30 September 2013

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IN THIS BULLETIN

Please note: links to sources were active on date of publication. Some sources remove links periodically.

NEWS

Dugong habitat confirmed at relocation site of Okinawa base (Japan)

21 September 2013, GlobalPost

The inhabitation of a site planned for the relocation of a U.S. Marine base in Okinawa by dugongs, an endangered marine mammal, was confirmed last year for the first time in three years by the Okinawa Defense Bureau, a recent survey by the bureau revealed Saturday.

Only a small number of dugongs live in waters near the Japanese archipelago. A survey report obtained by Kyodo News through a freedom-of-information request confirmed traces of seagrass having been eaten by dugongs at the planned reclamation site in the April-June period of 2012. There had been similar traces of seagrass eating by dugongs near the area in June 2009 but no further evidence that they had inhabited the area since then. The findings could affect Okinawa Gov. Hirokazu Nakaima's decision on whether to approve the requested reclamation of the site off the coast in the Henoko district of Nago in the island prefecture.

The Okinawa Defense Bureau applied for the reclamation in March this year, saying there would be little impact on the environment, but it did not disclose the survey's findings. The waters off the Henoko district are known for abundant seagrass that dugongs feed on. The bureau's survey suggests dugongs have repeatedly visited the area as a feeding site.

Japan and the United States have agreed to relocate the U.S. Marine Corps' Futenma Air Station from the densely populated residential area of Ginowan to the coastal area of Nago as part of a realignment of U.S. forces in Japan. But the plan has hit a snag due to strong local opposition in Okinawa, which hosts the bulk of U.S. military bases in Japan. An Okinawa Defense Bureau official said the result of the survey does not affect its environmental assessment of the reclamation project and that it does not intend to review the relocation plan.
more…….. http://www.seagrasswatch.org/news.html

Seagrass Below Sunken Cruise Ship Worries Biologists (Italy)

19 September 2013, National Geographic

When Italian salvage workers propped up the Costa Concordia this week, they cleared a major hurdle in the long saga of the cruise ship that sunk off the coast of Giglio in January 2012. Over the next few weeks, crews will attempt to completely remove the ship from the area. But beneath the ship may be a bigger problem that worries some biologists. Having run aground in the Tuscan Archipelago National Park, the largest marine conservation area in the Mediterranean Sea, the shipwreck has posed unique challenges to environmental managers.

The salvage team hired by the Costa Concordia cruise line has taken precautions for the sake of the local marine life. The company has allocated $400 million to minimize environmental damage. Since the beginning of the salvage project, workers have transplanted noble pen shells, removed heavy oil and diesel from the ship, put down pollutant-absorbent booms, and created "bubble walls" in the water to reduce noise pollution. But one challenge remains: the reef's seagrass.

Feathery-looking Neptune grass blankets the seafloor around the ship. Sitting on the ocean floor for more than a year, the wreck has killed an unknown amount of seagrass; the cruise line has not disclosed the exact size of the area impacted. While crews attempt to replant damaged Neptune seagrass beds, there's debate over whether the area will spring back.

Enric Sala, a marine ecologist and National Geographic resident explorer, is not optimistic about the team's chance of success. If divers successfully replant the seagrass beds, "it would be a first," he says, explaining that prior attempts have not been at such a large scale. Yet it may not be out of the question. Kevin Hovel, a biology professor at San Diego State University and a participant in numerous seagrass replanting projects, sees possibility at the Concordia site. "There is an element of chance to it," says Hovel, adding that "seagrasses are a pretty sensitive species." Whether the seagrass in the area bounces back has implications for people on land. The way the plant stabilizes sand can reduce shoreline erosion from waves and storms.
more…….. http://www.seagrasswatch.org/news.html

Preserving S China's endangered dugongs (China)

17 September 2013, Global Times

Every morning, Huang Yilong looks out at the sea, hoping to catch a glimpse of the dugongs once abundant in his hometown of Beihai, a coastal city in South China's Guangxi Zhuang Autonomous Region. The 85-year-old fisherman said he and his fellow villagers had not seen the rare creatures for many years, and they could only live with the memories of the lovely "mermaids" now.

