). Through the Institute, the Army has fostered relationships with computer game developers and movie special effects communities (Smith, n.d.). *America’s Army* is a battle simulation which allows users to participate in real time with other players. Primarily a recruiting tool, the game has been hugely successful and has more than six million registered users, most of whom are regular players (Purdy, 2007).

Serious games are particularly suited to Generation Y (Purdy, 2007). Because this generation has grown up with computer games, they are culturally appropriate. Generation Y seamlessly integrates technology and virtual communication such as msn messenger, mobile phones, computer games and Ipods into their everyday experience (Purdy, 2007). In addition, Generation Y will be the consumers and adults of the future and in the position of facilitating long term change. In the mean time, they are able to exert significant influence on parental behaviour, leading to the potential for flow-on effects and as a catalyst for behavioural change. The literature review also identified young people as being part of the “hard to reach” in communities of the outer east.

The University and councils of the outer east have strong relationships with schools in the region and the development of a serious game will build on the strong established links. The project will complement the sustainability training modules developed by SYR and used in school curriculums, enhancing learning outcomes and complementing these modules.

The basic premise behind serious games is that when kids learn by themselves, they learn the fastest - this is supported by evidence from research. The reasons why serious games work are summarized by Purdy (2007) as being:

- **Hard fun.** “Serious games, when done right are hard and challenge the learner. When the player fails, they learn something about why, are motivated enough by the story to try another approach, and ultimately get rewarded in a fun way” (Purdy, 2007).
- **Deep Learning:**
 - *“Learning by doing:* players make decisions that have consequences; they actively participate in the game environment.
 - *Learning by experimenting:* Players can safely try out multiple solutions, explore and discover information and skills.
 - *Life like learning situations:* Virtual worlds can provide environments that respond the same way the real world responds, allowing the player to transfer knowledge and experience between the two.
 - *Believing in abilities:* Rewards and levels in games foster the belief that you can achieve goals. This generates a positive attitude towards overcoming obstacles and increases the player’s success rate.
 - *Clear objectives:* well-defined game goals allow players to make more progress toward learning objectives.
 - *Team learning and skills:* Multi-player games allow for group problem solving, collaboration, social interaction, negotiation, etc. Players learn not only from the game but from each other.
 - *Learning without limitations:* Game environments naturally transcend barriers of language, geography, race, gender and physical abilities. Players who are self conscious in real life because they are different have no way of being set apart online” (Purdy, 2007).

In collaboration with Swinburne’s Multimedia Unit a sustainability game with a focus on ways to minimise energy use will be developed. This could take the form of energy saving software for school buildings. For example, the gamer is able to walk through the building, make changes (e.g. plant trees, install blinds, solar hot water, energy efficient light globes) and see the impact on the virtual thermometer and virtual energy consumption. Users are able to experiment with different ways to reduce consumption.

The target audience will be upper primary (grades 5 and 6) or early high school (years 7 and 8). The game will be cutting edge and using icons (natural and built)

from the local environment. The setting will be the municipalities of the outer east. Photos of local icons will be “wrapped” around objects, making it quick to build real world objects in a virtual world. The potential exists to develop the game so that multiple users can form teams (communities, schools, clans, streets etc), to play against each other and develop collaborative problem solving skills. Market testing and development of the product will be in consultation with the target demographic to ensure maximum acceptability and uptake by the target demographic.

Games are being increasingly recognised as effective means of communicating complex ideas in engaging ways, and for this reason many educators are now incorporating games as a key part of their teaching repertoire. Significantly, games can also engage people who are traditionally difficult to reach, by engaging them in a way that does not resemble traditional learning. In respect, the use of so-called serious games can be seen as an evolution of the multimedia revolution of the 1990s, when the capabilities of new media allowed teachers to make their content come alive in new ways. Games, however, take the interactive experience offered by traditional multimedia and expand upon it, allowing the user to interact with the material in a much deeper way than has ever been possible before.

The impact of this intervention will be tracked longitudinally through the regional indicators project (energy consumption statistics) and with school communities through the collection of energy use statistics onsite, surveys and focus groups. The development of a serious game to ameliorate the generation of greenhouse gases presents an exciting opportunity to adopt new technologies and to engage effectively with the school communities in the outer east.

The game will offer a rich environment that will draw the player into the game world while at the same time helping them to understand many of the key issues we are facing in terms of sustainability.

