

Seagrass-Watch E-Bulletin



31 March 2014

Seagrass-Watch's electronic news service, providing marine and coastal news of international and national interest. Abbreviated articles are presented with links to their source. Seagrass-Watch HQ recommends that readers exercise their own skill and care with respect to their use of the information in this bulletin and that readers carefully evaluate the accuracy, currency, completeness and relevance of the material in the bulletin for their purposes. You are free to distribute it amongst your own networks.

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NEWS

What's an Acre of Seagrass Worth? \$80,000 in Fish Alone (Australia)

31 March 2014, by Philine zu Ermgassen & Mark Spalding, *National Geographic*

For decades, dire tales of collapsing fish stocks were told, only to fall on deaf ears. Then, in a 2008 report, "Sunken Billions," the World Bank and the FAO began to couch the problem in entirely new terms – financial terms. They estimated that \$50 billion was lost each year due to poor fisheries management. At last, the conservation community discovered how to get attention, but it raised a new question: what to do about it? To truly turn the tide, they knew, meant not only taking fewer fish, but also producing more. That's where seagrass, mangroves, and other habitat come in. These habitats are nurseries to new generations of commercially valuable fish and it is time we recognize the value of those important ocean services on Earth's balance sheet.

In places where habitat loss harms fish, protection and restoration are a very real opportunity. A new study, supported by The Nature Conservancy, tells us just how real. The report tells us that each square meter of seagrass habitat we save in southern Australia could add nearly one kilogram of fish each year. Said in a different way, every acre of seagrass could add US\$80,000 of commercially important fish to the oceans every year. No one is blind to the fact that seagrass restoration is both technically challenging and financially expensive, but these figures show that the benefits far outweigh the costs. Some restoration efforts could pay for themselves in just five years. In these terms, seagrass restoration is a no brainer. And yet, as with so many projects where the costs are large and the

benefits are shared, money can impede getting seeds in the ground. On an encouraging note, however, the story of the financial impact of a small patch of seagrass in a small part of the world is but one among the many that our ocean has to tell. Valuing ocean wealth stands to change everything. It represents a fundamentally new model for the global conservation conversation. It has been reviewed and tested by the scientific community.

We can use it to build a complete accounting of coastal wealth that includes jobs, food security, and tourism income into an honest and compelling bottom line figure. Suddenly, that little patch of seagrass in South Australia is no longer “dead space” able to be snuffed out by a change in shipping lanes, run-off or pollution, but rather a storehouse of wealth. Humans crave quantification. Numbers turn heads. Numbers change policies. Numbers are compelling. But, we must act fast. Seagrasses are being lost every minute we wait. And, it's costing us untold billions.
[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

Proposed projects 'will destroy Krabi' (Thailand)

07 March 2014, The Nation

Fossilised shells at a beach dating back 75 million years and over 10,000 rai of the country's second-largest seagrass area in Krabi would be destroyed if the coal seaport and coal-fired power-plant project go ahead, an environmental watch agency warned yesterday. Adding to the concerns over the project, the local tourism association in Koh Lanta is worried that the project would jeopardise the area's tourism, with the industry generating between Bt1.4 billion and Bt1.5 billion annually for the local economy.

In response to the backlash, a consultancy company hired by the Electricity Generating Authority of Thailand (Egat), which would construct the plant, will on Sunday listen to public concerns about the project in Krabi. The 700MW power plant would be fuelled by bituminous and sub-bituminous coal, which would likely be imported from Indonesia, Australia and Africa. Construction of the Bt30-billion facility is scheduled to be completed in 2019. Egat is conducting an environmental and health-impact assessment of the project, which is expected to be completed soon.

A Greenpeace report states that the marine life surrounding the proposed project and the sea route to transport coal to the port includes the seagrass area, which covers 17,725 rai, dugongs, nursing grounds for aquatic species, a mangrove forest and over 21 species of wild birds.

[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

Getting firm on fertilizer (USA)

06 March 2014, Florida Today

Fertilizing yards during summer months may soon be illegal in unincorporated Brevard County, in an effort to sow greener pastures for the Indian River Lagoon. If commissioners approve the rainy-season fertilizer ban tonight, Brevard would join more than 50 local governments statewide — including several within the county — that already have done so.