Dugongs, also called sea mermaids or sea cows, were once common in the Shatian shallow sea area in Beihai's Hepu County, the animal's habitat in the country before the 1980s. When a dugong feeds her calf, it looks like a human mother nursing a baby, earning them the "mermaids" nickname. "When I was young, I always saw these 'mermaids' coming ashore to feed on seagrass," Huang said. But the proliferation of fish farms and seawater pollution in the area caused the animal's numbers to decrease sharply. Local residents in Hepu believed they might have become extinct or moved elsewhere. Most of Hepu's local villagers in their 40s or older said they saw the dugongs when they were young, and some even had close contact with the creatures. "Whenever the dugongs saw us swimming by the seaside, they would immediately kneel and wave to us like human beings," Huang Yilong said with a sense of nostalgia.

Pang Xianzhang, a 67-year-old villager, said the dugongs were deemed divine creatures in the past, and local people never tried to catch them. But everything changed in 1958, when the country was going through the "Great Leap Forward" and the "People's Commune" era. Pang said the commune required local fishermen to provide a large amount of fish during light seasons, and they had to begin catching the fat dugongs. The hunt for the mammals did not stop until 1962. "In just five years, more than 200 dugongs were killed," Huang said with regret, adding that he was among the culprits who ate the dugong meat. Massive killing led to a drastic decrease in the dugong population, and the 'mermaids' were barely seen after the killings. Human damage to the local marine ecosystem only exacerbated the situation, Huang said.

What saddens the local fishermen the most is that the younger generation has not seen the dugongs in the wild. All they can see are just the specimens in exhibition rooms or pictures in books or on television. To keep the sea cows from extinction, the Chinese government has employed various measures. In 1988, dugongs were listed under the first-class animal protection category. This was followed by the establishment of the Hepu Dugong National Nature Reserve (HDNNR) in 1992. The reserve, which covers an area of 350 square kilometers, is the only sanctuary of its kind in the country for the animal. In 2008, a protection project to help save the species from extinction was initiated in Guangxi. The project cost around 26 million yuan (4.23 million U.S. dollars), 76 percent of which came from the central budget and the rest from the regional and local governments. The project, which has already been completed, includes a scientific research center, a sea animal rescue center, watchtowers and patrol boats, among others. The local government in Beihai has also tightened supervision and enhanced efforts to clear out illegal sea farms in the HDNNR area.

In recent years, there have been increased sightings by fishermen of the docile animal, thanks to decades of preservation efforts, said Zhou Xiang, a working staff with the HDNNR. "The local fishermen are aware of the importance of dugong protection, and they would report to us if they spotted any trace of the dugong," Zhou said. He said the government should step up protection measures to prevent the animals from going extinct so that the beautiful creatures could return in large numbers.
more…….. http://www.seagrasswatch.org/news.html

Young Blue Crabs Prefer Denser Seagrass Beds(USA)

16 September 2013, The Fish Site

A new study by researchers at the Virginia Institute of Marine Science have found that its not just the presence of a seagrass bed that matters to young blue crabs, but also its quality—with denser beds holding exponentially more crabs per square meter than more open beds where plants are separated by small patches of mud or sand. The study, led by VIMS graduate student Gina Ralph, appeared in the August issue of Marine Ecology Progress Series. It is co-authored by VIMS Marine Scientist Kathleen Knick along with faculty members Rochelle Seitz, Robert “JJ” Orth, and Rom Lipcius.

