OceanWatch Australia - Marine NRM

Fishing and Aquaculture Forum - 26 June 2014

The OceanWatch Australia Fishing and Aquaculture Forum aimed to establish the values, benefits and key opportunities for Marine NRM now and into the future. Twenty-two participants undertook a full day workshop of surveys and engagement activities to establish a baseline of the seafood community's understanding, perceptions and expectation of Marine NRM. Each participant was invited based on their breadth of knowledge across multiple fishing and aquaculture perspectives.

Summary of Forum

Workshop participant's **personal knowledge** regarding current Natural Resource Management was generally rated as poor to average, but the participants were familiar with the concepts of marine stewardship and the importance of environmental best practice.

Key **values** associated with Marine and Marine NRM, included; trust, finding the balance, stewardship, innovation, transparency, wellbeing, responsibility, prosperity, food, life, enjoyment, holistic solutions.

The **benefits** of marine NRM from the **personal perspective** of participants, included; enhancing life & lifestyle, respecting the environment, provides food, fun, wellbeing, life giving, experience & enjoyment, legacy, use & improve, defining who we are, gives life balance.

The **benefits** of marine NRM from a **community or collective perspective** of the participants, were perceived to be; create a legacy, ensure we all benefit equitably, leave it better than we found it, stewardship, sharing, pride, sustainable, profitable, equity, sharing the load, all responsible, sustenance, identity, health and wellbeing.

The **opportunities** of marine NRM, included; shared understanding of issue from all perspectives, better catchment management, recognising impacts, focus shift from preservation to conservation, environmental connectivity-spirituality, reducing ignorance, increasing funding, media engagement.

Issues and Solutions

Issues raised by participants were able to be grouped into the following categories; barriers to tidal flow, marine debris, TEP species, habitat, biosecurity, climate change, water quality and quantity, pollution.

Of interest were the number of non-physical issues identified by the participants, including regulation and legislation, relationships, equity, information. Issues around equity included resource sharing between marine stakeholders, as well as equity between stakeholders within the wider NRM delivery process.

Potential **solutions** for many of the issues were identified by participants and are provided within the body of the report.

Priorities

Participants were asked to prioritise from their collated list of issues previously identified within the workshop. Each participant was asked to cast 3 votes to identify the priority issues. Votes were allocated as each participant saw fit ie, multiple votes were able to be cast for issues.

Habitat, pollution, water quality and biosecurity were highlighted as the key focus areas.

Additional grouping of issues provides further evidence of participant's priority areas for response.

From a total of 54 votes cast:

1. Habitat + Barriers to tidal flow = 28 votes
2. Water quality + pollution = 17 votes

52% of votes placed fish habitat related issues as the priority area
31% of votes placed water quality related issues as the priority area
11% of votes placed biosecurity as the priority area

4% of votes placed climate change as the priority area
0% of votes placed TEP species or marine debris as the priority area

OceanWatch Marine NRM Fishing & Aquaculture Forum

FINAL REPORT

JULY 2014

Presented by

RURAL TRAINING INITIATIVES

About the Project

On 26th of June 2014 Oceanwatch Australia delivered a Marine Natural Resource Management workshop at Rydges Airport Sydney. The project was developed and overseen by Oceanwatch Australia in consultation with workshop facilitator, Jill Briggs, Rural Training Initiatives P/L.
The workshop was developed from an initial quote followed by a teleconference discussion. Delineation of responsibilities included logistics and knowledge sharing managed by Oceanwatch and facilitation of the workshop managed by Rural Training Initiatives P/L.

The Oceanwatch Workshop

The workshop commenced with a planning session between Oceanwatch Australia staff and Rural Training Initiatives. A 1 day facilitated workshop was designed and delivered for over twenty people including Oceanwatch Australia staff, indigenous, recreational and commercial fishers and aquaculturalists and other key stakeholders. A report including overview, data collected and general recommendations was generated.

The Oceanwatch Marine NRM Workshop had four components.

Overview
Component 1 – Social connection, 25th June 2014. Informal drink and dinner.

