



## **A Multi-level, Multi-platform Approach to Communications on the SW Hub CCS Project**

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### Abstract

With the South West Hub looking more and more like an opportunity for the geological storage of industrially generated CO<sub>2</sub> in Western Australia, the need to keep the community and other stakeholders informed is, and remains, paramount.

As the international language about the carbonisation of the earth's atmosphere evolves from envisioning a low carbon future, a zero carbon future and lately a negative carbon future, how do we communicate the idea and purpose of a Carbon Capture and Storage (CCS) feasibility project?

In Western Australia the State Government Department of Mines and Petroleum (DMP), as manager of the SW Hub CCS project, has been tackling the problem of knowledge sharing in a community for whom CCS is a relatively new concept.

Any communications strategy should take into account the economic, historic and social context of the community it embraces. The SW Hub has been given mining, farming and environmental issues at a local level, sitting within the wider international forum of tackling atmospheric carbon.

Communicating a CCS feasibility project centres on landholders, and must cross the spectrum, from school children through all levels of community knowledge and understanding, to the scientific circles of the international CCS world.

The enduring foundation of the SW Hub Communications Strategy has been openness and accessibility for anyone interested. This is achieved by delivering constantly evolving key messages via many forms of communication and targeted for specific levels of familiarity and understanding.

With the cooperation of landholders, the SW Hub has accomplished a series of significant data acquisition projects, including 2D and 3D seismic surveys and four stratigraphic wells.

Research and raw data are published for each stage, as are the subsequent analysis and modelling which has consistently confirmed the target Lesueur Sandstone formation as a potential CO<sub>2</sub> reservoir.

Landholders are the most important stakeholders because they are the most immediately affected during the project, and because they stand to be the most affected if geosequestration becomes a reality; landholders in the target area receive the most direct and detailed information about each of the data acquisition stages.

The next level of detail is shared with community representatives through local government and via the Lesueur Community Consultative Committee (LCCC) which serves to both inform community members and facilitate feedback on aspects of the project.

Stakeholder engagement is planned and recorded to ensure all levels of government and key industries and community groups are kept informed about the project, within the context of constantly increasing the number of people who have knowledge and familiarity about CCS and the SW Hub.

The CarbonKids program developed by CSIRO, and sponsored by DMP, is an opt-in sustainability program for schools which meets the requirements of education curriculums, and has increased knowledge about CCS and the SW Hub locally and internationally.

St Michael's Catholic Primary School in Brunswick Junction produced a book for CarbonKids titled '*A Day in the Life of a Carbon Atom. Starring: Adom.*' (reference) which is written by children for children.

The English version has helped local children, and their parents, understand geosequestration, and has been shared in several countries, and the book has been published in two other languages.

The all-embracing communication medium is the website [dmp.wa.gov.au/ccs](http://dmp.wa.gov.au/ccs) which is a portal for short films and documentation at all levels; providing an overview of the project and its various stages, as well as links to everything from the Adom book to peer reviewed research papers.

For those seeking the most project detail, the website includes links to WAPIMS – an information management system providing access to raw data and research information which can only be interrogated by specific scientific tools and specialised computer programs.

Information sessions, before and after data acquisition stages, are open to anyone with an interest in knowing about CCS, with presentations, graphics, banners, brochures, reports and occasionally a giveaway item on offer.

Bus tours were made available during activity stages of the project and stands set up at annual agricultural shows, where one aspect of the project becomes the focus.

Maintaining a physical presence and offering opportunities to converse one-on-one with people working on the project are integral to the communications strategy. 'Being there' plays a role in ensuring that, while information at all levels is available to anyone, delivery can be tailored for an optimum match with each audience.

This paper explores the South West Hub's approach to communications between 2011 and 2016, employing a combination of informal, formal, general and highly technical

platforms to deliver key messages across various media with the aim of normalising CCS and gaining community acceptance of the SW Hub.

## Introduction

The SW Hub(SW Hub) is a project investigating the suitability of the Lesueur Sandstone formation for the permanent storage of industrially generated carbon dioxide.