“Vegetated habitats, particularly marsh and seagrass, have long been known as nurseries for blue crabs,” says Ralph, “with many previous field and lab studies showing higher density, survival, or growth of juveniles in seagrass habitats compared to un-vegetated areas nearby.” “Our study,” she adds, “is one of the few to address the role of habitat complexity within seagrass beds, and the first to show on a broad scale that—all else held equal—denser, higher-quality grass beds hold more juvenile crabs.” Ralph says that on average, “there were 30% more crabs for every 10% increase in the percentage of seagrass cover within a bed during 2007, and 14% more crabs for each 10% increase in seagrass coverage in 2008.”

Ralph says the team’s findings are important because they “suggest that the quality of seagrass habitat can influence the population dynamics of blue crabs on a baywide basis.” That raises concern given the historical decline in eelgrass—the Bay’s main seagrass species—and projections of the continued decline of this cool-water species as water temperatures rise during the coming decades due to climate change.
more…….. http://www.seagrasswatch.org/news.html

Story also covered by:
http://esciencenews.com/articles/2013/09/13/research.shows.denser.seagrass.beds.hold.more.baby.blue.crabs

New seagrass regulations in place (TX, USA)

06 September 2013, Lone Star Outdoor News

Beginning Sept. 1, a new law passed by the 83rd Texas Legislature takes effect all along the Texas coast, prohibiting the uprooting of seagrass with an outboard motor propeller. These measures have been taken in an effort to support the vital Texas’ fisheries and promote sustainability of the state’s coastal natural resources.

A regulation has been in place since 2006 prohibited the uprooting of seagrass in the Redfish Bay State Scientific Area with an outboard propeller. With this regulation in place and an extensive education and outreach effort, a 45 percent reduction in propeller scar in RBSSA was observed. "Based on the proven success of reduction of propeller

scars in Redfish Bay Scientific Area, we are hopeful that we can educate boaters about seagrass and direct them to change boating practices to help reduce uprooting of seagrass," says Ed Hegen, TPWD Coastal Fisheries regional director in Rockport.

Texas Parks and Wildlife Department staff will be supporting these coastwide efforts to protect seagrass by spreading the word handing out brochures to boaters, posting signs at boat access points, including articles and advertisements in print media, and posting billboards. State game wardens will be on the water educating the public as well as enforcing the regulation. It's important to remember, boaters have continued access to the places they've recreated in prior to the regulation — there are no closed areas. It is the responsibility of the boater to be aware of their surroundings and to keep their propeller from digging up seagrasses as this habitat is essential in sustaining the natural resources and beauty of our Texas' bays.
more…….. http://www.seagrasswatch.org/news.html

Seagrass is a huge carbon store, but will government value it? (Australia)

06 September 2013, by Paul Lavery, The Conversation,

Australia is surrounded by a thin green line of seagrass meadows potentially worth A$5.4 billion on international carbon markets, and which could contribute to Australia and other nations meeting carbon emissions targets. Whether that potential can be realised is very much dependent on the type of carbon management scheme our next government puts in place.

Most people are aware forests lock up carbon dioxide from the atmosphere. This is a part of our carbon accounting scheme and underpins tree-planting and forest conservation schemes, giving value to this "green carbon". Until now, the carbon captured by marine plant systems, so-called "blue carbon", has largely been ignored in carbon accounting. But our new research from Edith Cowan University (published in the journal PLOS ONE) shows that seagrass meadows, hidden beneath our oceans, lock away between four and ten times that of our forests. Pound-for-pound, they are big hitters when it comes to snatching carbon out of the atmosphere. We conservatively estimate that Australia's 92,500 sq km of seagrass meadows contain more than 155 million tonnes of carbon. At a carbon trading price of A$35 a tonne (predicted by the Federal Government for 2020) that indicates a multi-billion dollar asset that can be used for tradable carbon credits. In addition to the carbon these meadows have already locked away, they add about another 1 million tonnes of carbon each year, with a potential value of $35 million. So lets look at how we realise this potential value, and how the next government's approach to carbon could affect this.

