28 February 2018

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IN THIS BULLETIN

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NEWS

Orth to be honored as Virginia Outstanding Scientist (VA, USA)

28 February 2018, Gloucester Mathews Gazette Journal

When he was an undergraduate student, Dr. Robert "JJ" Orth had already been rejected by several grad schools and was just about to give up on his plans for a career in science and enlist in the Navy when a call to the Virginia Institute of Science changed his life. Tonight, Orth - an expert in seagrass biology at VIMS - will be honored as one of three Virginia Outstanding Scientists for 2018 by Gov. Ralph Northam as part of the Outstanding STEM Awards.

Orth's path began in college when he was a sophomore studying biology at Rutgers. His father introduced him to a then up-and-coming field called oceanography. After completing his bachelor's degree, a lab partner who was studying physiology told Orth of a marine institute in Virginia - the Virginia Institute of Marine Science. Today Dr. Orth' work includes seagrass biology and ecology with a focus on restoration science. Among his achievements is a seagrass mapping program that is used by the federal government, Virginia and Maryland.

more…….. http://www.seagrasswatch.org/news.html

A day to play (FL, USA)

28 February 2018, Splash Pensacola Beach

Seagrasses are underwater plants that provide homes to many different types of marine life. To learn more about seagrasses, marine creatures that live in seagrasses and ways to protect them, come to the 18th annual Seagrass Awareness Celebration Saturday, March 24, from 10 a.m.-2 p.m. at Shoreline Park South in Gulf Breeze.

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Court rejected claims that Adani posed threat to Great Barrier Reef (QLD, Australia)

28 February 2018, The Australian

An international campaign has successfully branded Adani's proposed Carmichael coal mine a "carbon bomb" that is set to blow up the Great Barrier Reef. But the Galilee Basin is a long way from the Queensland coast and even further from the reef.

Carmichael may pose genuine environmental concerns in terms of water use, land clearing and habitat loss. There may well be environmental impacts from increased shipping through reef waters and from an expanded Abbot Point coal terminal near wetlands. But the bigger claim that Adani poses an existential threat to the Great Barrier Reef that can be avoided by banning the mine has been tested in the Federal Court and rejected.

The Australian Conservation Foundation took the federal environment minister to court claiming he failed to take account of the climate change impact of the Adani project and potential harm to the reef when he approved it. ACF argued the harmful effects of climate change (ocean temperature and acidification) were the most serious threat to the reef, would get worse, and depended on how effectively the issue of rising levels of greenhouse gases was addressed worldwide. ACF asked the Federal Court to find the environment minister should have taken greenhouse gases from combustion of coal from the mine into greater account. However, the federal minister argued that any increase in global greenhouse gas emissions from the Adani mine would depend on a number of variables. The Federal Court did not rule on whether the Adani mine was a good thing or not. But the trial judge supported the environment minister's right to make the decision he did.

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Long-awaited dredging project to proceed in Trinity Inlet (QLD, Australia)

28 February 2018, TropicNow

Dredging of Trinity Inlet is expected to start in early 2019 after the State Co-ordinator General today approved the $120 million project. Economic modelling suggests the $120 million project will generate an estimated $850 million benefit to the local tourism sector over the next two decades with increased passenger expenditure, port charges and associated supplies and servicing. The approval by the Co-ordinator General comes with 290 conditions, aimed at protecting water quality and the Great Barrier Reef. The project faces just one hurdle, with approval from the Federal Government required before it can proceed.

Today's approval has already drawn fire from a range of critics on both sides of the political divide. Port advocates claim it will only extend the inlet's capabilities to welcome larger ships for another decade, while environmentalists say the project should not proceed due to the Inlet's proximity to the Great Barrier Reef. The approved project reducing the volume of dredging by 77 per cent compared to the previous LNP Government plan, down from 4.4 million cubic metres to 1 million cubic metres. All capital dredge material will be placed on land rather than at sea as previously proposed.

more…….. http://www.seagrasswatch.org/news.html

Chilika lake largest habitat of Irrawaddy dolphins globally (India)

27 February 2018, India Today

The Chilika lake in Odisha has emerged as the single largest habitat of Irrawaddy dolphins in the world with the spotting of 155 such animals, a Chilika Development Authority (CDA) official said. The finding is based on the preliminary report of the first ever Annual Monitoring of the lake held on Saturday, CDA Chief Executive Susanta Nanda said. The Annual Monitoring was conducted by the CDA to count the number of the marine mammals and to study the hydrological impacts of removal of pen culture (locally known as gherries), he said yesterday.