National studies identified CO<sub>2</sub> sources and potential geosequestration sites around Australia in the early 2000s, one of which was in the sedimentary Perth Basin lying in the west of Western Australia.

The Western Australian State Government committed to investigating CCS during the first decade of the 21st century, and despite Collie being the source of an estimated total coal resource of 2,400 million tonnes the Collie Basin was identified as unsuitable for CO<sub>2</sub> storage.

By 2007 the government had commissioned a South West regional study which focused on the stratigraphy of the Harvey and Waroona Shires, midway between the industrial centres of Kwinana and Collie.

*(Map showing Perth Basin, Collie Basin and location of area of interest)*

A Business Plan, including a Stakeholder Engagement Plan, was developed supported the business case put to the Australian Government in 2010, for a landmark CCS project which could open up new CCS reservoirs with unconventional seals around the world.

The town of Harvey lies 140km south of the WA State capital, Perth, and has a population of 2600. Surrounding the town site is the Harvey Shire, a sparsely populated agricultural and horticultural area producing quality meat, fruit and wine.

The area of interest is to the north-west of the Harvey town site where two significant stratigraphic features occur; firstly the Lesueur is closer to the surface than in surrounding areas and secondly, the South West's most important potable water source known as the Yarragadee Aquifer has been eroded away. (Reference?)

The SW Hub project team is conveying the concept of geosequestration to a public whose knowledge and experience of the underground has been mining: mineral sands mining, bauxite mining, gold mining, lithium mining, fly-in fly-out (FIFO) to the State's North West for iron ore mining and gas extraction.

What is important to this community is the ground itself, and its capacity to support livelihoods and lifestyles on quality farm land with a good water supply.

During the first decade of the 21<sup>st</sup> Century, the Western Australian population experienced mining as a steady source of growing wealth; in the South West a richness of bauxite and mineral sands was extracted from underneath bush containing endemic species such as jarrah trees; in the North West the red earth rich with iron ore was poured onto ships.

This means the communications strategy for the SW Hub has been carried out during and in the wake of a once-in-a-century mining boom that dominated the economy and caused the biggest Australian population migration from east to west since the Western Australian gold rush of the 1890s.

Combine this economy, fuelled by mining, with a concerted campaign against the gas extraction practice of hydraulic fracturing (known as fraccing), the general community response to any one of a number of prompts is: “Is it fraccing?”

It is the most common response to: “Have you heard of CCS?” and “Do you know of the South West Hub?” and the single question most asked by people as they survey the banners and core samples on display at SW Hub information sessions or stands at local agricultural shows.

This question illustrates some of the challenges in gaining community acceptance through familiarity and trust in a social environment where knowledge is disparate and often selective/popular based; and this paper will explore how the answers have been tailored for various levels of understanding across multiple platforms to engage the community in the SW Hub.

### Engagement Starting Points

Well planned and executed community engagement strategies may be applicable across various projects and similar communities; but it is impossible to ignore local knowledge as a keystone to the success of an over-arching strategy.

Local knowledge works both ways: Just as strategists may apply a familiarity with the community to create a relevant hierarchy of stakeholders and other aspects of a successful community engagement strategy, a community-held familiarity and trust developed by those strategists through years and even decades of ethical practice, benevolent presence and reliable behaviour can only be a bonus to a project.

Nomenclature plays an important role in public perception and especially influences first impressions. This is where some local knowledge has proven useful.

The stratigraphic feature which is most suitable for CO<sub>2</sub> injection is referred to by geologists as the Harvey Ridge, but the community is more familiar with a residential subdivision named Harvey Ridge. Using this name to refer to the stratigraphic area of interest may have resulted in the community assuming the CO<sub>2</sub> injection target was in the middle of a housing estate!

By 2012 it became obvious that the rather cumbersome nomenclature Collie-South West CO<sub>2</sub> Geosequestration Hub (Collie Hub) needed to be consolidated and the project became the South West Hub.

For similar reasons, geosequestration was dropped in favour of CCS in a range of publicity materials produced for the project which included brochures, *SW Hub Update* newsletters, banners and research reports.