Under the past government's policy, the price of carbon was fixed until 2014-15. After that the price would be determined by the market, in an emissions trading scheme. The estimate of A$5.4 billion is based on the past Government's predicted carbon-trading price of A$35 a tonne in 2020. Exactly how that would be realised remains unclear. However, mechanisms such as the UN's Reducing Emissions from Deforestation and Forest Degradation program have been used internationally to realise the value of leaving forests intact so their stored carbon is preserved. This sort of mechanism may create enormous flow-on benefits: jobs could be created in assessment of marine carbon resources, bringing these to markets or through the creation of new marine habitats through re-vegetation schemes. Scientists and economists in the Mediterranean region are currently working together to develop tool kits that would allow blue carbon stores to be brought to the carbon market.

In contrast, the Direct Action Policy proposed by the current opposition, appears to severely limit the potential to realise the value of blue carbon. Under a direct action scheme, there is no value associated with not leaving the carbon in the meadow, and no penalty for disturbing that meadow and releasing the carbon into the atmosphere. Unfortunately, seagrass meadows are under serious threat from nutrient pollution and coastal development. Every square kilometre lost releases 1.6 tonnes of carbon back to the atmosphere. One possible way that a Direct Action Policy could give value to blue carbon is by rewarding the creation of new vegetated marine habitat, in the way we pay for re-afforestation. Unfortunately, the biggest carbon stores are found in seagrasses which are notoriously difficult to transplant or revegetate.

There will need to be a massive investment if we hope to be able to do with marine plants what we have learned to do with forests over hundreds of years. In the short-term, conserving and valuing what we have might be the cleverer approach. If we lose the habitat it may well be a long-term loss, even if we are going to invest in transplanting. Australia's Coastal Carbon Biogeochemistry Cluster, a collaboration of research providers, is working to further improve our estimate of carbon stored in marine habitats and how these might change in future climate scenarios. Meanwhile, our European colleagues continue to investigate the ways in which blue carbon can be brought to the carbon market. Hopefully, Australia will realise that we have a valuable blue carbon resource that is worth protecting and can be done so with economic benefit, if only we are open to creative carbon trading schemes.
more…….. http://www.seagrasswatch.org/news.html

Story also covered by:
http://www.sciencealert.com.au/news/20130609-24771.html?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A+sciencealert-latestnews+%28ScienceAlert-Latest+Stories%29

Fossil find solves Australian marine mystery (Australia)

4 September 2013, by Dani Cooper, ABC Science

An ancient mystery has been solved through the identification of a group of fossils as the ancestors of our modern-day dugong. The identification of the 12-million-year-old fossils pushes the record of sirenia or sea cows, the group of marine mammals that includes dugongs, in the region back seven millions years. In doing so it also reveals the sea cow has played a critical role in the structure and maintenance of our marine ecosystems, and suggests any loss of its modern-day relative could have serious long-term impact for our oceans.

Dr Erich Fitzgerald, senior curator of palaeontology at Museum Victoria, says the fossils were found in a cave in the Highlands of Papua New Guinea almost 30 years ago by Professor Rod Wells of Flinders University in Adelaide. Fitzgerald says it was an "extraordinarily fortuitous find" that almost cost Rod Wells his life when a flash flood washed through the cave as he was collecting the specimens, with a number of fossils lost in the flooding. Little attention had been paid to the fossils until Fitzgerald discovered casts of the vertebrae and ribs while working at the Smithsonian Institution in the United States. At the time Fitzgerald realised they could be the oldest sea cow fossils in Australasia and contacted Wells to see if they could work on the originals.

The results of the collaboration that also includes Dr Jorge Velez-Juarbe of the Smithsonian, is published in the latest Journal of Paleontology. Fitzgerald says their work fills a gap in sirenian geographic history, as until now the oldest sea cow fossil find in Australasia was a South Australian specimen estimated to be five million years old. "Elsewhere in Asia, sea cow fossils are found in much older rocks, so it was always a mystery as to why fossils hadn't been found in this part of the world," he says. Fitzgerald says the rock in which the fossils were embedded is estimated to be between 12 million to 18 million years old. "At a minimum the fossils are 12 million years old and that extends the evolutionary history of this entire group by at least seven million years," he says. "It takes this mammal back to a time when the world was quite different and most of Papua New Guinea was not above the sea."