The ban would effect only unincorporated parts of the county and would run from June 1 to Sept. 30. Other new rules under consideration include prohibiting use of phosphate fertilizer without a soil test first to prove it's needed, requiring at least 50 percent slow-release nitrogen fertilizer, and no longer allowing people who use deflector shields on spreaders to fertilize within 3 feet of waters.

In recent years, unprecedented algae blooms have choked off tens of thousands of acres of seagrass in the lagoon. Seagrass is important source of food and shelter for marine life in the lagoon. The seagrass die-off was followed by the mysterious deaths of large numbers of manatees, dolphins and pelicans. Excessive nitrogen and phosphorous — the active ingredients in most fertilizer — in the lagoon is widely suspected of feeding the algae blooms.

[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

Senate inquiry into failure of environmental offsets (Australia)

04 March 2014, Sydney Morning Herald

The use of environmental offsets to compensate for damage done by major mining will come under scrutiny after the Greens secured Labor's backing for a Senate Inquiry. The inquiry, likely to be voted on in the Senate on Wednesday, will examine whether offsets — such as the purchase of land elsewhere for its preservation — are adequately monitored and effective when used as conditions for federal approvals.

The inquiry will focus in particular on several major projects, including the Bimblebox Nature Refuge, an 8000-hectare area under threat from a coal mine owned by federal MP and billionaire Clive Palmer. Also to be examined will be the offsets linked to the Abbot Point port expansion in Queensland which will require the disposal of millions of tonnes of dredge spoil into the Great Barrier Reef, and Whitehaven's Maules Creek open-cut coal mine, the largest new coal project under construction in Australia. The inquiry will report by June 16, two weeks before the end of the current Senate's term.

[more..... http://www.seagrasswatch.org/news.html](http://www.seagrasswatch.org/news.html)

Great Barrier Reef: government website to justify dredging 'not accurate' (Australia)

03 March 2014, *The Guardian*

A Queensland government website aimed at correcting "false and extreme claims" about the Great Barrier Reef is itself highly misleading, according to a leading marine scientist. The site, called Reef Facts, addresses the contentious decision to allow the dredging and dumping of 5m tonnes of seabed sediment within the Great Barrier Reef marine park in order to expand the Abbot Point port.

Citing research by the Australian Institute of Marine Science, the site attributes the loss of coral cover on the reef to storms, crown of thorns starfish and bleaching. Pollution from port development and dredging is "minor", the site states. The Abbot Point dredging will be done "responsibly within strict environmental limits", the website claims, with the sediment dumped 40km from the nearest reef. It points out the disposal area covers 0.0005% of the total area of the marine park. Andrew Powell, Queensland's environment minister, said the government was putting "facts ahead of opinion and hysteria".

Jon Brodie, a research scientist at the Centre for Tropical Water and Aquatic Ecosystem Research at James Cook University, told Guardian Australia that the Reef Facts website is "not very accurate". "It's a political document and it's best to think of it as that," he said. "It's a misdirection. Brodie said the website made little mention of the impact of climate change and downplayed the sheer amount of spoil that would be placed onto the reef by the Abbot Point project and others in the future. "The average sediment coming from rivers onto the reef is 6m tonnes a year, so 5m from Abbot Point over three years isn't an insignificant amount by any means," he said. "The concern is the precedent because there's a huge amount of dredging to come in Townsville, Cairns and Gladstone. "The [park authority] itself said there will be damage done to the corals and seagrasses. There are perfectly good other alternatives that would cause less damage, so why did we choose the most damaging? It's a slap in the face to Unesco."

more..... <http://www.seagrasswatch.org/news.html>

Report from Great Barrier Reef Marine Park Authority warned against waste dumping plan (Australia)

03 March 2014, *Brisbane Times*

The federal government ignored scientific advice when the dumping of millions of tonnes of dredging waste from a mining project into the Great Barrier Reef was approved. Documents released under freedom of information laws show the Great Barrier Reef Marine Park Authority was warned that approval should not be granted for dumping sediment waste into the reef to make way for a coal project. "The proposal to dredge and dispose of up to 1.6 million cubic metres of sediment per year ... has the potential to cause long-term irreversible harm to areas of the Great Barrier Reef," the authority's own report reads.

Under the proposal, the seabed would be dredged to create berths for six coal ships for the Abbot Point coal port expansion. The dredged waste would then be dumped in the Great Barrier Reef. The report's author warned particularly of the effects on seagrass meadows and coral reefs.