While the SW Hub has benefited from local knowledge, and indeed the employment of some level of local knowledge is encouraged for all projects, it is not the purpose of this paper to further explore this obvious benefit; it is to paint a picture of a successful CCS community engagement strategy being conducted in Australia.

The SW Hub CCS feasibility investigation began in earnest in 2011 when the project and the community were introduced to each other through a workshop entitled ‘Results from Collie CCS Hub workshop: What the locals think?’. (reference)

The result was a significant improvement in participants’ self-rated knowledge of climate change and related issues. This was the beginning of a multi-level, multi-platform approach to communications on the SW Hub project.

### The Australian Context

The SW Hub became the first project to be funded in June 2011 under the Australian Government’s CCS National Flagships program, managed by the Department of Industry, Innovation and Science.

The Flagships program, along with a carbon tax which has since been abolished, was part of a suite of activities aimed at reducing the nation’s greenhouse gas emissions by 60% of the year 2000 level by 2050. This goal was later raised to 80% and is now 26-28 per cent on 2005 levels by 2030, but the SW Hub focus is on connecting man-made carbon dioxide emissions with overall global warming and not on these changing targets.

Funding was initially awarded for pre-competitive geological data acquisition, preliminary studies (including risk assessment, social impact assessment, a pipeline study and an environmental impact statement), project engineering and management, with further funding to be provided as the project proceeded.

A series of stage-gated data acquisition projects began with seismic surveying and the results from four stratigraphic wells has added layers of complexity to our understanding the Lesueur Sandstone and its storage capacity.

Establishing a solid foundation made it easier in 2013 to withstand opposition to the 3D Seismic Survey presented by a handful of landowners who brought their own legacy issues with industry and government into the public arena.

From the beginning there has been an overriding consensus, among the project team and the two levels of government funding the project, for the SW Hub to be open and welcoming to anyone with questions or comments about the project. The task is to foster familiarity and trust through inclusion and thereby encourage community acceptance.

‘New and emerging technologies often come with an inherent social risk that if not well managed, can heavily impact their deployment.’, according to Peta Ashworth?? who reviewed and validated the SW Hub Community engagement strategy in 2015 (Reference).

The review recommended continuing to evaluate activities, make changes and “respond to needs being expressed by the community.”

## Multi-Level Multi-Platform Communication

The series of stage-gated data acquisition projects began with a 2D Seismic Survey conducted soon after the initial workshop in 2011.

(insert pamphlet, advertisement etc.)

Based on advice received from the analysis of the 2D Seismic Survey, the site for a 2.945km deep stratigraphic well (Harvey 1) was identified in the Shire of Harvey near the boundary with the Shire of Waroona.

Waroona Shire adjoins Harvey Shire to the north and has been consistently included in published materials such as *SW Hub Update* newsletters and project publicity because the original project area initially covered two shires.

Immediately following the stratigraphic well site selection process, community consultation was undertaken to brief the community and ensure that views from the community were obtained.

The hierarchy of community engagement begins with the landholders of the specific site and swiftly moves to the Lesueur Community Consultative Committee (LCCC).

Consisting of self nominated community members, who are mainly landowners from the area of interest and local vicinity, along with representatives from local government and nominees from local MP's, the LCCC provides a forum for high level detail and discussion about the South West Hub's plans, activities and results.

While the three levels of government (Federal, State and Local) are kept informed through separate channels, local government is represented on the LCCC in person by the Shire President and Shire CEO, and Federal and State MP's send their own representatives.

LCCC meetings allow open discussion about the South West Hub's plans and provide the opportunity for members to gain an overall view of the project, ask questions, make suggestions and hear about the results of each stage of the data acquisition and the outcomes of research.

The questions asked and the thoughts provided by the LCCC members are highly valued activities which connect the SW Hub team to informed and interested community members.

A classic contrast of needs exists, as the LCCC members wish to see the end result up front, while the project strategists are involved in data acquisition, analysis and developing the project.

