



# **Seagrass-Watch Community Involvement Workshop**

*The University of the South Pacific, Fiji*

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# Part 1

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## OVERVIEW

In July, 2002, a workshop was held at the Marine Studies complex, the University of the South Pacific, Laucala Bay, Fiji. It was attended by 16 participants from Fiji, including representatives from Foundation for the Peoples of the South Pacific, World Wildlife Fund for Nature South Pacific, Ministry for Fisheries & Forestry, Curriculum Development Unit and the University of the South Pacific.

The Workshop was an opportunity for all organisations (both government and non-government) who expressed some interest in Seagrass-Watch monitoring and research to meet, to share information and to develop a strategy for the implementation of the Seagrass-Watch program in Fiji. The workshop was organised by Dr Veikila Vuki of the University of the South Pacific, Marine Science. The workshop leader was Len McKenzie from Seagrass-Watch HQ.

Seagrass-Watch is a scientific global seagrass monitoring program that investigates and documents the status of seagrass resources worldwide and the threats to this important ecosystem.

Seagrasses, which grow at the interface of the land margin and the world's oceans, are threatened by numerous anthropogenic impacts. There is a lack of information on the status and health of seagrasses world wide, particularly in the less economically developed countries. Seagrass-Watch's efforts to develop effective monitoring of known seagrass areas and to map and record uncharted seagrasses in the western Pacific are important first steps in understanding and maintaining seagrass resources worldwide. Synchronous and repeated global sampling of selected environment and plant parameters is critical to comprehending seagrass status and trends; monitoring these ecosystems will reveal both human impacts and natural fluctuations in coastal environments throughout the world.

Seagrass-Watch was developed by the Marine Ecology Group (MEG) at Queensland's Department of Primary Industries & Fisheries (QDPI&F) in conjunction with the CRC Reef, Queensland Parks and Wildlife Service and community (citizen) groups. In this program volunteers collect quality information for coastal management on changes in seagrass meadow characteristics, such as the extent of coverage, position and depth of habitat, species composition, estimates of abundance, presence of dugong feeding trails and possible human impacts. This information provides a reliable early warning system on the status of seagrass resources, and a broad measure of change.

It is also hoped that Seagrass-Watch will integrate with existing education, government, non-government and scientific programs in Fiji to raise community awareness and preserve these important marine ecosystems for the benefit of the people of Fiji.

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## WORKSHOP SUMMARY & RECOMMENDATIONS

The workshop was productive and very successful. The level of interest in establishing the Seagrass-Watch in Fiji was high. It is hoped that Seagrass-Watch will integrate with existing education, government, non-government and scientific programs in Fiji to raise community awareness and preserve these important marine ecosystems for the benefit of the people of Fiji.

### ***The implementation strategy***

It was the recommendation of the workshop that implementation of Seagrass-Watch in Fiji would be best achieved via the following two methods and that these methods should not be conducted independently of the other, but rather as a cooperative and complimentary response. The methods are:

1. Integrating into the Fiji Locally Managed Marine Area (FLMMA) Network. Also the Ministry for Fisheries & Forests could integrate Seagrass-Watch through its Fisheries Impact Assessments (FIAs), Marine Protected Areas (MPAs) programme and Marine Resource Inventory Surveys (MRISs). 410 qoliqoli's (areas defining traditional ownership of coastal resources – customary fishing rights ownership) have been recognised in Fiji and a resource inventory will be conducted over the next 4 years. The Geographic Information System (GIS) generated from the MRIS could suggest critical seagrass habitats which need to be monitored.
2. Integrating into the School curriculums. The Fiji school curriculum is currently under review, and submissions are being taken on ways it could be improved to make it more relevant. Curriculum Development Unit (CDU)

It was recommended that the most appropriate way to progress is the formation of a Seagrass-Watch Group: a group which includes representatives from all interested stakeholders.

### ***The communication strategy***

The Community Radio broadcasts need to be re-instated for marine awareness, and broadcast in all languages. Needs to be a Hindi broadcast for info on seagrass to Fijian Indian artisanal fishers – qoliqoli area seagrass management. Most Saturday newspapers have an Eco column and articles can be provided.

### ***Immediate actions***

Two secondary schools have currently expressed interest in participating in the Seagrass-Watch program in Fiji. They are Nadroga Navosa High School (Cuvu) and St. Johns College Cawaci (Ovalau).

Nadroga Navosa High School is in the Cuvu Tikina on western Viti Levu. There are very large seagrass meadows in Cuvu Bay, but they are threatened by turbid flood waters from the Voua River. Anecdotal reports suggest that the seagrasses in the

province are in poor condition, as seagrasses are losing their leaves and there are no longer any edible invertebrates in the seagrass meadows.

At Cawaci, the student run “Environment and Landscape Group” from Saint Johns College plan to monitor seagrasses on the fringing reef flat in front of the college. In recent years the reef has experienced blooms of green algae (seaweed) which may indicate high levels of nutrients and disturbance. Seagrass-Watch monitoring will provide information on condition and health of the reef.

The establishment of Seagrass-Watch in these schools will be used to assess the adequacy of the protocols and the field guides.



# Part 2

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## Focus Groups

*Aim: To contribute information/ideas for developing a strategy  
to implement the Seagrass-Watch program in Fiji.*

Focus groups were asked to provide responses to the following questions:

- How can Seagrass-Watch integrate with existing programs?
- How can Seagrass-Watch involve schools, village communities, conservation groups, *etc*?
- How can Seagrass-Watch results be communicated effectively?
- How can Seagrass-Watch fit into existing strategies?
- How can Seagrass-Watch be improved/tailored to local needs?
- How can Seagrass-Watch activities be coordinated on-ground?