The number is more compared to the last years figure of around 100 dolphins during the annual census, Nanda said. While dolphins are seen in different parts of the lake has raised the hope of eco-tourism, Nanda said high degree of cautions was necessary to preserve them by taking up responsible tourism. The monitoring also revealed that the lake houses around 0.9 million birds which is similar to the trend of population over the years.

The seagrass bed which was reduced to 86 square km in 2016 has now shown a marked improvement and with ground trothing stands at 135 sq km indicating improved hydrological condition of the lake. The use of zero nets for fishing has also been reduced significantly, but they still pose the maximum threats to the eco-system of the lake as they increase siltation.

more…….. http://www.seagrasswatch.org/news.html

Study found that fisheries discarding edible fish, pose a threat to food security (Sri Lanka)

26 February 2018, Tech Explorist (press release)

New research suggests small-scale artisanal fisheries in Sri Lanka are throwing away more marine species than they keep. The study conducted by Cardiff University and Swansea University in collaboration with Susantha Udagedara of the Blue Resources Trust investigated small-scale fishers in Sri Lanka were throwing away more than 50 fish for every trip they made.

Scientists investigated the amount and sizes of fish that were being discarded at a landing site in Puttalam Lagoon. For all 63 fishing trips examined over the course of a week, all catches were sorted on land and no fish were returned to the sea. They recorded 2,752 fish being thrown away. Notwithstanding the reason for rejecting them was not always clear, fish might have been perceived too small, or not significant enough to sell. In all cases, fishers caught many species they weren't originally targeting. These were frequently juvenile fish, prominent to the sustainability of the lagoon. Of the 62 species recorded in the survey, more than 82% were routinely discarded. 32% of people living in the lagoon, typical of the kind found in the country, are in poverty – equating to 5,000 households. The team calculated that bycatch could provide three fish a day for every household.

Benjamin Jones, a researcher at the Sustainable Places Research Institute and lead author of the study, said, "In this era of increasing food insecurity, these findings represent a serious concern for Sri Lanka. These discarded fish could have helped to feed the poorest people living in nearby communities." Co-author Dr. Richard Unsworth of Swansea University said, "These alarming findings add to other similar observations made by our team across the Indo-Pacific region where many fish are commonly wasted in even small-scale fisheries. This places the food security of dependent people clearly in doubt." All fishers said they preferred fishing in seagrass meadows because of the abundance of fish they can catch there.

more…….. http://www.seagrasswatch.org/news.html

Lagoon report shows a waterway in peril (FL, USA)

22 February 2018, Florida Today

The Indian River Lagoon flunked by most measures on a regional environmental group's first report card of the estuary's ecological health. The Marine Resources Council, a nonprofit group based in Palm Bay, unveiled early findings from a two-year, $180,000 study of the lagoon's health - the estuary's first ecological report card of sorts. The study was funded almost entirely from local foundations and private donors, and included a $47,000 grant from the National Estuary Program.

MRC examined various segments of the lagoon, looking at 20 years of water quality and habitat data, including measures of chlorophyll, nitrogen, phosphorus, seagrass and the typical cloudiness of the water. They divided the lagoon into 10 areas and created a standardized scoring system, ranging from 0 to 100. The report card provides a baseline for comparison of lagoon restoration efforts. It was inspired by the Chesapeake Bay Foundation's annual community report and is based on repeatable scientific methods to measure progress of restoration efforts. MRC assigned various lagoon segments numerical scores, based on how close they came to meeting established targets for seagrass growth, water pollution reductions and other parameters.

In 2016 and 2015, no section of the lagoon passed. In 2014, the Mosquito Lagoon passed MRC's scoring criteria. More than half the lagoon's seagrass died off in 2011 when a "superbloom" of algae fouled most of the lagoon, blocking sunlight from reaching the seagrass. Duane DeFreese, executive director of the Indian River Lagoon

Council, does not expect much state money for the lagoon this year. So he urged the community to push state representatives for recurring funding for the lagoon. Brevard County's half-cent sales tax is expected to raise $340 million over 10 years for lagoon cleanups, said Brandon Smith, environmental specialist with Brevard County. Much of that money will go toward dredging out organic muck, which clouds up the lagoon, blocking sunlight to seagrass and fueling excess algae growth.
more…….. http://www.seagrasswatch.org/news.html

Seychelles announces two new marine protected areas the size of Great Britain (Seychelles)
22 February 2018, Mongabay.com