While the creation of the LCCC has not necessarily produced a group which will advocate for the project, it has created a conduit into the community and showcased a range of opinions about each stage of the project, which has mainly been positive.

## Multi-Level

In this context, levels of interaction can be considered as groups arranged over a target, with ever decreasing rings representing the increasing importance and focus of communications. (not sure where 'The Centre' goes?)

Level 1 in the centre is the landholders of property directly affected by the project.

This group is given personally addressed direct communication through letters, regular meetings and a range of information material which may include pamphlets and data sheets, with personal replies to questions.

For instance in the lead up to the 3D Seismic Survey some individual contacts were made. (reference Martin's paper)

They are invited through personalised invitations in the mail to public communications events such as information sessions and they are regularly informed about developments.

Level 2 represents the landholders with properties adjoining the directly affected properties who are personally contacted by the Land Access Team, kept informed through publications.

This level of engagement may include either the few immediate neighbours for a stratigraphic well, or the many adjoining the surrounding the approximately 115 square kilometres covered by the 3D Seismic Survey.

Level 3 involves the Harvey Community of several thousand people who receive information through presentations through groups such as Rotary or Lions and can access information through local media, especially the local newspaper where advertisements are placed and news about the project reported.

Level 4 A further level of engagement relates to the community in the wider South West Region. Some direct involvement is through the DMP's sponsorship of the CSIRO Sustainable Futures – CarbonKids program which is an opt-in program for schools to fulfil sustainability aspects of the curriculum.

Engagement is through open public Information Sessions and displays attended by project representatives at local agricultural shows in Harvey and Brunswick. Both of these shows are well attended annual events (Harvey Show 1.5 days with attendance of . Brunswick Show and one day with attendance of .) showcase local produce, livestock, industries, enterprises and projects.

Level 5 The SW Hub is important in the development of CCS within Australia and around the world. The project has been engaged with Australian CCS projects through National CCS Week and a range of CCS-based organisations. (the former Australia-based National CCS Council?)

(Kelli graphic here)

Multi-Platform

(Add photos to this section)

Landholders are the most important stakeholders in the SW Hub community engagement strategy. Regular face-to-face meetings are held with the landholders directly affected by the project to allow a free flow of information between the parties in an attempt to identify win:win outcomes and respond to requests.

These meetings may include members of the project team as well as the Land Access Team.

Key messages are developed for the Project at any given stage, and these are refined for each activity to ensure they are relevant to each audience. Key messages ensure consistency and allow the project team to reinforce each other's comments.

The neighbours of properties directly affected by project activities are next in the line of importance, who are afforded some face-to-face meetings and personally addressed correspondence. This correspondence has included hard copies of published information and newsletters, information sheets and invitations to events as well as opportunities to comment on the project.

High on the stakeholder list is the LCCC whose members are among the first to be informed of announcements relating to the project. Members have an early opportunity to comment on these announcements.

Inclusion in knowledge about the project is spread through public events such as Information Sessions about SW Hub data acquisition stages and manned displays at local agricultural shows. These focus on one timely stage of the project and often share a booth with research partners such as CSIRO.

Presentations and Q&A sessions are booked with community and industry groups and include an invitation to contact the project with further queries.

As the project is stage-gated, a website was developed to provide ease of contact and present relevant information in an accessible format, allowing large amounts of data from each stage to be accessed as well as overall summaries of each stage.

One benefit of the website is that it clearly illustrates how the SW Hub sits under the umbrella of the DMP and therefore the Western Australian Government.

Tools used by the SW Hub include a range of publications such as booklets, pamphlets, information sheets on specific stages of the project, and SW Hub Update newsletters which combine news about activities and results with local human interest articles and facts about CCS.

Project reports and research results are distributed to relevant stakeholders and local libraries in printed format, while all publications can be downloaded from the website.

Articles about the project's progress have been written for publication in State and national publications, media releases prepared, some specifically for local media like the local newspaper in Harvey and the regional radio (ABC South West).