Component 2 – Information sharing, 26th June 2014. Oceanwatch staff provided three addresses to the assembled participants.

Component 3 – Facilitated discussion, 26th June 2014. Rural Training Initiatives facilitated whole-of-room and small group discussions.

Component 4 – Consolidation of workshop and commitment to Marine NRM future and close. Oceanwatch CEO provided a guided discussion and closed the workshop.

Workshop Detail

9.00am		Arrival – tea & coffee
Component 2		
9.30am	Brad	Welcome
9.35am	Jill	Introduction – housekeeping • Exposure to NRM - Questionnaire on NRM • Attendee introductions
9.50am	Lowri	• NRM in Australia • Marine NRM
10.00am	Brad	OceanWatch Australia's role in NRM • Structure and history • NRM recognition • Thematic scope • Budget realities
10.20am	Simon	Interaction with other NRMs • Case studies
Component 3		
10.45am	Jill	Input into Strategic Planning • Values and benefits • Identification of stakeholder issues linked to NRM • Prioritisation of issues
	Jill	Strategies to address issues
Component 4		
	Brad	Resolution Wrap up
4.30pm		Depart

Methodology

The methodology included: -

- A questionnaire to establish the workshop participants personal knowledge regarding natural resource management
- The delivery of speeches (3) to provide information regarding NRM, Oceanwatch and case studies
- The facilitation of values, benefits and opportunities around marine environment NRM.
- The collation of information collected throughout the workshop to develop future priorities.
- The development of a Marine NRM commitment by participants.

The delivered facilitation process

Questionnaire on NRM

- Establish baseline of knowledge
- Finding out what people know about NRM

Delivered speeches

- NRM in Australia regional NRM role, catchment based boundaries.
- Understand OceanWatch's role in NRM
- Company structure and history. NFP NGO DGR status. Articles of Association. Environment focus

Input into strategic planning

- Values and Benefits - What values do you attach to the marine environment and to the stakeholders and what are the benefits to you/others/community of Oceanwatch.
- Identification of stakeholder issues linked to NRM - what are the biggest threats or concerns regarding the coastal/marine environment
- Prioritisation of issues - what are the highest priorities to address
- Strategies to address issues - what are the opportunities/strategies to address identified issues.
- Commitment to engage with Oceanwatch and NRM.

Generated Workshop Data

Values

Participants were provided with the opportunity identify values of NRM

Values – words that underpin the value of Oceanwatch and NRM.

- My habitat
- Trust
- Respect
- Sharing
- Balance
- Stewardship
- Community
- Acceptance
- Innovation
- Transparency
- Collective wellbeing
- Collective productivity
- Intrinsic

What else?

- Emotive
- Idolised
- Responsibility
- Prosperity
- Food
- Life
- Collective knowledge
- Enjoyment

What is most important?

Regulation	12
Relationships	20
Equity	13
Information	12

Benefits of Marine NRM

Working in groups participants were asked to consider the benefits of NRM and Oceanwatch.

Group 1
Me: Beauty, intimidating, serenity, lifestyle – life, respect, food, fun, wellbeing
Community: Future generations, wellbeing, stewardship, sharing, pride
Organisations: sustainable, profitable, improved social licence to operate, increased opportunity to work within regulatory frameworks, equity

Group 2

You	*Community*	*Organisations*
'Life" what we want, simplicity, not complicated or complex	"life" needs expectations	Achieve objectives of organisation
Experience & enjoyment	Sharing the load and making all responsible	Truth & stewardship to engage and achieve
Strike rate, getting something measurable	Social & fun Aquatic & fun - Whales, fish, seals, birds, water	Improved thinking For improving ecosystems
Legacy – better for future generations -Better change	Sustainability. Improve ecosystem. Feeling of wealth	Community funding - Proper use of public resources
Enjoyment and the experience whilst leaving a legacy for the future generation 'Use & improve'	Need to have an aquatic ecosystem that provides community benefits for our life and those that follow. Social and economic sharing the load, meeting lifestyle and healthy ecosystems 'Shared view for and Improved ecosystem'	Ability to achieve and grow our organisation through meeting our commitment and objectives