The government of Seychelles has announced the creation of two new marine protected areas covering 210,000 square kilometers, the size of the island of Great Britain. The first marine protected area includes 74,400 square kilometers (28,700 square miles) of waters surrounding the extremely isolated Aldabra archipelago, a UNESCO World Heritage Site that has remained largely untouched by people. The Aldabra Atoll is home to the elusive dugong (*Dugong dugon*) and the world's largest population of about 100,000 rare giant tortoises (*Aldabrachelys gigantea*). The islands are also important nesting grounds for hawksbill turtles (*Eretmochelys imbricata*) and green turtles (*Chelonia mydas*).

The Seychelles government designated the two new marine protected areas as part of a debt-for-nature deal drawn up with the help of TNC. The deal allows Seychelles to restructure part of its national debt in exchange for its commitment to increase marine protection from 0.04 percent of its exclusive economic zone (EEZ) to 30 percent. The debt-for-nature swap involves private funders such as the Leonardo DiCaprio Foundation, China Global Conservation Fund of TNC, The Jeremy and Hannelore Grantham Environmental Trust, Lyda Hill Foundation, Oak Foundation, Oceans 5, Turnbull Burnstein Family Charitable Fund, and Waitt Foundation.
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This adorable, thumbnail-sized pygmy squid is a new species (QLD, Australia)
22 February 2018, Earth Touch News

James Cook University researcher Jan Strugnell and the Australian Museum Research Institute's Mandy Reid recently helped to add a new name to the roster of Australia's small-time squid. Meet the Hallam's pygmy squid, officially known as *Idiosepius hallami*.

Like many species discoveries, this one got its start somewhere you might not expect: in a museum. Strugnell and Reid first stumbled across their squid subject in the preserved specimen collection of the Australian Museum in Sydney, and the find sent them on a mission to collect additional specimens, so these could be specially preserved for molecular sequencing. On one such field trip, the collected squid surprised the researchers by putting on a mating display right there in their petri dish.

The Hallam's pygmy squid can be found in the waters of eastern Australia, from Queensland's Shoalwater Bay to Narooma in southern New South Wales. The animals may be tiny, Reid notes, but studying them has broader implications for conservation. They live among mangroves and seagrass, which are under threat and are among the planet's most effective carbon absorbers. So, an increased understanding of these habitats and what lives in them is of great importance.
more…….. http://www.seagrasswatch.org/news.html

Plantwatch: seagrass meadows are vital – but in serious decline (UK)
21 February 2018, The Guardian

Meadows of seagrass are one of our great but sorely neglected wild plant spectacles. Seagrasses around the UK are in serious decline, though, and their immense reservoirs of carbon are being released. Development and dredging are to blame, as well as pollution from sewage and farming washing huge amounts of nutrients into the sea, which kills the seagrasses. Old sewage plants overflow with untreated sewage during heavy rainfalls, which is illegal but common. And excessive nutrients from livestock waste slurry runs off into rivers and ends up in the sea.
more…….. http://www.seagrasswatch.org/news.html

Proper Governance Needed To Protect Multi-Million MPAs (Bahamas)
20 February 2018, Bahamas Tribune

The multi-million dollar benefits generated by the Bahamas' Marine Protected Areas (MPA) will be endangered unless proper management systems are implemented, a study has warned. An economic valuation of ecosystems in the Bahamas' 40 MPAs, conducted for local environmental organisations, said the "economic value of the fisheries and tourism sectors" is "at risk" unless the necessary financing and governance systems are put in place. The report, conducted by the Natural Capital Project, said just 10 per cent of the Bahamas' MPAs possess final management

plans while another 15 have draft versions. This means that less than half the nation's MPAs are overseen by properly structured governance frameworks.

The specific threats identified in the study, which was carried out for the Bahamas National Trust (BNT), The Nature Conservancy and the Bahamas Reef Environment Education Foundation (BREEF), include undermining $67.6 million in annual tourist spending - and 383,000 visitor days - generated by visits to the MPAs. These areas also contain ecosystems responsible for producing more than $23.5 million in yearly habitat value as breeding grounds for the spiny lobster, generating more than 50 per cent of crawfish sector activity, six million pounds of catch and some 1,300 Bahamian jobs. MPA ecosystems were also identified as providing a natural coastal defence to hurricanes, protecting some $806 million in annual income and the 40,000 residents who live along the coastline of Bahamian islands. And the mangroves and seagrass within the MPA network were found to store 400 million tons of carbon, saving $5 billion annually in terms of harmful emissions avoided.