Despite the recent relentless rise of social media, old-fashioned forms of communication remain effective for the project. Posters were developed and placed

on local noticeboards to inform the community about seismic surveys and well drilling.

Activism on social media has not been an issue for the SW Hub to date, most probably because the popularity of social media is increasing from a low rate of use among the demographic of landholders in the rural areas of Harvey.

However, some aspects of the DMP portfolio receive attention from activists, often regarding perceived environmental impacts, so the challenge for the SW Hub will be in how social media can be monitored, and what involvement the project would have, given DMP social media guidelines in this rapidly evolving area.

The print media is used to advertise opportunities to participate in information sessions and to attend guided bus tours to see the project's data acquisition projects in action. Media releases about aspects of each stage are distributed to relevant local, regional and State media.

The SW Hub is part of the international CCS community, through visits to Canberra and other CCS projects, networking with industry representatives and attendance at national and international conferences.

This networking led to a dairy farmer visiting WA from the Otway CCS demonstration project in Victoria for an informal barbecue and discussion with Harvey landholders about his experience with CO<sub>2</sub> injection site on his property.

DMP support for the CSIRO Sustainable Futures – CarbonKids program for students in Year 6 to Year 10 has introduced many students to the SW Hub and it is not unusual to hear adults at the local Harvey Agricultural Society Show say they had heard about the SW Hub from their children.

This multi-level, multiplatform approach allows an efficient allocation of limited community engagement resources to maximise inclusion.

From Local to International

(add photo of Adom Book)

Sustainable Futures – CarbonKids is a national teaching program for school children developed by the CSIRO which includes teaching about CCS and schools have an option to run the program, either within one school or as a combined school's workshop. This program is sponsored by DMP in the South West and involves x schools.

'A Day in the Life of a Carbon Atom: Starring Adom' is a children's book about CCS. Written both by and for children, this colourful publication is the creation of students at St Michaels' in Brunswick Junction who had attended classes in sustainability.

The story and illustrations for 'A Day in the Life of a Carbon Atom: Starring Adom' were the result of a workshop held at St Michael's and DMP sponsored it's publications. A State Government Minister presented the by-then high school students

with copies of the book which has been distributed to libraries throughout the South West region.

The book has proven a favourite with youngsters and creating new international links for Australia, through the book's distribution in Scotland and Canada, as well as being published in Japanese and Chinese languages.

#### Risk assessment and issues definition

The extent to which the South West Hub's activities are socially acceptable, and therefore politically tenable, are a result of carrying out a well-planned, though ultimately flexible, community engagement strategy.

The groundwork laid in the lead up to the 2013 outcry by some landholders against the 3DSS meant they that while they could deny access to their own properties, their objections had little impact on the majority of landholders who assisted with the survey and ensured its success.

Laying a firm foundation through open communications and by association with geological science experts, as well as being known and trusted within the local community, allowed the project to overcome the objections and go ahead, though managing the public relations and signing up over 100 landholders meant the survey was delayed from one summer to the next.

A key aspect of the communications strategy is having locally-based decision makers who are in touch with stakeholders and able to smooth the course for all involved.

The success of the community engagement strategy is directly proportional to the trust the SW Hub has engendered in its relationship with the local community; trust bred by familiarity.

In Harvey the trust between the community and the project is the sum of trust in individuals, trust in those delivering the messages and trust in the message which is well researched and honest.

#### Frequently asked Questions

The community has a surfeit of questions but the most common ones are whether the project involves fracking and why is it in Harvey.

At one stage project team members answered in writing more than 70 questions gathered from various sources. The fracking question, as it became known, has become popular due to the movie 'Frackman' and a social media campaign against fracking.

Because fracking so legitimate activity carried out by explorers under licence from the DMP, the answer is 'No; we want to keep CO2 in the ground.'

Why here? Why would anyone risk the future of a top agricultural area by transporting industrial by-products many kilometres from their source and “dumping industrial waste products” here?

Especially during the early days and during the past five years this question arises frequently.

The “Why here?” issue is connected to concerns about groundwater security, but is mainly borne from the fact that the area of interest has no notable carbon dioxide producing industries.