Fitzgerald says it had been thought dugongs were a recent arrival to the Australasian region and therefore their role in maintaining seagrass systems has been recent. "In fact sea cows have been part of the tropical ecosystem for a long time and it suggests the delicate interaction between sea cows and seagrasses and all other animals is quite ancient and sea cows play a vital role in maintaining the health of the marine environment."

Fitzgerald says the dugong plays a similar role under water to an elephant on the savannah. "The elephant in Africa plays a role in modifying the savannah by making lots of little pockets of habitat that smaller animals need to survive," he says. "Sea cows play a similar role and that suggests if they are removed or become extinct it might have serious long-term implications for the ecosystem." Fitzgerald says Australia also has the highest amount of diversity of seagrasses in the world. This was thought to have happened because of a lack of grazing by sea cows. Instead this discovery shows "sea cows may actually play a vital role in maintaining diversity of sea grasses".
more…….. http://www.seagrasswatch.org/news.html

Story also covered by:
http://www.abc.net.au/science/articles/2013/09/04/3840822.htm

Former ports chief glad to see the end of harbour dredging (Aus)

26 September 2013, Whitsunday Times

After two years of dredging plagued by controversial issues from diseased fish to seagrass loss, former port chief Leo Zussino is telling the same story - this time with a side of sausages. He joined new Gladstone Ports Corporation CEO Craig Doyle, and Western Basin Dredging and Disposal project leader Peter O'Sullivan, to update the community on dredging activity at a barbecue at CQ University on Wednesday.

Although the $1.3 billion dredging project finished last week, studies around the harbour will continue until 2021, with the GPC spending about $17 million in environmental study projects plus a further $5 million for its biodiversity offset strategy. "I'm more than most grateful that the dredging has finished," Mr Zussino said. "It's been a very interesting time over the last couple of years, but it's good to see now that we have a proliferate of scientific data and information that says we've completed the project in a sound and structural way, and we have minimised the impacts we've had on the environment."

Dredging remains a political issue as environmentalists campaign for an end to spoil dumping in the Reef Marine Park and Heritage Area.
http://www.whitsundaytimes.com.au/news/ports-heads-cook-up-the-latest/2032565/

The murky waters of dredge spoil dumping (Aus)

23 September 2013, ABC Local

A leading water quality scientist is predicting the amount of dredge spoil dumped off the Queensland coast could be as high as nearly 200 million tonnes over the next ten years if all likely port expansions go ahead. Senior Researcher

at James Cook University Doctor Jon Brodie says while there's too much conflicting information regarding tonnage and spread of dredging and is urging the government to set up an independent review.

On a trip recent visit to Keswick Island, 35 kilometres off the coast of Mackay, Dr Brodie told residents and a local conservation group, Communities Protecting our Region, he wasn't sure what the impact of dredging would be on the reef habitat surrounding the pristine island because comprehensive, reliable research simply isn't available. "There are two sets of modelling around at the moment that are in total contradiction," says Dr Brodie. "One is the Environmental Impact Assessment for the developments that says dredge spoil won't go far at all and then there's another report done directly for government that says the dredge spoil will get here in significant amounts. "Neither model might be right. The process is so poor that we end up like this with two conflicting views.

In July, the federal government released a synthesis report outlining the impacts of dredging at Townsville, Cairns, Gladstone, Hay Point, Rosslyn Bay and Abbott Point. While Dr Brodie concedes the report was commissioned to an independent company, he says open and transparent decision making requires multi-disciplinary peer-review to oversee the assessment and believes that isn't happening. Instead, he is working unpaid in his own time to crunch the numbers for his own scientific report.