Group 3

You *Community* *Organisation*

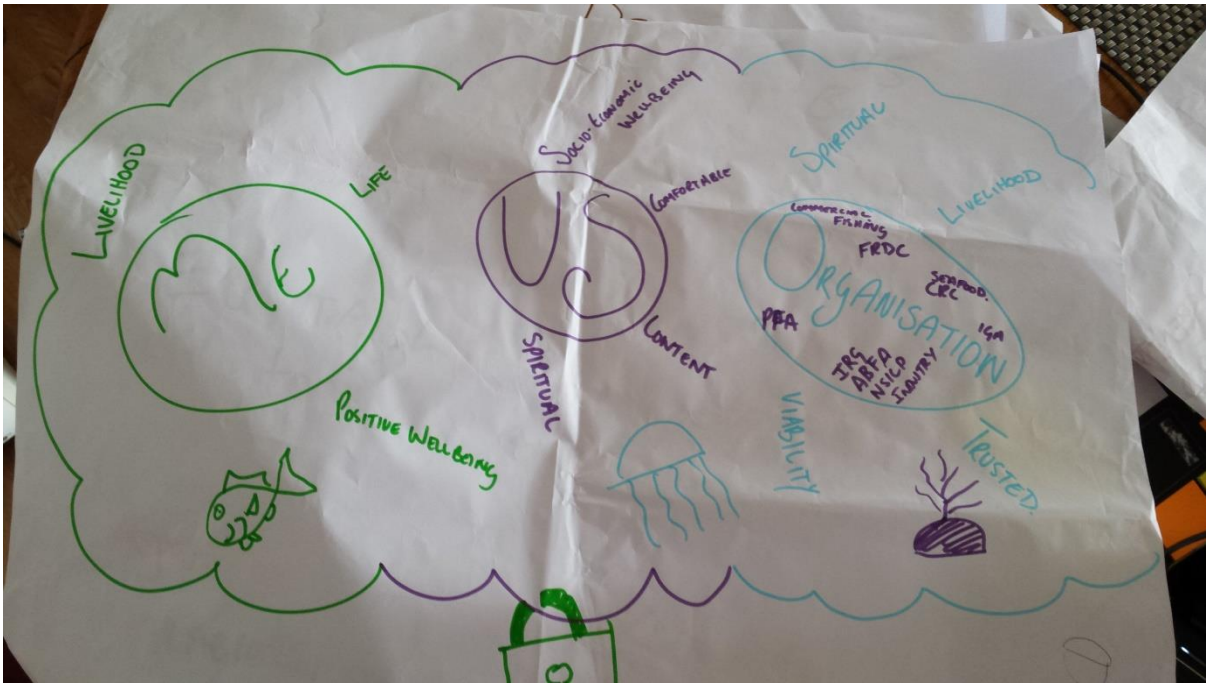
Balance

Mountains to reef (marine) solutions

Productivity abundance / resilience knowledge

Sustenance Identity

Health and well-being



Group 4

Me: Defines us, gives 'life' balance

Community: Create a legacy to ensure we all benefit equitably. Resources are tangible and intangible.

Organisation: Collective knowledge to generate/ based on truth; rights; "leave it better than we found it".

Issues and solutions.

Participants were asked to identify issues and, if possible, provide solutions . Two activities were incorporated here: -

1. *Remove your organisational/sector 'hat' and identify issues for NRM*
2. *With you organisational/sector hat on identify issues and provide solutions for NRM when considering a, physical environment and b, non-physical environment.*

