

Regional NRM Strategy Update



NARvis and Photomon



EVALUATION REPORT

Overview

Four workshops were held in November and December 2014 to introduce participants to NARvis, the new website that hosts the updated Regional Natural Resource Management (NRM) Strategy for the Northern Agricultural Region, and get feedback on the Strategy and on the use of the Photomon app.

By the end of each workshop, participants had:

- Explored the updated NRM Strategy on NARvis;
- Learnt how NARvis can be used to assist in grant writing;
- Gained an understanding of the Photomon smartphone app;
- Provided feedback on both NARvis and Photomon.

Participants

A total of 45 participants attended the four workshops:

- 7 at Gingin;
- 11 at Geraldton;
- 6 at Three Springs;
- 21 at Jurien Bay.

For a detailed list of participants, see Appendix I.

Facilitation and reporting conducted by Tuna Blue Facilitation.



Executive Summary

This section provides an overview of the evaluation outcomes gathered in the workshop surveys completed by participants. Please refer to the next section of the Report for further detail.

1. Priority targets that align with participants' objectives

Given the broad range of participants in attendance, all the targets were highlighted as important to on-ground objectives. However, inland participants placed a specific emphasis on the importance of managing invasive species and increasing biodiversity and ecosystem integrity, whilst the coastal participants focused more on coastal erosion and adaptation processes.

Major issues not addressed in the Strategy

The majority of participants indicated the Regional Aspirations & Targets covered the projects they undertake on the ground. A small number of comments highlighted areas for more consideration:

- Providing new industry research (ie: inland aquaculture);
- Target on working with schools and the community;
- More specific focus on horticulture and irrigation.

2. Photo-monitoring uses

Participants identified a wide range of projects and monitoring situations that Photomon would be beneficial for, including:

- Land degradation;
- Remnant vegetation health;
- Revegetation success;
- On the spot identification of pests and current levels of infestation; weed control monitoring;
- Beach monitoring, coastal erosion, off road vehicle effects;
- Improvements in pasture composition, pasture regrowth after grazing, trial crop establishment, orchard monitoring;
- Planning for Shire infrastructure, documenting town improvements.

In addition, areas raised where NACC could play a further facilitative role are:

- Assisting community members to upload and incorporate historical collections of photo-monitoring;
- Engaging individual landholders to monitor assets on private farmland and encourage them to provide constant input and feedback using Photomon;
- Facilitating network reporting between multiple members of the community, and broader community awareness raising initiatives;
- Arbitrating arguments and conflicts regarding project progress and issues, if the photo-monitoring data exists.

3. Most useful aspects of NARvis

The majority of participants were impressed with the accessibility and user friendliness of NARvis, the high amount of information and data included, the mapping function, and the grant writing information and tips.

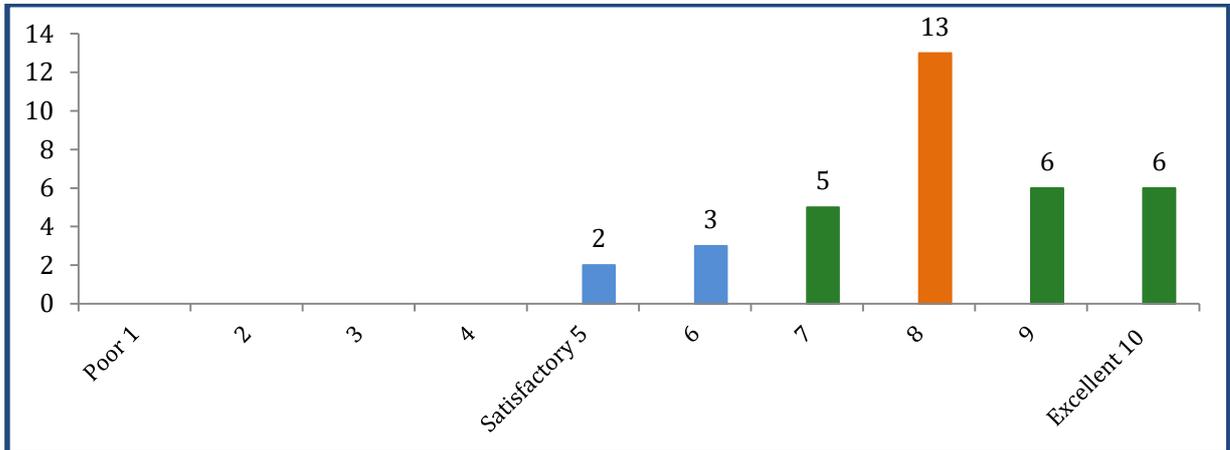
4. Other aspects to include on NARvis

Most participants commented they will need more time to explore the website and get a better understanding of its functions, with one participant suggesting any comments or changes will be submitted via the website as a user comment, which is encouraging. Some suggestions for improvements were:

- A clear preamble on why there is a need for a Strategy and a context, for the people coming in cold (maybe a pop up window);
- Incorporate more historical information (e.g. water, roads, and loss of natural vegetation);
- Providing the reporting community with confidence in terms of protecting privacy and identity;
- Include more on water monitoring and licencing (to develop a regional repository of information from water monitoring and water licence data, plus land use applications and research)
- Include Local Government land use plans and maps;
- Provide regular progress reports to acquit the targets;
- A sustainability directory on cycle paths, solar systems and urban bus layouts;
- More information on fracking in the region and a map of fracking sites;
- The maps need better labelling.

5. Overall rating of the Strategy in meeting participants' needs as a funding tool

The graph below displays the ratings given by all participants across the four workshops.



Evaluation Outcomes – In Detail

The participants completed evaluation sheets at the conclusion of each workshop.

1. Thinking about your group's current or proposed projects:

Which of the targets identified in the Strategy align with your objectives?

Gingin:

- Conservation (waterlogging, salinity and acidity) as it relates to water balance in the soil. The water balance was upset when the land was cleared, followed by resultant poor soil structure, leading to collapsing of soil and the loss of bacteria;
- Building landscape resilience to climate change, particularly in our wetland assets;
- Maintaining and restoring ecological connectivity;
- Water resources, Aboriginal heritage and biodiversity;
- Prescribed and declared pests;
- All targets align with my personal objectives (and the region);
- Different groups can work with set targets or against (they provide a starting point).

Geraldton:

- Vegetation loss on local dunes (weeds, winds and increased nutrients);
- Biodiversity, invasive species and coastal management;
- The objective of my organisation is to rebalance the ecosystem by balancing the water / air ratio to allow production of food and natural vegetation to thrive; most of the targets would fit;
- Targets highlight the issues in a concise manner;
- Coastal adaptation, and community involvement and capacity targets;
- Waste diversion by 30% by 2030 (NARvis is 10% by 2020);
- Climate Change Risk Vulnerability Assessment by 2020;
- It was interesting that someone mentioned it needed a preamble, as from my perspective, I was thinking perhaps the information was too basic and not specific or factual enough;
- Biodiversity, water and coastal;
- Encouraging sustainable urban design.

Three Springs:

- Invasive species are effectively managed at both the local and regional scale;
- Invasive species;
- Biodiversity, production systems, revegetation of protected areas, wind and water erosion, water quality and invasive species;
- Invasive species, biodiversity and ecosystem integrity, communities in the NAR are able to maintain economic viability;
- Water resources are valued;
- Water resources, invasive species, and biodiversity and ecosystem integrity.

Jurien Bay:

- Coastal revegetation;
- 500ha of coastal vegetation protected and enhanced by 2020 (biodiversity target);
- Jurien Action Group is addressing environmental concerns facing our National Parks, Water Reserves, landfill wetlands and communities' water supplies;
- Invasive species;
- Perennial pastures;
- Coastal and marine; biodiversity and ecosystem integrity are maintained and improved at a landscape scale;
- Coastal erosions of beaches – shifting beach sand; revegetation of sand hills.

Are there any major issues your projects address, that aren't addressed in the Strategy? If so, provide examples.

Gingin:

- Mostly covered;
- All fit in;
- The project information must be readily and easily retrievable;
- Providing new industry research (ie: inland aquaculture) that does not seem to be addressed in the Strategy.

Geraldton:

- Acceptance that there is an issue by management;
- Not at this stage, will require a more detailed examination;
- Weed Management Plans – no funding under Biodiversity;
- Biodiversity management, invasive species, river protection and coastal protection;
- Community engagement.

Three Springs:

- Don't know yet, need to study the Strategy and discuss with other people in the LCDC;
- Salinity;
- Working with schools;
- Selling trees to the community;
- Protection of planted trees;
- Community bird walks and bush knowledge.