One area of research Dr Brodie says has been successful in improving the health of the Great Barrier Reef is the Reef Rescue program. The program started in 2008 to help famers find new ways of working to improve the environment by reducing soil and chemical runoff into rivers. "Up to now we've reduced loads of sediment nutrients and pesticides to the great barrier reef. "Of all the discharge from rivers there's only six million tonnes per year and through Reef Rescue, we saved 360,000 from 2009 to 2011. "It's one of the most successful reef management programs we have. We are making a real difference."
http://www.abc.net.au/local/stories/2013/09/23/3854542.htm

Pumps Remove Foul Smelling Sea Grass from WA Shores (Aus)

19 September 2013, Sourceable

The Western Australian government has announced that it will make increased use of pumps to facilitate the removal of the large amounts of foul smelling seagrass which accumulates on the shores of Port Geographe near Busselton. State transport minister Troy Buswell said that that the increased use of pumps to get rid of the toxic seagrass in lieu of overland transportation via trucks will benefit Busselton residents by reducing their exposure to the unpleasant smell caused by carting the weeds away via roads.

In addition to the removal of seagrass, pumps will also be used instead of trucks for the delivery of sand to local beaches. He added that preparations for the annual seagrass removal program had already commenced as work continues on the $28 million reconfiguration of Port Geographe's coastal structures in order to remedy environmental problems caused by the marina development. Busselton's VMS Contractors will be the approved subcontractor for the work. Pumping is expected to continue for three months, starting in the middle of September and concluding by mid-December.
http://sourceable.net/pumps-remove-foul-smelling-sea-grass-from-wa-shores/

Story also covered by:
http://www.busseltonmail.com.au/story/1772238/less-trucks-for-port-geo-seagrass-clean-up/?cs=1435

Qld Environment Department announce sand-shifting trial to increase hatchling success at Raine Island turtle rookery (Aus)

17 September 2013, ABC Online

The Queensland Government will wait before beginning an expensive proposal to fix a turtle rookery at Raine Island off Cape York until it assesses the impacts of a new trial. Queensland Environment Minister Andrew Powell says they were considering shipping sand to the remote island, which has suffered a dramatic decline in hatchling success rates due to a gradual loss of viable nesting areas.

Mr Powell says rangers will trial re-arranging sand on the island before deciding if further action is needed. "At this stage we're looking to just use the sand that is already on the island," he said. "To nest turtles need a certain depth of sand and what we've witnessed of late is that the depth simply isn't there and the eggs are getting flooded. "By shifting sand into an ideal pattern and depth hopefully we'll see an increased hatching rate than what we've seen in the past. "Obviously we want to see whether this approach works. "If it doesn't then it'll certainly assist us in looking at future models of ways that we can assist the turtles on the island." The Torres Strait Regional Authority is contributing $90,000 towards the trial.
http://www.abc.net.au/news/2013-09-17/trial-to-begin-at-raine-island-turtle-rookery/4963048?section=qld

Waterway checks insufficient: watchdog (WA, Australia)

16 September 2013, by Daniel Mercer, The West Australian

Large parts of Cockburn Sound are not monitored because of a funding shortfall as research suggests the health of the fragile waterway is deteriorating, an environmental watchdog says. Soon after a study found the Peel-Harvey estuary was under significant stress, the Cockburn Sound Management Council issued a stark reminder about major problems the southern harbour faced. In its annual report, the council said in parts of the sound there had been "significant increases" in levels of chlorophyll-a - a green pigment which indicates algal growth - especially in the south. It also noted there had been widespread and inexplicable reductions in seagrass cover - a key indicator of the waterway's condition - while there were elevated levels of heavy metals in other parts. Some of the worst water quality recorded in the 12 months to June 30 was in Jervois Bay south of Coogee.

The report indicated the "seagrass picture is incomplete" near Garden Island because the Defence Department had been unable to monitor it, a source close to the council said, adding the episode was increasingly typical. Although declining to be identified, the source said much of the monitoring that had previously been undertaken by businesses and agencies was no longer being done because of a lack of funding.