1. No Hat

- Share understanding of issue form all perspectives
- Selfishness/self-interest
- Bury your grudges
- Catchment management
- Water management
- Understanding environment
- Recognising impacts
- Anthropogenic impacts
- Population growth- urbanisation
- Environmental impacts – H_2O quality
- Public buy-in
- NRM – focus on preservation. Should be on CONSERVATION i.e. sustainable use
- People ill/ misinformed
- Connectivity-spirituality
- Political management
- Ignorance
- Funding
- Chemical guidelines
- Water guidelines
- Government cycles
- Environmental flows- cultural flows
- Local government planning instruments
- Turf-based funding
- Media

Trust
Relationships
Emotional Maturity
“You’re wrong! I’m right”

Resource Allocation -

Indigenous
Commercial
Recreational
Aquaculture

2a, Physical Issues (Table 4)

Physical Issue	Key Points	Solutions
Barriers to tidal flow	Flood mitigation	Restarting natural flows
	Weirs	Hydrology affected by waterway diversion-limit/plan better with LG
	Water storage	
	Land use/management/ planning	
	Urbanisation	
	Barriers and changes to habitat	Unintended consequence
Marine debris	TEP species	
	Negative impacts to fishing	
TEP's	Large predator TEP removal	Impact on species distribution, species abundance, species balance
	Seismic survey	Lack of regulations surrounding the conduct of seismic survey and relation to fish
	Negative impacts of fishing	
	Methodology of operations	Operations are measured in terms of "tonnage" not in terms of ethical/community conscious behaviour eg number of shots per day, per location , per species etc
Habitat	Structures (groynes etc)	People understanding ecology. Good habitat = more fish. Education of kids (kids hold parents accountable)
	Lost foreshore degradation	Pumping sands around
	Land use/management/planning	
	Government development policies	How to influence gov't policy Case studies before and after of areas affected by urbanisation. Learning from past mistakes Biggest threat.
	Urbanisation	Population growth control
	Habitat addition (artificial reefs)	Is it a problem? Types of materials?
	Planning of infrastructure that impacts tidal flow	Dams, Oyster farms Planning around how to maximise oyster growth & minimise environmental interruption Research the topic to inform policy
	Salt marshes/ wetlands – planning for sea level rise	Don't shift the problem downstream
	Barriers & changes to habitat	More policy of illegal structures
	Riparian veg repair	
		A legal system that recognises higher environmental values (higher repercussions for doing the wrong thing).

		Legislation that prevents the majority from doing the right thing.
Other	No boundary/ jurisdiction	[1]Need for consensus between NRM groups Terrestrial/ riparian/aquatic Roles/responsibilities/activities
	Resource conflict /access	Not NRM action
	Holistic – think of issues holistically	N/A More about process in doing something
	Indirect offsets	NRM can influence offsets to localise areas/catchments Public benefit Do they work ? Are they effective?
	Centralisation of NRM knowledge	One stop shop. See [1] above
	Ecosystem impacts from local depletion	Local depletion can be defined in general terms Whole/balance Balancing act What's right Short/long term Can be defined in general terms
Biosecurity	Translocation	
	Exotic pests and diseases	Early identification of marine pests and diseases
	Genetics	
	Marine Stocking	Included artificial reef
	Anchoring vessels offshore	Research effects; understand limitations (anchoring points?)
	Transport	
	Ballast	Best practice
	Disposal of blood waste	Blood waste (management practice – land based)
	Escapes from fish farms	Effects of native fish Antibiotics Business best practice Precedence in Mac harbour
Climate Change	Habitat loss	
	Foreshore degradation	
	Land use/management/ planning	
	Role of Crown	
	Salt marshes/ wetland/ sea level rise	
	Regulatory framework	
	Sea level rise	
	Sp range expansion & contraction	
	New habitat	
		Adaptation & education (resource use)
Water quality & quantity/ purity	Transferred water between estuaries	