The study added that the "economic value and benefits" associated with the MPAs, and their coastal and marine ecosystems, meant their management needed to be included within the Bahamas' major planning processes. The Natural Capital Project study, dated November 2017, was carried out as part of Bahamas Protected, a three-year initiative designed to improve and expand the MPAs so that the economic value of their ecosystems is protected.
more…….. http://www.seagrasswatch.org/news.html

Healthy Harbour report: Are we getting the whole story? (QLD, Australia)
20 February 2018, Gladstone Observer

Process engineer and environmentalist Jan Arens has slammed the recently released Gladstone Healthy Harbour Report card, claiming it is an attempt at "window dressing" and the results do not reflect reality. The report card, based on data collected between July 2016 and June 2017, uses a system of grading A to E. It awarded seagrass and coral habitats within the harbour an overall grade of D. Meanwhile, it gave water quality an overall A at 87 per cent and sediment quality a B. Mr Arens said something didn't add up if water quality was considered excellent.

GHHP chair Paul Birch said the 213-page technical report, which provided details of the testing and monitoring, was available for anyone to access at ghhp.org.au. CQUniversity professor and head of the GHHP independent science panel John Rolfe explained during the launch of this year's report card last week that seagrass and corals were slow to recover from cyclone damage. Prof Rolfe said dugongs feeding on seagrass also impacted its score. He said micro-algae living on corals in the Gladstone Harbour had also slowed their recovery from cyclone damage.

Mr Arens said while most were being positive about the quality of water in the harbour, he struggled to understand the score of 87 per cent. Mr Arens said millions of dollars of taxpayer money was spent each year on monitoring the harbour and producing the healthy harbour report card and technical report but the way the information was collected was not accessible to members of the public. He has previously filed freedom of information requests in a bid to learn more about the results and data collection. Mr Arens, a geologist and process engineer who has been studying water quality for the past 17 years, said the harbour needed evidence-based scientific assessment, not a "score".
more…….. http://www.seagrasswatch.org/news.html

Illegal fishing nets blamed as 5 dugongs washed ashore (Abu Dhabi, UAE)
17 February 2018, Khaleej Times

Four dugongs - three males and one female - have been found washed ashore on Abu Dhabi's Saadiyat Public Beach in recent weeks, in what may be the biggest single die-off of one of Abu Dhabi's most vulnerable species. In addition, another dead dugong, an expecting mother with a fully-developed calf, was discovered last week.

Following the incident, a team from the Environment Agency - Abu Dhabi (EAD) made up of species scientists and marine biologists have been racing against time to determine the cause of death and to intensify monitoring of critical areas. The results of the investigation and necropsy indicate that the most probable cause of death was drowning in an illegal fishing net, locally known as 'hiyali'. Abu Dhabi is home to the world's second largest population of dugongs, with around 3,000 found mostly in the waters around Bu Tinah Island, part of the Marawah Marine Biosphere Reserve. Dugongs, their foraging habitats and their migratory routes in the UAE have been protected under Federal Law No. 23 and No. 24 since 1999. The UAE is also a signatory to the UN Convention on the Conservation of Migratory Species, making it an international commitment to protect dugongs.

The EAD has now intensified its monitoring of critical areas within and outside marine protected areas and is meeting regularly with fishermen, calling on them not to use the illegal hiyali net and to report the locations of any abandoned fishing nets. Commercial and recreational fishermen caught using illegal and banned fishing gear and methods will be prosecuted. First-time offenders can receive fines of up to Dh50,000 and/or an imprisonment term of not less than three months, while second-time offenders can receive fines of up to Dh100,000 and/or an imprisonment term of not less than one year. Other causes of dugong death included habitat loss, marine pollution and collisions with speeding boats.
more…….. http://www.seagrasswatch.org/news.html

Related article
Marine patrols to intensify following dead dugong discovery on Abu Dhabi coast (18 February 2018, The National)
https://www.thenational.ae/uae/marine-patrols-to-intensify-following-dead-dugong-discovery-on-abu-dhabi-coast-1.705598

Queen conch dying out in the Bahamas despite marine parks (Bahamas)

16 February 2018, Mongabay.com

It's hard to adequately describe the importance of conch to the Bahamas. But new research finds that the queen conch (*Strombus gigas*), economically important as food and for its decorative shell, is facing unprecedented fishing pressure throughout its Caribbean range. The study in the Marine Ecology Progress Series journal found widespread decline and an aging population among the conchs of the Exuma Cays Land and Sea Park (ECLSP), a marine protected area (MPA) in the Bahamas. The plight of this previously abundant and well-protected conch population is a troubling blow for this iconic marine mollusc.