Jurien Bay:

- Establishing baselines and sort of baselines; water; flora and fauna counts;
- Pyp Grass;
- Horticulture; irrigation.

2. *What types of activities do you currently use photo-monitoring for? Or, what types of activities could you see it being beneficial for?*

Gingin:

- I have nearly 40 years of photos taken of progress in overcoming salinity and restoring productivity;
- As an adjunct to qualitative monitoring of the Brook and wetland system across our region;
- The compilation of photos with attached relevant data (words and pictures) to show improvement in soil structure with the use of perennial pastures;

- Most of the asset is on private farmland and a photo-monitoring component encourages individual landholder participation and the opportunity for constant input and feedback;
- We have own DAFWA database;
- Gingin Brook and running stream for 11 years;
- Natural bushland and loss of vegetation due to a drying climate and water loss;
- Monitoring weeds;
- Demonstrating improvement of pasture composition;
- Network reporting with multiple members of the community and broader community awareness;
- On the spot identification of the pest and current level of infestation;
- Environmentally and ecologically funded revegetation;
- Pasture regrowth (perennials) for after grazing.

Geraldton:

- Beach monitoring of accretion and erosion;
- Could become a blueprint for monitoring a set location and changes (i.e. windblown beaches, access tracks and management of recreational access);
- Revegetation success and failure monitoring;
- Regeneration monitoring;
- At present, we do very little photo-monitoring but we would like to increase;
- Land degradation and weed management;
- Beach erosion, weed control, revegetation and beach wrack;
- Asset conditions (hard infrastructure and natural areas), planting erosion control and weed management;
- Trial crop establishment and monitoring;
- I see it as a handy tool to set up photo-monitoring for NACC revegetation sites and other sites, it would save the tedious and non useful template that we currently use, and farmers might actually continue monitoring;
- Revegetation projects;
- Beach monitoring for NACC, Hidden Treasures and Rivers & Wetlands Projects;
- Coastal and wetlands;
- Beach monitoring and vegetation.

Three Springs:

- Revegetation success, failure and growth;
- Remnant vegetation health;
- Land degradation, monitoring revegetation and reclaimed sites;
- Lakes edge remnant vegetation and land reclamation ratios;
- Coastal erosion in Green Head and Leeman;
- Future use of revegetation and monitoring invasive species and repercussions;
- Before, ongoing and after pics of revegetation sites;

- Physical approach to town's improvements;
- Community events for wellbeing, information and inclusion;
- Use engagement tools for the broader community.

Jurien Bay:

- Volunteer monitoring of beach erosion and accretion;
- Monitoring the coastline at Jurien Bay;
- Coastal erosion and accretion;
- Coastline erosion and photo-monitoring of the sites within current gas leases;
- Looking at coastal erosion and providing direct information to the local Shire on coastal planning issues, eg: recently after the Shire put 3,000 tonnes of sand in front of the park, I was able to inform them with photo evidence that within 6 days, approx 40 - 50% was washed away;
- Revegetation with Moore Catchment Council supplied trees for Carnaby's; pasture monitoring; orchard monitoring;
- Monitoring the changing coastline of Jurien Bay;
- My daughter and I use Photomon as part of our homeschooling program, it fits in well as a practical component of studying coastal erosion and deposition, and wave action;
- I don't use the data currently but could see it being very beneficial for all agencies for beach break monitoring, erosion / accretion, monitoring storm impacts during winter, and sand movement and coastline movement
- Where to plant or not plant seedlings in revegetation projects;
- To assist with Off Road Vehicle use and access, and potential infrastructure sites for planning whether to go ahead or not;
- Coastal erosion (in the Shire, we do have coastal monitoring, wave monitoring and full weather monitoring);
- Let's us know what is happening;
- Settles arguments and conflict regarding what has happened;
- Makes us aware of the changes that are happening;
- Learning how much the coastline changes and how it works and what happens;
- I'm volunteering within Cervantes taking photos for Photomon, so I identify with beach monitoring targets, helping to monitor dune / beach erosion.

3. ***Which aspects of the NARvis website will be most valuable to you?***

Gingin:

- The ability to see issues in the landscape;
- The identification of identified features from the mapping data;
- Looking at the success of grants groups that we have given support to;
- Looking at cross relating strategies with our own;
- The whole site;
- Comprehensive information available on local issues;

- Community accessibility for reporting and creating a statistical database relative to the date, time and place;
- Can be linked to an existing website to allow the saving of current photo data history;
- Grant applications and Photomon applications.