	Agricultural runoff	
	Eco - toxins	
	Harmful algal blooms	symptom
	Eutrophication	
	Water storage	
	Water consumption and planning	
	Water table contamination	
	Sewerage/effluent	
	Disposal of blood water	
	Acid sulphate soils	
		Identification of actual cause
		Researching alternative to the cause
		Education – the course to mitigate effects
		Regulation regarding the cause to mitigate effects,
		Establish base line data
		Ongoing monitoring
		Evaluate any new dam storage proposals and possible alternatives (recycle water)
Pollution	Eco toxins	
	Sediments	
	Chemical contamination & guidelines	
	Ballast water	(international guidelines) –no political will. (UV filter)
	Dredging and development	Comparative assessment between dredged areas(changes resulted) and a controlled site Promote and implement best practice
	Water table contamination	
	Increased mining	
	Sewerage effluent	Plans to upgrade – population increase. Re-evaluate sewerage capabilities in areas where development is expected.
	Urbanisation	
	Diffuse & point source	Pump outs of boat water (effluent tanks)
	Tourism & pressure on infrastructure	
	ASS (Acid sulphate soils) - acidification	
	Exploration – oil, gas & mining	
	Fertiliser & iron ore boats	
	Sediment – bottom sediment	
	Chemical inputs	
	Maintenance of infrastructure	
	Anti fouling	
	Oil residues from roads & outboards	
	Nutrients	Improve understanding of nutrient release

		from aquaculture & land use- broad scale & localised (it's dissolved and particulate) Negative & positive environmental impacts Back to science based Rules negate stewardship
		Ambient light & noise impacts on natural environment & systems
		Identify best practice; cause then implement change needed
		Local land services partnerships with OWA
		Currently management is regulated by state and commonwealth policies
		Political and community pressure - improve communication (need to identify alternatives) with community (may not work either)
		National pollution work plan – know identifying impacts – dealing with it through education. (offsets don't work – still damaging environment)
		Community perception. Partnerships with other organisations with similar goals & aspirations.

2b, Non Physical Issues

Non Physical Issue	Key Points	Solutions
Regulation /Legalisation	Process not delivery	Refocus by government and NRM to reduce red tape and reporting regulations
	International guidelines & how they relate locally Red/Green tape	Peak organisations connected to groups – absorbing information – international best practice Government agencies – understanding international guidelines – international best practice Irrespective of what level we currently operate Need to remove duplicate management approaches EBPC audit?
	Planning instruments	Sites, placement of aquaculture farms within estuaries to address tidal flow changes
	Environmental impact assessments	All fisheries not just commercial fisheries
	Fisheries Management Plans	Address equity, sharing, community food requirements Science based plans required
	National planning – identifying food	Seafood considered in planning - council? State & commonwealth level "need to identify seafood".

	Environmental water & chemical guidelines	Understanding value/impact on water Checking guidelines ? satisfactory to health of natural resources. Eg chemical banned in other countries Cultural and linguistic diversity – ability to understand key messages ie use of chemicals Compliance with regulations/ chemical guidelines/– interpreter required Communicate with AWA – where are they up to with this – are they achieving?
		Animal ethics not considered? (food authority and freshness)
		Precautionary based approach -> scientific based (demands are real/$$$)
Relationships	Metrics not only $$$	Recognise value is not just $$$ - maintain cultural bonds and ties Research- of like comparisons Fisher knowledge & anecdotal information & incorporating into decision making processes Recording
	Connectivity	Centralization of database for NRM knowledge Creation of liaison positions
	Fear of celebration	Focus on the positives
	No engagement from the "others"	Formation of partnership groups Alliances Identify commonalities and drivers (commitment and resources)
	Relationships across stakeholders	
	Communication across sectors	Resource sharing process – involving peak bodies & stakeholders to address issues Limited entry policies Focus of shared values rather than benefits (which are different between sectors) -> Policy
	Politics of resource sharing (bias for votes)	
	Unity	
	Mental health-impacts	See relevant organisation/ authority Discussion with relevant authorities to identify appropriate pathways & engagement Appropriate consultation methods before decisions
		Community of practice Education for sustainability - UTAS Framework
Equity	Turf wars - $ & area – NRM Groups	
	Access & equity	Allocation & mechanisms to drive equity
	Divisiveness - sectors	Current model creates division even though our values are similar
	Indigenous to be part of the commercial sector	Hasn't considered indigenous interests historically.