Not only are conchs economically and culturally important, but they also play a vital role in the marine ecosystem. Conch eggs and larvae, produced in the hundreds of thousands, are an important food source for a number of vulnerable and endangered marine creatures. Conchs also feed on the algae found on seagrass, preventing the seagrass from being smothered.

The Bahamas' extensive network of MPAs was previously a beacon of hope for the beleaguered conch population. The BNT banned fishing in the ECLSP in 1986, and an initial survey conducted in the early 1990s found conch densities as much as 31 times higher than surrounding fished areas. These early results were so positive that conservationists hoped the successful ECLSP population could help repopulate downstream fisheries. However, repeat surveys in 2011 and 2016 highlighted an alarming downward trend. The survey found predominantly old and large adults in the park, with a shortage of juveniles to replace them. In contrast to the ECLSP population, conch in fishing grounds have become younger with time as adults are harvested faster than they can be replaced. It's clear that the primary driver of the conch decline in the Bahamas is overfishing. Conservationists have proposed a number of potential measures such as a closed season, quotas, export bans, bans on surface-supplied air systems, or a standardized lip thickness (to ensure conchs have time to breed before being taken). The BNT is finalizing its position on the specific regulation it intends to pursue through the Conchservation campaign.
more…….. http://www.seagrasswatch.org/news.html

Industry and healthy harbour not exclusive: GPC (QLD, Australia)

16 February 2018, Gladstone Observer

Mr O'Sullivan said GPC was mainly considered the "canary in the mine" when looking at the latest healthy harbour report cards, including water and sediment quality and seagrass results. With little change to the environmental factors between 2016 and 2017, which scored a C overall, Mr O'Sullivan said the results showed industry could sustainably operate near waterways. Mr O'Sullivan said GPC led the way in environmental studies and practices, including the world-first research undertaken with James Cook University which delved into sunlight's impact on seagrass growth.

Although the study was generally well received, Mr O'Sullivan said there could be some improvements to its interpretation. For example, he said seagrass species composition which scored a zero at the inner harbour, was taken from the lowest indicator during the study. Mr O'Sullivan said this was because there was one species of seagrass at the Gladstone Harbour.

Head of the independent science panel John Rolfe said seagrass was slow to recover from flood and cyclone events. Also contributing to the d-grade for seagrass was the increased number of dugong feeding on it. "We don't think there's a lot we could do for seagrass, there has been some suggestion though that we could explore planting juvenile seagrass," Mr Rolfe said.
more…….. http://www.seagrasswatch.org/news.html

Seaweed and Seagrass Buffer the Acidity of the Nearby Ocean (CA, USA)

15 February 2018, Hakai Magazine

Ocean acidification is already threatening marine life around the world, and conditions are only expected to worsen in the coming years. But for certain shoreline environments, there may be a workaround. Researchers have discovered that marine vegetation such as seaweed and seagrass exert such a strong mitigating effect on local water acidification that they could alleviate some of the impacts on coastal ecosystems.

Most predictions about ocean acidification have focused on broad-scale impacts in open water. But coastal environments play by different chemical and biological rules than the open ocean, so findings from one system will not necessarily apply to the other. With this in mind, Cascade Sorte, an ecologist at the University of California, and her coauthor Nyssa Silbiger set out to see if coastal vegetation could buffer ocean acidification by taking up excess carbon dioxide. Until now, the idea had never been tested across broad geographic areas and diverse biological

communities. Sorte and Silbiger selected 57 tide pools at four sites along an 1,800-kilometer stretch of the coast from Oregon to Southern California. They characterized the physical and biological components of each pool—counting and classifying the species present, for example, and taking various chemical measurements—and then statistically analyzed those factors' influence on the water's acidity.