Sustainability Game Features

Game to focus on changes that can be made to home or other dwelling and the habits of occupants, with a view to decrease environmental footprint.

Gameplay – protagonist (main gameplay character) will be able to move about the neighbourhood, visiting certain buildings in which some actions can take place. Style of game will be third-person – ie looking over shoulder / down on protagonist character.

Would have a budget associated with each building, and “scoring” could involve % decrease in energy and water consumption resulting from these actions or changes – who can score the most given the budget constraints (many possibilities for optimisation – no obvious easy solution).

Scope – only 2 – 3 buildings will be active (ie able to have changes made) at this stage, however will be able to cruise around a neighbourhood area (size to be determined). Target age groups upper primary and lower secondary

Possible actions of protagonist will fall into 3 categories:

- Influence behaviour change of residents
- easy to implement changes to dwelling (ie predominantly non-structural and relatively inexpensive)

- structural or expensive changes to dwelling

The game will feature the following possible scenarios:

Energy consumption

Behaviour change:

- Turn off electrical devices at power point (esp those on standby power and things like plug-pack power supplies)
- Turn down heating thermostats in winter, turn up air conditioning thermostats in summer.
- Choose green power option from electricity retailer.

Easy to implement (suitable for tenants):

- Close gaps with door sausages / draught stoppers / weather stripping.
- Close off living space for winter heating.
- Open up living space for air circulation in summer.
- Shade windows externally with cheap bamboo blinds
- Windows - bubble-wrap “double glazing” – where partial opacity is OK (frosted appearance – *ReNew issue 71*) – or transparent membrane double glazing (www.clearcomfort.com.au). Swap incandescent light bulbs for CF.
- Install pelmets (where not fitted) and hang heavy curtains to reduce window heat transfer.
- Heavy fabric wall hangings provide additional insulation properties for walls – especially southern facing walls with no windows.

Structural or expensive changes:

- Shade windows externally with fixed shades, or appropriately located deciduous trees.
- Replace halogen downlights with LED lights
- Block permanently open ventilation outlets (possibly temporarily for colder months)
- Fit self closing cover to ceiling extractor fans.
- Fit covers to halogen downlights in ceiling (reduce heat loss though the holes).
- Ceiling insulation (several options for both bulk and reflective)
- Wall insulation (several options for both bulk and reflective)

Water consumption

Behaviour change:

- Collect shower water in bucket while water warming.
- Use low impact detergents (kitchen/laundry) and soaps (bath/shower).
- Use tank water (if available) for laundry and garden.

- Collect laundry rinse water separately – better for use in garden than main wash water.
- Turn off toilet cistern supply, refill cistern manually with jug from reservoir of greywater.

Easy to implement (suitable for tenants):

- Install one or more “mini” (100-200 l) rainwater tanks, and if necessary, pump to distribute water.
- Install greywater diverter in waste pipe.
- Install greywater holding tank – even just large containers or something like Wet Wheelie (wheelie bin adapted for this purpose – complete with pump)
- Obtain submersible pump or similar for extracting greywater from bath, holding tanks etc.
- Install low-flow shower head.

Structural or expensive changes:

- Install rainwater tank.
- Install greywater treatment system.
- Dual plumbing to use greywater to flush toilets, rainwater for laundry & garden taps etc.

Project Limitations

The Project Steering Group meets on the third Thursday of each month. At our meeting on Thursday 21 February, Anne Langworthy the contracted project manager informed the group that her position and the Centre For Regional Development has been made redundant effective May 2008. The three Local Government partners are meeting on March 14 to discuss the impact on the LAP project and the alternatives available. The preferred option is to enter into discussion with the Swinburne National Centre for Sustainability to take over the remainder of the contract and to assist in the evaluation deliverable of the LAP project during May and June.

Are all the timeframes and milestones for the Activity being met?

Yes No

Reporting and Fund Availability Schedule

Please revise the Reporting and Fund Availability Schedule with any new timeframes and milestones.

See attached

PART C: FINANCIAL INFORMATION (Schedule, clause C.1.1)

Please update the financial table to reflect and changes in the budget and actual expenditure to date.