Queensland campaigner for Greenpeace Louise Mathieson said though it may be true the immediate disposal area has no seagrass, muddy plumes can spread for up to 80 kilometres. In its dredging permit assessment, the authority states that seagrass in the vicinity of the dredging activity is likely to be affected by the dumping, primarily by reduced light and increased water sediment.

more..... <http://www.seagrasswatch.org/news.html>

Rare seagrass under threat (Malaysia)

02 March 2014, *The Sun Daily*

A rare seagrass, found only in Middle Bank in Penang and Johor, is under threat here from proposed reclamation project. Tanjung Bungah assemblyman Teh Yee Cheu said the seagrass needed to be preserved and the area gazetted as a marine conservation site. He said the Penang Development Corporation (PDC) has called for a Request for Proposal (RFP) to reclaim a patch of sea where the seagrass is growing. He said the other area where seagrass grows is off Gelang Patah in Johor.

Teh, an environmentalist, said the 125-ha site was the second largest intertidal bed after the one in Johor and was visible during low tide. Reclaiming Middle Bank threatens the ecological balance as the seagrass bed is an important part of the food chain and an important breeding ground for marine life," he told theSun.

When contacted, State Environment Committee chairman Phee Boon Poh said the administration was aware of concern over the proposed reclamation. He said the state was studying the hydroflow as well as the geographical and physical outlook for the project. "Sure it remains," he told theSun via a text message when asked if the seagrass bed was going to be preserved.

more..... <http://www.seagrasswatch.org/news.html>

Reef future fires passionate studio debate (Australia)

28 Feb 2014, 730 Report, ABC

The stampede to unlock one of the world's richest coal seams has stirred up an almighty debate over the future of the Great Barrier Reef. The coal terminal at Abbot Point, near Bowen, will need a large-scale dredging program to accommodate more ships. And it's that dredge spoil that's caused outrage. It'll be dumped in the World Heritage area. To try to get to the bottom of the issue [you can view the debate] by Environment Minister Andrew Powell and Greens Senator Larissa Waters.

more..... <http://www.seagrasswatch.org/news.html>

Boaters are damaging seagrass off Key Biscayne, UM researchers say (FL, USA)

28 February 2013, MiamiHerald.com

Boaters are severely damaging the seagrass in the Mashta Flats, a pivotal part of the bay off Key Biscayne that provides food and shelter for marine life, acts as a buffer against land erosion and protects the mainland from storms. That was the conclusion of a team of marine biologists and graduate research assistants from the University of Miami, who presented their findings Tuesday at the Key Biscayne Village Council meeting.

"Significant damage is being done," said Diego Lirman, Ph.D, an associate professor of marine biology and fisheries at The University of Miami Rosenstiel School of Marine and Atmospheric Science. Lirman showed the council members high-resolution seagrass images that revealed 543 scars from propellers, anchors and hulls across the flat's shallow coastal floor. About 20 percent of the 83 acres that comprise the Mashta Flats, which is part of the Biscayne Bay Aquatic Preserve, are found within Key Biscayne's jurisdiction. The study showed that seagrass covers nearly 48 percent of Key Biscayne's area of the flat.

Lirman, along with his research team said a comprehensive seagrass protection and restoration program for Mashta Flats would be needed "to maintain natural resources for future generations." Their recommendations consisted of allowing access the flat to kayaks, canoes and paddle boards while restricting boating and walking access. They also recommended educating beach goers, boaters and the general public on how to protect the flat, as well as organizing trash clean-up and restoration initiatives.

more..... <http://www.seagrasswatch.org/news.html>

Great Barrier Reef's future bleak, IPCC report warns (Australia)

31 March 2014, The Australian

The disappearing Great Barrier Reef could be irreparably damaged within 25 years unless more is done to reduce carbon emissions, warns a major UN report. Speaking in Sydney on Monday, lead authors of the UN's Intergovernmental Panel on Climate Change (IPCC) report said the effects on Australia's economy, society and population were already being felt with potentially devastating impacts a "very real and immediate" danger.

Professors Lesley Hughes and Ove Hoegh-Guldberg claim Australia has experienced a near one degree Celsius temperature rise over the past 100 years and faces a further rise of up to 5C over the next century unless carbon emissions are quickly reduced.