She and Silbiger also found that the greater the amount of vegetation present, the higher the rate of calcification for shell-forming species. This implies that seagrass and algae could help protect the ability of shell-forming creatures like sea snails, oysters, and mussels from being degraded by acidification—a problem that's already present in some places and is predicted to become more pronounced over the next century. Sorte says the acidification-buffering effects will likely be limited to places with more abundant vegetation and relatively little water movement, as opposed to the open ocean or coastal areas where plants and algae populations have been degraded. But the good news is there are still many areas that could benefit.
more……. http://www.seagrasswatch.org/news.html

Sewage and livestock waste is killing Britain's seagrass meadows – new study (UK)
15 February The Conversation

Seagrass meadows surrounding the UK are in a perilous state of decline, and recently published research has now uncovered one of the biggest causes. The study suggests that a major driver of seagrass decline is nutrient pollution from sewage and livestock waste. Though a new finding, it sadly comes as no surprise, given that about 40% of rivers in England and Wales are polluted with sewage.

This nutrient pollution puts the long term viability of seagrass meadows in doubt. Over-enrichment results in the suffocation of seagrass. The nutrients cause microscopic algae to smother the seagrass leaves, decreasing their ability to capture light, ultimately killing them, and destroying the habitat for fish and other marine animals. In addition to this environmental impact, several areas, including the Thames waterway seagrass, and a meadow in Studland Bay, Dorset were considerably enriched in nutrients from sewage, livestock effluent and/or human waste.

Though efforts have been made to develop a British marine protected area network, and EU legislation has improved water quality in the last few decades, these initiatives are insufficient. Ten of the 11 sites studied were in areas with designated EU protection, but most of these seagrass meadows were still polluted with nutrients derived from urban sewage and livestock waste. Analysis of the seagrass tissues points to constant sewage exposure. Old and outdated water treatment facilities are one of the likely culprits, resulting in discharges of untreated sewage during times of heavy rainfall. These are legal, but evidently the capacity of these facilities is insufficient to handle the country's needs, and waterways are suffering because of it. There is also the problem of livestock waste. Farming is now one of the UK's leading causes of water pollution, and inefficiencies in storage and disposal of slurry mean that it ends up in rivers and coastal waters.
more……. http://www.seagrasswatch.org/news.html

Study finds depleting seagrass meadows may decrease blue carbon storage (FL, USA)
14 February 2018, Dauphin Island Sea Lab

A recent study by Dauphin Island Sea Lab researcher Dr. Just Cebrian and graduate student Caitlin Wessel, and led by Dr. Stacey Trevathan-Tackett of Deakin University, expands our understanding of seagrasses and their importance to our environment. The publication, 'Effects of small-scale, shading-induced seagrass loss on blue carbon storage: Implications for management of degraded seagrass ecosystems', appeared recently in the Journal of Applied Ecology. The study focused on how seagrasses mitigate the amount of carbon released into the atmosphere and erosion.

The team deployed the shade cages in June of 2013, and removed the cages in January of 2014. The results of this study showed that the seagrass in unshaded plots remained stable, while the seagrass in shaded areas died off, leaving the study plots bare. This study provides direct evidence that the loss of seagrass by shading decreases the carbon stored within the sediment and leads to an increase in erosion. With future monitoring of the Johnson's Beach sites in the coming years, the researchers hope to find a recovery of the seagrass meadows, ultimately leading to an increase sediment carbon stores. However, the recovery of those seagrass meadows within a year of the study
more……. http://www.seagrasswatch.org/news.html

Baymen reject state's program to restore bay bottoms (USA)
12 February 2018, Shelter Island Reporter

More than 30 baymen and anglers attended a February 7 Town Hall meeting to tell the town board to abandon working with the New York State Department of Environmental Conservation (DEC) on restoring seagrasses to bay bottoms.

Councilman Jim Colligan developed a 20-page draft plan with his colleagues and two town committees to map out a restoration strategy. "This whole thing has to go away," Tom Field said, and the town should instead focus

“aggressively” on storm water runoff and the spraying of pesticides. The baymen told the Town Board they know Island waters better than anyone. The problem isn’t how to preserve and protect seagrass, but how to deal with water pollution and pesticide spraying. Mr. Colligan apologized for not seeking their advice earlier in the process and said it was his error.

According to a Nature Conservancy report, almost 65 percent of the seagrass meadows are gone from southern New England and New York waters, beginning their long and perilous decline in the mid-1970s, according to the report. The New York State Seagrass Protection Act of 2012 calls for the development of seagrass areas and to work with local governments, businesses, fishermen, environmental groups and individuals to come up with plans to stop the erosion of the natural resource.
more…….. http://www.seagrasswatch.org/news.html

Planning Minister John Rau requests EPA investigate relocating Flinders Ports dredge spoil on land (Australia)
09 February 2018, The Advertiser

Planning minister John Rau wants the Environmental Protection Authority to investigate the disposal on land of Flinders Ports dredging operations. SA’s largest port operator has applied to the State Planning Commission to widen the existing shipping channel at Outer Harbor by 40m for a distance of 7km. Its proposal would require dredging 1.55 million cubic metres of sea matter, which it plans to dump 38km offshore in Gulf St Vincent. Local environmental groups, Wildcatch Fisheries and SA Best candidate Gary Johanson have been up in arms over the plan after a similar operation in 2005 killed 2000ha of seagrass and devastated fish stocks.