Geraldton:

- As a new person to the Strategy, the overall information provided on the NAR;
- The mapping and the data available
- Great amount of information available;
- Ability to complete grant applications to a more professional level; assistance on the site looks really good;
- Grant directory and mapping function;
- Grants, Photomon and maps;
- Grant sourcing;
- It is easy to read, well laid out and the current grants listed are great; the mapping function will be good for groups and individuals; the targets and strategy information; previous successful grants and grant writing tips;
- Very comprehensive information about the whole region; impressed at the amount and quality of data that NARvis contains;
- Comprehensive layers of data and measurement tools;
- Real time interactive mapping;
- I will be referring this to my Local Government officers;
- Strong links with other sources of information.

Three Springs:

- Ease of access to information on the NAR;
- Huge volume of information in one place;
- Progress reporting and grant applications;
- Grants and site map creator;
- Accessibility of information;
- Fun for members to use;
- Invasive species, revegetation and degradation;
- Layers of information and accessibility of diverse and useful information.

Jurien Bay:

- Coastal management;
- Resource section, section on community groups, community projects and past projects;
- Help Green Head Coast Care with the 3 Bays Walk project, eg: grants changes and benefits and seeing what else we can be doing;
- Maps, sites (caves, waterways, indigenous);

- Coastline movement;
- Mapping and lots of other things, it's fantastic!;
- The part where you see how the coastline is changing;
- Local environment for our Shire and the issues to be aware of, knowledge and news articles;
- Using many areas for extra information for covering school curriculum using our entire region;
- Hopefully gain current updates on influences and events in our area through the articles;
- Looking at photo-monitoring photos;
- Use maps of coastal areas and the GIS type features available for those maps, for interest sake;
- Aerial maps for work on accretion and erosion, new areas to protect and manage weeds and human impact;
- The tool for measuring the distance and area for potential projects, ie: fencing or tenders for contractors, or spraying of weeds per hectare;
- NARvis will revolutionise how groups apply for grants;
- Teaching and informing us how to keep our land real.

4. *What else would you like to see included on the NARvis website?*

Gingin:

- Getting together of scientists and farmers to overcome problems with common sense approaches;
- Historical element for everything (water, roads, and loss of natural vegetation);
- More producer groups using the system to better spread information;
- Giving the reporting community confidence that their privacy and identity is protected;
- Regional repository of information from water monitoring and water licence data to land use applications and research (all in one location).

Geraldton:

- A clear preamble on why we're doing this and why there is a strategy; something for the people coming in cold (maybe a pop up window);
- Need time to assess;
- Not much more to add at this stage; looks pretty good;
- Probably needs a few more targets or at least refine the current ones, and regular progress reports to acquit the targets;
- Local Government land use plans and maps;
- Carbon emission mitigation;
- Sustainability directory on cycle paths, solar systems and urban bus layouts;
- Could a section be written for children and schools?;
- Maps need better labelling;

- When targets change, I would like to see what the old ones were and why they changed.

Three Springs:

- Feral animal control and invasive species;
- Degradation ratios and maps;
- Past projects.

Jurien Bay:

- Seems to be well covered;
- It is comprehensive, I would need to use it for a little longer and get back to you;
- Pyp Grass;
- Lime sand mine sites;
- Fracking sites;
- Planning issues;
- More about fracking;
- I am able to respond at this time through the website, so any feedback on information I would like included will be noted
- Need more time to play with it to make any suggestions;
- Don't know yet;
- I would like to see more about travelling ground diseases like dieback.

5. Overall, how well does NARvis meet your needs as a Strategy and funding tool?

1 Poor	2	3	4	5 Satisfactory	6	7	8	9	10 Excellent
				2	3	5	13	6	6

Gingin:

- It gets more useful the more familiar I get with it;
- Not looking for funding as a DAFWA employee but as a tool for working with groups both in the NAR and metro, it keeps me informed of projects in the area though they may not be related to the area I am working in;
- Needs additional historical information;
- I very much see it as a work in progress that can be extremely valuable;
- If I was applying for funding, it would be a fantastic tool;
- Be interesting to see the reaction of younger members.