Answering this question was one of the main aims of the early community relations work and involves communicating a complex mixture of stratigraphy, proximity to major CO<sub>2</sub> producing industries and educating the community about CCS.

As the main production area for coal in the South West, Collie was an obvious location to look for suitable stratigraphy for geosequestration, however the Collie stratigraphy is unsuitable for CCS.

Harvey lies in a farming area on the southern Perth Basin and is located between the region’s the major industrial area of Kwinana and the coal-fired power generation centre of Collie.

Geologists identified the area’s stratigraphy as being potentially ideal for geosequestration, despite the lack of a conventional seal.

Hang about, what is stratigraphy?

Establishing a rapport with any member of the community, no matter where, when or with whom the interaction occurs, requires the strategist to efficiently assess that person’s level of knowledge and factors that are likely to influence their point of view, in order to establish a meaningful two-way conversation.

In a nutshell, this conversation might include: Have you heard of CCS?

Geosequestration is the permanent storage of CO<sub>2</sub> deep underground.

Stratigraphy is the study of the strata lying underground.

CO<sub>2</sub> produced by the burning of fossil fuels has been linked to global warming.

Scientists are researching ways to reduce carbon emissions.

CCS projects around the world can make a difference.

The SW Hub is a CCS feasibility study.

And then there is that fracking question!

Amongst the first communications tools developed for the SW Hub was a stratigraphic image which showed the underground formations and named them. It

became our most important communications tool, representing an underground world that many people had never imagined.

*(Stratigraphic banner place here)*

While geologists saw only the terrifically simplified illustration of a complex underground, this graphic tackled the fact that the overwhelming majority of local residents, Western Australians have little knowledge of the intricacies of what lies under the ground they tread on.

In a State which has prospered from mining for nearly two centuries, and at the time was wrapped up in the middle of the biggest iron ore led mining boom experienced in a lifetime, there is little to question about the appropriateness of mining.

Western Australians are used to resources being dug out, but the concept of putting something into the ground for permanent storage was mostly foreign.

The addition of chronostratigraphic information to the graphic created a widely appealing association with dinosaurs which was something to interest all ages, and introduced the dimension of time, promoting a sense of distance, and allowing the relatively short 2 to 3 kilometres underground to be re-phrased as “rocks created approximately 250 to 200 million years ago” which seems a lot longer.

*(Pictures of publicity materials here)*

Another community engagement issue was a lack of anything other than a basic knowledge about CO<sub>2</sub>.

This was tackled by mouth, literally, with the explanation that each of us breathes out CO<sub>2</sub> and consumes it in soft drinks. A diagram explaining the phase changes of CO<sub>2</sub> was used.

Can the CO<sub>2</sub> be extracted if we find a way to reuse it? Not with current technology.

While we are talking about stratigraphy, the Lesueur is about one-and-a-half kilometres thick in the Harvey area, and it stretches from Augusta in the south, to Geraldton in the north and then continues offshore.

Groundwater is slightly better understood than stratigraphy; people know it exists though possibly not the fact that is stored in rocks, they have an idea about the salinity levels of accessible water on their properties.

What they do not often know is that in this area the salinity increases with depth or that for reasons unknown, the Lesueur is closer to the surface in the Harvey Waroona area than in surrounding areas.

But the most powerful “Why here?” answer is that the South West region’s major freshwater reservoir called the Yarragadee Formation does not exist in the area of interest. While the reasons for this gap in the aquifer are not clear, it is a geological quirk that adds to the area’s suitability for CCS, as it dispels any fears that this important aquifer, held dear by the community, would not be affected by carbon storage in the Harvey area.

Potentially ideal stratigraphy, increasing familiarity with climate change issues and exposure to carbon reduction messaging was changing community attitudes.

What happens if there are earthquakes?

The short answer is: “Probably nothing” but there is a need to address the issue of the highly unlikely event of a major earthquake by obtaining background seismicity levels and the monitoring system for any future CO2 injection.

Several research partners work on projects to enhance and compliment the South West Hub.