Mr Johanson, who has been pushing for the material to be used to build up land at Gillman, said it showed the community could exert pressure on the government. He said rather than by truck, as he had previously suggested, a pipe would be the best option. But this idea was dismissed last week by the EPA as being an “unacceptable alternative” owing to a risk of the pipe breaking and leaking into the mangroves. Flinders Ports chief executive Vincent Tremaine has ruled the option out.
more…….. http://www.seagrasswatch.org/news.html

Slinging Sediment
07 February 2018, Hakai Magazine

Seagrass meadows take up less than 0.1 percent of the world’s oceans; nevertheless, they are considered a huge carbon sink. Estimates from more than a decade of what’s called “blue carbon” research suggest seagrass beds store as much as 83,000 metric tonnes of carbon per square kilometer—three times as much as forests—and lock it away for millennia. These dramatic rates of carbon storage have caused scientists, conservationists, and others to champion seagrass beds as a way to mitigate climate change. But there’s one problem: the numbers may be wrong.

“Researchers in the blue carbon community have overestimated how much carbon stays buried in seagrass beds,” says Sophia Johannessen, a geochemical oceanographer with Fisheries and Oceans Canada (DFO). Johannessen’s conclusions, published last year in the scientific journal Environmental Research Letters, have wide-ranging implications. Johannessen says those estimates could be 10, or even as much as 3,000 times, too high. Johannessen says it all comes down to bad math. Blue carbon researchers, she says, misunderstand how marine sediments receive, process, and store organic carbon. In particular, she says the rate at which sediment builds up in seagrass beds has been overestimated, as have the concentrations of carbon within the sediments. And carbon storage estimates are made by multiplying those two factors.

Some blue carbon researchers, however, believe Johannessen is wrong. A group of scientists from Deakin University in Australia fired back, publishing a response in Environmental Research Letters criticizing her methods and conclusions. They insist that previously published carbon storage rates are indeed correct. “Johannessen’s paper misreported, miscalculated, and cherry-picked what they reported,” says Peter Macreadie, head of Deakin’s Blue Carbon Lab and lead author of the response. “The blue carbon world is aware of the limitations and scientific challenges ahead when it comes to measuring carbon dioxide abatement, but it’s unhelpful to have tire kickers who aren’t prepared to be part of the solution,” Macreadie says.
more…….. http://www.seagrasswatch.org/news.html

Push to 'save' Blackcurrant Island (QLD, Australia)
07 February 2018, Whitsunday Times

Opposition to the long discussed all-tide boat ramp at Blackcurrant Island in the Gloucester area has been getting louder at the communities of Dingo Beach and Hydeaway Bay. A recent meeting of the newly formed Save Blackcurrant Island at the Dingo Beach pub drew more than 65 locals who oppose the proposed all-tide facility on the southern side of the island.

In December 2016 a GHD surveyor's report, commissioned by the Whitsunday Regional Council, listed the island as the sixth most favourable site from a total of eight sites investigated for the suitability of an all-tide facility. In August 2017 council nominated the Blackcurrant Island site as its "preferred option" but said there was "no funding in its long term capital plan" and it would be seeking funding from the State Government to build the boat ramp.

In a statement, the Save Blackcurrant Island group said it was "alarmed at the potentially devastating and irreversible effects of the GHD design proposal on the delicate ecosystem". The group states Blackcurrant Island is "surrounded by mangroves, seagrass and coral reefs that provide shelter, feeding and nesting areas for dugong, turtles, stingray, numerous fish species and other marine creatures". In mid-2016 a petition proposing to extend and make the existing boat ramp at Dingo Beach an all-tide facility gained the support of a 400 signatories. However the Save Blackcurrant Island group is also opposed to any plan to dredge out the front of the Dingo Beach pub and allow all-tide access to the existing boat ramp. The group is advocating for improvements to the existing boat ramp. Owner of the Dingo Beach pub Tony Sellers said most people of Dingo Beach and Hydeaway Bay didn't want the boat ramp at Blackcurrant Island and called on Division 4 councillor Peter Ramage to make his position on the project clear.
more…….. http://www.seagrasswatch.org/news.html

Study: Fertilizer bans cut nutrients in Indian River Lagoon, but don't stop algae blooms (FL, USA)

02 February 2018, TCPalm

Fertilizer bans are doing a good job keeping nutrients out of the Indian River Lagoon, but not the type of nutrients that feed algae blooms. That's the result of research presented during the Indian River Lagoon Symposium at Harbor Branch Oceanographic Institute, a branch of Florida Atlantic University at Fort Pierce.