		Funding
	Volunteer representation & - $$$ resourcing costs	
	How much can be taken on & the costs	
	User says & user pays	
		Limitation from no comparable metric (hard to compare values) – commercial vs spiritual
		Education based on facts not hearsay across all sectors
		Who sets the royalty for the resource?
Information	Mischievous & mis information	Labelling seafood. Product of X. Clamping down on supply chain rules. Clarifying labelling rules. Priorities of the new government?? Centralisation of info (database) managed and resourced so it is updated Agreement to focus on saturation of info rather than simple distribution (appropriately resourced ie extension officers) Extending information without bias, from other
	Bias	Extending information without bias, from other regions/fishing/sectors In the right way (understand the correct "way " terminology) Matrix of tool- - Use this method of communication - Low skill low tech – use verbal Relationship Understand the target group & use appropriate "tool"/ method Sustainability reporting (recognized framework) Marketing info, buy in better understanding, appropriately resourced
	Preconception	
	Public opinion	
	Education	In WA getting to young minds. "Adopt a fisherman" Teaches positive info to schools, eating fish, crew? (core role)
	Positiveness of utilizing the resource	More education programs Celebrating success, loaves & fishes Applying for wider awards ie banksia. Assistance around how to promote (self promote) Counter arguing negative stories from overseas Promoting all seafood. Not just Australian
	Ideology	Perception of the right thing
	Maintenance of Traditional knowledge	Local fishing knowledge includes broader ideology Cross sectorial (branches)– (Indigenous, aqua, wild harvest) more strength in unity How to maintain – practice of activity,

		renewing info supported through policy
		Resourcing Active campaign to get around the need to resource info extension/marketing FRDC has budget?? Sponsorship – Coles /Clive Palmer?/ Westpac/Corporate/Social responsibility. Thinking laterally Resourcing of public awareness days (common goal of rec & commercial is occurring). Loaves and fishes
		Don't hear about the good stuff Aust fisheries stocks are being sustainably managed. 70% of fish are imported (not good news) Marketing – chefs talking sustainability

Priorities for future focus (Table 6)

From a collated list of Participants were asked to prioritise

No	Future Focus	Votes
1	Water quality	8
2	Habitat	23
3	Pollution	9
4	Climate change	2
5	Biosecurity	6
6	Marine debris	0
7	Barriers to tidal flow	5
8	TEP's	0
9	Other	1

Discussion and Recommendations

It is clear that the workshop was well organised, planned and facilitated with useful information generated by the participants.

It would also appear that it was a seafood community supported event with the four key seafood community sectors represented as well as other key stakeholder groups. All the participants spent time developing greater understanding about Oceanwatch and NRM and discussing and providing data on a variety of strategic issues to assist Oceanwatch develop a strategic direction.

There is considerable data included in Generated Workshop Data section and it is recommended that Oceanwatch spend time extracting the relevant points. However below are our general recommendations: -

- Distinguish between what is Oceanwatch core work and useful information to provide to other key seafood organisations.
- Be informed by the data and understand the importance of the values and the benefits identified which frame the collected data.
- Understand that many of the benefits are difficult to quantify and therefore should be included in your reporting on this event and within your strategic plan.
- Be mindful that the participants required prompting from the facilitator to commence discussing physical issues.
- Ensure that future Oceanwatch energy is directed towards the Priorities for future focus (Table 6).

Conclusion:

The Oceanwatch Australia Marine Natural Resource Management workshop delivered on 26th of June 2014 at Rydges Airport Sydney was a successful discussion forum. The project was developed and overseen by Oceanwatch Australia in consultation with the workshop facilitator, Rural Training Initiatives P/L.

The workshop provided Oceanwatch stakeholders with the opportunity to understand the value and benefits of marine NRM and to surface issues facing NRM and assist Oceanwatch and to provide solutions to these issues.

Rural Training Initiatives P/L, facilitators of the workshop, was pleased to assist Oceanwatch in delivering a valuable process for the seafood community.