Early in the project a research partner relationship was formed with the Western Australian Energy Research Alliance (WA:ERA) a joint venture between Australia’s premier research body the CSIRO, The University of Western Australia (UWA) and Curtin University.

This alliance was identified in the submission to the CCS Flagships Program as an essential component of the South West Hub.

The WA:ERA relationship extended to support a successful submission to the Federal Government’s Education Investment Fund for a \$48 million National

Geosequestration Laboratory (NGL) designed to conduct research and development support for large-scale geological storage of CO2 and developed at the Australian Resources Research Centre in Kensington in the WA State capital of Perth.

With scientific laboratory equipment, mobile and re-deployable field instruments and scientific equipment installed in an in-situ reservoir scale field laboratory, the NGL provides priority access to the SW Hub to analyse fluid samples from the reservoir and confirm storage effectiveness; conduct core flooding from well samples and develop novel, low cost remote sensors.

(DVG note here Value of ??)

Importantly, CSIRO assisted by sending personnel to SW Hub community events (Name Linda? particularly Dr Linda Stalker and mention publications?) who were able to not only provide a greater level of detail about CCS, they lent the familiar and highly respected CSIRO name to the project.

These events included Information Sessions focussed on particular stages of the project, such as the 3D Seismic Survey, which were open to the public and held in accessible locations such as the Harvey Recreation and Cultural Centre and at various display booths set up at as well as a series of annual Agricultural Shows held in the region.

*(Pictures of Info Sessions and Ag Shows here)*

The association with UWA led to the establishment of a seismic monitoring system which is using 14 seismic stations to a) establish the area’s baseline seismicity and b) imaging the subsurface structure of the Perth Basin.

Seismometers in schools a CSIRO program connected to UWA which sees schools hosting seismometers for 24/7 surveillance of background seismicity and quakes.

Curtin University is conducting an MT Data survey in order to help determine the distribution of fresh and saline groundwater. Despite several efforts, collecting groundwater samples not contaminated with drilling mud has proven difficult.

The work by research partners has been the focus of community displays, with a series of geophones connected to a monitor where people could see how their movements created vibrations in the ground which could be detected by the geophones.

A seismic truck acquired by Curtin University arrived just in time to be put on display at the Brunswick show in the lead up to the 3D Seismic Survey. This attracted people who were familiar with vibroseis trucks and those who had never seen them, prompting conversations about the upcoming project.

The lead up to the 3D Seismic Survey was tumultuous and required a range of initiatives; talking with landowners, an open information session, discussions with the local shire and local Members of Parliament.

Of slightly more than 100 landowners, there were six formal objections to the clearing permit for the 3D Seismic Survey.

The communications strategy was in place, the land access team KD.1 was on the ground and a successful community Information Session had been well attended in Harvey.

But time was limited and the land access team found the going a bit harder once a group of landholders contacted the local MP to object to not only the survey but the whole CCS feasibility investigation.

The result was negative publicity, a revised media plan which included placing information in a local newspaper (JV?) and the need to delay the 3D Seismic Survey for a year until the subsequent dry summer period when vibroseis trucks could access as much of the area as possible.

The lead-up to the 3D Seismic Survey delay was a tumultuous time, but in the end there was little to compel public sympathy for an argument against a scientific research project.

## Media Strategy

As with the community there is a hierarchy of knowledge among journalists. As important as the need for the community to be educated is the need for reporters and presenters to be given a background in CCS.

By keeping tabs on the movement of local journalists in and out of key positions within the local media, new journalists can be briefed ahead of news releases in order to allow them to write more informed and relevant articles.

There is a recognised need to brief new journalists whenever possible on the basics of CCS and allow them to ask questions away from the public glare in order to encourage informed writing and good quality information in articles.

The invitation to media briefings is an important addition to the SW Hub open door policy and an extension of inclusion.

The SW Hub media interactions have been through traditional channels as social media has not been relevant to the early stages of the project. This is a result of demographics and the relatively low use of social media among out most important stakeholders (Level1).

Summary tbc

Trust!

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