# Focus Group 1.

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## Schools

Attendees: Wasevina Turaga (CDU), Subashni Appana (USP), Make Liku Movono (USP) & Salote Waqairatu (USP)

### **Issue**

### **• Comment/Solution**

#### *Integration with school curriculum*

- Provide simple notes for pre- and primary-school on environmental science, e.g., “Cows eat grass for food. Fish eat seagrass for food.”
- Integrate seagrass into secondary school Basic Sciences, as they already have a coral reef and mangrove unit booklets
- Form 7 – introduce seagrass aspect in Marine-physics, Chemistry and Biology

#### *Involving schools*

- Promote seawater aquariums for pre- and primary-schools
- Labs and posters for forms 3-7
- Projects and seminars – tertiary level also guest lecturers

#### *Involving village communities*

- *Bose ni tikina* – local village youth programmes for fishing and awareness (quarterly)
- *Bose ni yasana* – regional meeting that monitors annually
- Seagrass-Watch clips in vernacular for youth
- Division/District workshops

#### *Effective communication*

- Provide short articles to BSSP (Biological Society of the South Pacific) newsletter
- Vernacular documentaries – Fiji TV, radio, newspapers
- Implement a “*Seagrass Day*” in school calendars, include activities (eg. Seagrass transplant competition, oratories, dramas, posters, field trips)
- Schools computers could have a seagrass homepage on desktop wallpaper – which could be updated monthly
- Publication of all seagrass information in vernacular

#### *New strategies*

- Environmental Bill – could pass laws to protect seagrass

#### *On-ground Coordination*

- Could be coordinated through the CDU office – outreach to schools – inexpensive and complete.

# Focus Group 2.

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## Fisheries

*Attendees: Nalini Singh (MFF), Stanley Qalovaki (MFF), Shirleen Bala (MFF)*

### ***Issue***

### ***• Comment/Solution***

#### *Integration with existing programs*

- Fiji Locally Managed Marine Area (FLMMA) Network – conservation and sustainable management involving NGO's, USP, MFF and Hoteliers
- Participatory Learning & Action (PLA)
- Marine Resources Inventory Surveys (MRIS) to include seagrass in the GIS mapping, which Lands, Forestry and NGO can then use to assist with planning.
- Marine Protected Areas (MPAs) (approximately 15 in Fiji) could incorporate Seagrass-Watch.

#### *Involving schools*

- Stakeholders (eg. MFF) in schools curriculum's (CDU) to suggest changes to curriculum for forms 6 & 7 biology and geography.
- Need to stress the importance of seagrasses, such as the relationship between seagrass and sea cucumbers.
- Use Seagrass-Watch sites through village schools

#### *Effective communication*

- To restart the Community radio broadcasts as a medium for awareness building
- Need to broadcast in all languages

#### *Complimenting existing strategies*

- MRIS - long term monitoring
- MFF data from Fisheries Impact Assessments (FIAs) would become useful to Seagrass-Watch and vice versa. Seagrass-Watch would bring in monitoring aspect instead of "one-off" assessment.

#### *On-ground Coordination*

- FLMMA at the local community level, Turaga Ni Koro (TNK)
- Candidate must liase well with the local communities, TNKs, Fisheries Extension Officers and Fish Wardens



- MRIS by Fisheries of all Qoliqoli in Fiji over next 4 years

*Tailoring to local needs*

- Importance to use vernacular on ID sheets
- Inclusion of local names of animals found in seagrass meadows in vernacular (invertebrates such as - *Anadara spp.*, *Lambis lambis*, *Tripneustes*, *beche-de-mer*, *Dollabella*)
- All booklets/information papers be in vernacular/local language
- Include the importance of different marine organisms found on seagrass meadows
- Introduce Seagrass-Watch into community programme, setting aside certain days of the month to Seagrass-Watch
- Explain/emphasize role of seagrass in relation to the food web/chain

*Coordination*

- Community based coordinator
- Interest is from community and not organisation, to where it will be a sustainable project
- Network – a seagrass group which works with community representatives

# Appendix



## The University of the South Pacific

USP is the regional University serving Cook Islands, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu and Vanuatu

your education... your career... your future

### A Seagrass Workshop On "Seagrass-Watch"

You are cordially invited to a one-day seagrass-watch workshop

"Seagrass- watch" - A community involvement workshop.

**Tuesday 2 July at 10.00am-3.00pm, Marine Studies Complex, lower campus, Laucala.**

The workshop will focus on seagrass ecosystem, importance and monitoring using "seagrass-watch" methods.

**All Welcome**

**Lunch will be provided.**

All confirmation should be submitted by Friday, June 28, 2002.

**For further information please contact:**

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# Agenda

- 10:15am **Welcome to the Seagrass-Watch Workshop & prayer** (Veikila Vuki)
- 10:20am Group introductions
- 10:30am Seagrass-Watch presentation (Len McKenzie)
- Seagrasses & their importance
  - How seagrasses are damaged & how they are used as monitors of ecological health
  - Introduction to the Seagrass-Watch program
  - Seagrass-Watch in the Western Pacific
  - Seagrass-Watch methods
  - Example of Seagrass-Watch results & how they are used for management from Queensland
  - Seagrass-Watch in Fiji
- 11:30am Question time
- 12:00 midday Focus Groups (Veikila Vuki)
- Schools
  - Fisheries
  - Communities
- 1:00pm **Lunch**
- 2:00pm Focus Groups *continued...*
- 2:45pm Presentations from each Focus Group of issues discussed and suggestions and/or approaches
- 3:00pm Wrap-up (Len McKenzie)
- 3:15pm **Thankyou & Close** (Veikila Vuki)

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