Jurien Bay:

- I feel it will be fundamental in the success for grants applications for all groups.

Appendix I – Participant Lists

<i>Name</i>	<i>Group</i>	<i>Email</i>	<i>How they heard about the event</i>
-------------	--------------	--------------	---------------------------------------

Gingin, Monday, 24 November 2014

Gavin Drew	Farmer and consultant (water control)	gavin_sheila_drew@bigpond.com	Email and Phone
Bob Leeson	Evergreen Farming	leesonr@oceanbroadband.net	Email
Reg Beale	Moore Catchment Council	rabeale@bigpond.com	Email
Sally Calder	Gingin Water Group	sallycalder@inet.net.au	Email
David Rickson	Gingin Water Group	drickson@bigpond.net.au	Email
Ken Talbot	DAFWA	Kenneth.talbot@agric.wa.gov.au	Email
Kerry Fewster	Apiarist, Farmer and Gingin Water Group	kuyan@inet.net.au	Email
Rodger Walker		rodger.walker@nacc.com.au	

Geraldton, Wednesday, 26 November 2014

Mark Chadwick	City of Greater Geraldton	markc@cgg.wa.gov.au	
Mark Canny	City of Greater Geraldton	markca@cgg.wa.gov.au	
Jim Wedge		jimwedge@harboursat.com.au	
Priscilla Clayton		prisclayton@node1.com.au	
Jerry Clune		clune@westnet.com.au	
Robyn Nicholas	City of Greater Geraldton	RobynN@cgg.wa.gov.au	
Jim Sorgevana		sorgum@wn.com.au	
Phil Blakeway		nukara@bigpond.com	
Suresh Job		Suresh.Job@durack.edu.au	
Gordon Wilson			
Sean Hickey		djask@wn.com.au	
Elizabeth Sturrock	NACC	elizabeth.sturrock@nacc.com.au	
Violetta Pristel	NACC	violetta.pristel@nacc.com.au	
Jessica Stingemore	NACC	jessica.stingemore@nacc.com.au	
Callum Love	NACC	callum.love@nacc.com.au	
Heather Legge	NACC		
Wendy Payne		kalseahorse@westnet.com.au	Email
Grant Bain		ageabain@bigpond.com	
Yvonne Marsden			

Three Springs, Thursday, 27 November 2014			
Paulina Wittwer	Carnamah Landcare	pauline.wittwer@bigpond.com	
Fiona Falconer	Waddy LCDC	fiona.falconer@DPaW.wa.gov.au	
Phil Logue	PJ Farmers		
Bev Logue		bevlogue@bigpond.com	
Peter Syme	Yarra Yarra CMG	psyme@wn.com.au	
Ted Jack	Shire of Coorow	CDO@coorow.wa.gov.au	
Jude Cusworth	NACC / Gunduwa	jude.cusworth@nacc.com.au	

Jurien Bay, Friday, 5 December 2014			
Shane Love	MLA, Member for Moore	MooreElectorate@mp.wa.gov.au	
John Hatch	Friends of Lancelin Coast	johnhatch5@bogpond.com	Email
Rheece Turner			
Denise Beer	P&C Private		
Sascha Slocim	Student, JBOHS		
Wayne Gibson	Shire	president@dandaragan.wa.gov.au	
Rev Snook	Herbarium Jurien		Email
Bob & Ann Hendry		bobann.hendry@gmail.com	Philippa
Mica & Caroline Salmon		carolinemichael@bigpond.com	Pip
Tim Bailey	Shire	rosytim@bigpond.com	
Mark Canny	DoW	Mark.CANNY@water.wa.gov.au	
Colin Hedland			
Shelly Spriggs	NACC	shelley.spriggs@nacc.com.au	
John Reynold			
Andrea Gray	Jurien Bay CRC	angideek@westnet.com.au jurienbay@crc.net.au	Email + Philippa
Deb O'Brien		dbcrookes@hotmail.com	Philippa
Richard McLellan	Green Head Coast Care	rmclellan@wwfint.org	Website
Jill Wilson	WWF	jwilsonwa@bigpond.com	NACC Notes
Lis Mclellan	NACC	lmclellan@wwfint.org	Website
Alanna Smith	WWF	alannasmith63@hotmail.com	Philippa
Paul Robb	Cervantes	uniquecreek@westnet.com.au	Pip
Lindsay Sheridan	Cervantes		Philippa