Between 2010 and 2015, nearly every municipality along the Indian River Lagoon approved laws designed to keep nutrients in fertilizer from running off lawns and into the St. Lucie River and the lagoon. Most of the laws ban use of fertilizers with nitrogen and phosphorus during Florida's rainy season from June through September, when excess nutrients can feed algae blooms that shade and kill seagrass, as well as marine animals that depend on seagrass beds.

"There may be less nitrogen in the water from fertilizer," Brian Lapointe, a Harbor Branch researcher and co-author of the study said, "but the effect isn't evident. That's because the nitrogen we're finding in the lagoon isn't the type you find in fertilizers, but it is the type that feeds algae blooms." The dominant source of ammonia in the lagoon, Lapointe said, is sewage. Even with fertilizer bans, sewage runoff has caused an increase in nitrogen levels in the northern lagoon, especially in Brevard County, Lapointe said.
more…….. http://www.seagrasswatch.org/news.html

CONFERENCES

The 13th International Seagrass Biology Workshop (ISBW13) and World Seagrass Conference (11-17 June 2018, Singapore)

Theme: Under pressure – Seagrass science and conservation in stressful environments

The International Seagrass Biology Workshop (ISBW) is the only international meeting specifically tailored to seagrass scientists, professionals and students. The International Seagrass Biology Workshop (ISBW) provides a good opportunity for the scientists working on various aspects of seagrass ecosystems to come together and discuss their latest findings. The ISBW13 will be held in June 2018 at the National University of Singapore, Singapore, organized by National University of Singapore, National Parks Board, and DHI Water & Environment, Singapore.

More information:
To get important updates on ISBW13, visit: *https://www.isbw13.org/*
Follow on Facebook @ISBW13 and Twitter #ISBW13

The 5th International Marine Conservation Congress (24-29 June 2018, Kuching, Sarawak)

Theme: Make Marine Science Matter!

To conserve the world's oceans we must go beyond science, and use it to inform policy and management, and ultimately to catalyze change. The Society for Conservation Biology's International Marine Conservation Congress (IMCC) brings together conservation professionals and students to develop new and powerful tools to further marine conservation science and policy. With over 700 marine conservation professionals and students in attendance, IMCC is the most important international event for anyone involved in marine conservation.

More information:
To get important updates on IMCC5, visit: https://conbio.org/mini-sites/imcc5/
Follow on Facebook @ IMCC2018 and Twitter #IMCC2018

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 47,410 views to date)

Seagrass & other matters

World Seagrass Association http://wsa.seagrassonline.org
Keep up to date on what's happening with the around the world from the WSA. The World Seagrass Association is a global network of scientists and coastal managers committed to research, protection and management of the world's seagrasses. WSA members come from many countries and include leading scientists in marine and seagrass biology. The association supports training and information exchange and raises global awareness of seagrass science and environmental management issues.

World Seagrass Association on Twitter @Seagrass_WSA
Everything seagrass related. World Seagrass Association official account. Follow to stay up-to-date with global seagrass info. Moderator: LM Nordlund

Dugong & Seagrass Research Toolkit http://www.conservation.tools/
Dugongs and seagrass are under threat from human activities. By using this Toolkit you should be able to gather information to:
understand better the status of dugongs, seagrass and communities at your research site;
understand threats to dugongs and seagrasses and help find solutions to those threats;
understand the communities that value or may affect dugongs and seagrasses.

The toolkit will guide you to the techniques and tools most suitable to your team capacity, budget and timeline. By using the toolkit, you will also be helping to standardise data sets and methods across different countries and sites, allowing for better comparison of global dugong and seagrass conservation status.

The Toolkit is designed for use by marine natural resource managers and decision-makers (government and non-government) and for dugong and seagrass researchers. The Toolkit will assist organisations to assess funding proposals by describing the scope of work, choice of techniques and tools, and budget.

FROM HQ

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