Not Applicable

Is the Activity proceeding within the initial agreed Budget (or updated Budget from your previous Progress Report)? Yes No

Are there any other issues relating to Your performance of the Activity that We should be aware of? Yes No

PART D: OTHER DETAILS

Acknowledgement and Publicity (Schedule, clause L)

Please outline how the support of the Victorian Government through the Local Area Planning Support Program has been acknowledged during the reporting period and any future plans for acknowledgement and publicity. **Please attach examples, copies and photographs. For photographs please complete the Department for Victorian Communities Photo Consent Form.**

Not Applicable at this stage

Decisions or Orders (Schedule, clause N)

Have You had a decision or order of any court or tribunal made against You or involving You during the reporting period? Yes No

PART E: DECLARATION AND CERTIFICATION (STATEMENT BY CHIEF EXECUTIVE OFFICER)

I,, hereby certify that:

- a. all Funding received was spent for the purposes of the Activity and in accordance with the Agreement, and that We have complied with the Agreement;
- b. unless the Activity Period has expired or the Agreement has been terminated, the unspent portion of the Funds (if any) are available for use within the next Reporting period;
- c. the financial information is presented in accordance with the financial Reporting requirements You notified to Us;
- d. at the time the Report or financial statement is provided, We are able to pay all Our debts as and when they fall due and We have sufficient resources to discharge all Our debts at the end of the current Financial Year.

Signature of Authorised Person:

Name of Authorised Person: Michael J Marasco

Position: Chief Executive Officer

Telephone: 9298 4289

**LOCAL AREA PLANNING SUPPORT PROGRAM –
PROJECT MANAGEMENT FRAMEWORK FORM**

General Details

Name of Council (auspice agency): Maroondah City Council

Address of Council: PO Box 156, Ringwood

Name of Project: Regional Learning to Local Action - Getting to Know, Engaging and Mobilising our Community

Name of Project Contact Person: Rebecca Haig; 9298 4406

Project Details

Project Start Date	Project Finish Date	Total Project Cost (including Your contribution and any other contributions)	Value of Grant (excludes GST)
30 / 11 / 06	01 / 04 / 08	\$141,000	\$126,000

Reporting and Fund Availability Schedule

Stage No.	Brief description of Milestones/project stages/outputs	Anticipated Stage completion date	% of total payments	Funds requested for stage (excluding GST)
1	Sign and return Funding Agreement	Within 20 business days of receipt of Funding Agreement	22%	\$ 27,720 PAID
2 (Three principal stages to run concurrently)	Progress Report 1 Sharing of community engagement practices across the three municipalities. Purchase of facilitator expertise to explore, document and capture beneficial engagement practices of each of the three partnering municipalities.	31/10/07	18%	\$ 25,200 PAID

	<p>Who is and isn't currently engaged and why?</p> <p>Engage consultant to document the participating councils, state and national perspectives as to why people do not engage in civic participation and explore consequences.</p> <p>How can we improve local area planning through community engagement ?</p> <p>From findings of phases one and two, complete a detailed methodology of how to link with the disengaged. The purpose of the research is to gain a deeper understanding of the most effective engagement processes to use with communities to promote action for sustainability.</p> <p>The Councils are seeking to extend future engagement programs to a wider audience, fostering knowledge and skills for sustainable behaviour.</p> <p>Documentation for the above completed.</p>			
3	<p>Progress Report 2</p> <p>Opportunities for use of web based tools to increase community engagement</p> <p>A web based interactive tool will be developed based on the exploration of social marketing techniques to understand how and what engagement practices contribute to behavioural change. Web based interactive tool operational.</p>	28 / 02 / 2008	50%	\$60,480
Final Stage	<p>Final Report</p> <p>Evaluation of e-democracy as a tool.</p>	01/ 04 / 2008	10%	\$12,600

	The outcomes of the web-based tool which will be modelled on the Indicators Project will be evaluated as to the benefits of use of e-democracy as a social marketing tool for engagement and behavioural change. The monitoring and evaluation framework will measure process, outcome and impact and a template will be developed that can be replicated for use in the development of other web based designed tools.			
	Completion of project			
Final Stage Part 2	Completed and Tested Software	30/6/08		

Budget Forecast

Project Income	\$
Grant Amount	126,000
Funds from Your organisation	-
In kind from Your organisation	5,000
Funds from partnering organisations	-
In kind from partnering organisations	10,000
Other Contributions	
Total Project Income	\$141,000
Project Expenditure	\$141,000

Please complete for as many stages as necessary for completion of the project. Dates should be within a timeframe of **not more than 18 months**.

Statement by Chief Executive Officer

On behalf of the Regional Learning to Local Action Project Team I authorise the following Reporting and Fund Availability Schedule for the project as detailed in our application.

Signature of CEO:

Date: / /