"If we get a rise of two degrees, the prospect for the Great Barrier Reef is very, very poor," said Prof Hoegh-Guldberg, a University of Queensland marine biologist. "It is clear that failing to act is simply not an option." The UN-led IPCC report, Climate Change 2014: Impacts, Adaptation and Vulnerability was produced by 309 authors and editors from 70 countries and backed by governments around the world. Prof Hoegh-Guldberg conceded that the report would have its critics but stood by the language used in the report, which he said should be interpreted as "alarming but not alarmist".

Full story: <http://www.theaustralian.com.au/national-affairs/policy/great-barrier-reefs-future-bleak-ipcc-report-warns/story-e6frg6xf-1226869840665>

Great Barrier Reef: government faces second legal challenge on dumping (Australia)

24 March 2014, The Guardian

The federal government is facing a second legal challenge over its decision to allow excavated seabed to be dumped in the Great Barrier Reef marine park. Documents will be lodged with Brisbane's federal court on Monday to challenge the dredging and dumping project that will expand the Abbot Point port near the Queensland town of Bowen.

The Mackay Conservation Group, which is bringing the legal action, claims environment minister Greg Hunt has contravened his international obligations by allowing the expansion to proceed. The group will argue that under the federal Environment Protection and Biodiversity Conservation Act the government is required to fully protect world heritage-listed areas. The legal action, to be handled by lawyers at the Queensland Environmental Defenders Office,

has been bolstered by a \$150,000 crowdfunding campaign from activist group GetUp!. Conservationists hope the case will set a legal precedent to help protect other world heritage sites.

In December Hunt approved an expansion of Abbot Point which will see five million tonnes of sediment dredged from the seabed in order to allow ships to access the port, which will export coal from newly cut mines in central Queensland. The government has insisted the expansion plan will have a minimal, temporary impact upon the reef. However, some scientists have argued the dumped spoil will add to the pressures faced by the reef by smothering sea grasses, used as food by turtles and dugongs, and coral.

Full story: <http://www.theguardian.com/environment/2014/mar/23/great-barrier-reef-government-faces-second-legal-challenge-on-dumping>

CONFERENCES

The 11th International Seagrass Biology Workshop (ISBW11) (China, 7-10 November 2014)

Declining seagrasses in a changing world.

The International Seagrass Biology Workshop (ISBW) gives a good chance for the scientists working on various aspects of seagrass ecosystems to come together and discuss their latest achievements. The ISBW11 will be held from 7-10 November 2014 at Sanya city, Hainan Province, China, organized by South China Sea Institute of Oceanology, Chinese Academy of Sciences. ISBW11 convener is Dr Xiaoping Haung.

The following symposia themes were chosen for ISBW11:

- 1) Key Ecological Processes;
- 2) Ecosystem Vulnerability and Resilience;
- 3) Biodiversity and Ecosystem Services;
- 4) Management and Restoration.

Important dates:

- 22 March 2014 - Registration open
- 30 May 2014 - Opening of online payment
- 30 May 2014 - Beginning of hotel reservation
- 10 August 2014 - The last day of abstract submission
- 01 September 2014 - End of early bird payment
- 25 September 2014 - Notification of abstract acceptance
- 15 October 2014 - End of online payment
- 25 October 2014 - Notification of final list of participants to the ISBW11
- 07 November 2014 - ISBW11 begins

for more information, visit <http://isbw11.csp.escience.cn/dct/page/1>

SEAGRASS-WATCH on YouTube

Seagrass: Pastures of the sea <http://www.youtube.com/watch?v=66Y5vgsWj20> or <http://www.seagrasswatch.org/seagrass.html>

Presentation on what seagrasses are and why they are important (over 32,622 views to date)

...seagrass matters blog

World Seagrass Association blog <http://wsa.seagrassonline.org/blog/>

Keep up to date on what's happening around the world from the WSA with regular updates from WSA President Dr Giuseppe Di Carlo and *notes from the field* by Siti Yaakub.

FROM HQ

Past E-bulletins <http://www.seagrasswatch.org/publications.html#ebulletin>

Frequently Asked Questions <http://www.seagrasswatch.org/faq.html>

Seagrass-Watch Magazine <http://www.seagrasswatch.org/magazine.html>

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Giveaways <http://www.seagrasswatch.org/shop.html#GIVE1>

Future sampling dates <http://www.seagrasswatch.org/sampling.html>

Handy Seagrass Links <http://www.seagrasswatch.org/links.html>

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Seagrass-Watch E- Bulletin is compiled by Len McKenzie & Rudi Yoshida.