Hands Off Point Peron chairman Ron Chapman, whose group is fighting plans for a marina at Cape Peron in Mangles Bay, said the report highlighted how the area was already under environmental strain. Dr Chapman said the proposed marina would make problems worse because it would inhibit seagrass growth, obstruct the sound's ability to flush and involve dredging contaminated soil. Cedar Woods spokesman Stuart Duplock, whose group in partnership with LandCorp is behind the Mangles Bay proposal, acknowledged the CSMC report but noted WA's environmental watchdog had endorsed the marina. Mr Duplock said the project would not add nutrients to Mangles Bay nor have a material effect on seagrass health.
http://au.news.yahoo.com/thewest/galleries/news/

Bringing Back Virginia's Scallops (VA, USA)

11 September 2013, by Sandy Hausman, WVTF & Radio IQ

Thirty-eight-year-old Bo Lusk grew up on the Eastern Shore, hearing stories about scallops. Today, as a marine steward with the Nature Conservancy, he's working to bring them back. The process began in 1999 --- collecting eel grass seeds from other areas, then planting them off the coast.

University of Virginia Professor Karen McGlathery has also been part of the restoration. "The coastal bays, back in the early 1900's and before were carpeted with seagrass, so the sea floor was just one lush meadow of seagrass. Now we have over 4,000 acres of seagrass, so that's like 3,000 soccer fields out here in ten years, which is really remarkable." Then, scientists here started cultivating baby scallops from North Carolina. Mark Luckenbach, with the Virginia Institute of Marine Sciences, says the process begins in a land-based hatchery. After six weeks, they're placed in fine-mesh containers, in the ocean to spawn. Survival of baby scallops, even in nature, is rare, but a single scallop may produce ten million eggs each year, and about one in a million of those cultivated make it to adulthood. Bo Lusk and his volunteers have found their offspring as they gather seagrass seeds.

It could be years before there are enough scallops to support any kind of industry. And regardless of market potential, Bo Lusk thinks scallop restoration is a good thing for the environment. Scallops are filter feeders, so they help clean water. This summer, scientists spent three days surveying a single bay. They counted 30,000 large scallops and many more small ones again making their homes in the sea grass off the Eastern Shore.
full story: http://wvtf.org/post/bringing-back-virginias-scallops

South West estuary given seagrass test of health (WA, Australia)

04 September 2013, by Lizzie Thelwell, Science Network Western Australia

The waters of WA's Leschenault Estuary have been explored in efforts to analyse seagrass, sediment and groundwater to discover if pollutants from nearby agricultural drains are contaminating the water. The Department of Water's Kieryn Kilminster says estuarine environments are particularly vulnerable to human impacts and are good indicators of pollution as they integrate environmental conditions from both the water and the sediment.

The study, part of a larger project which ran from 2006 to 2009, was funded by the state and federal governments to determine the impact of acid sulfate soils on waterways in the south-west of WA. Dr Kilminster's research found the environmental impact of surrounding farm land disturbing acid sulfate soils on the northern part of the estuary is minimal.

The drain was a source of copper and manganese, with these elements most likely entering the estuary through water inflows. Arsenic and iron were highest and furthest from the drain, suggesting input of trace elements from sources other than the drain studied. Leschenault Estuary, just north of Bunbury, was studied because the seagrass coverage is widespread and there was a measurable 'acid sulfate soil' signal in the water entering the northern end of

this estuary. Two different types of seagrass, sediment and sediment porewater was sampled along a transect. The seagrass and sediment was dried, digested into solution using acid and then analysed for elemental content in the laboratory. The study serves as a baseline and recommends a more extensive sampling design of seagrass around the margins of the whole estuary to shed light on point source contamination which may relate to land use.
full story: http://www.sciencewa.net.au/topics/fisheries-a-water/item/2371-south-west-estuary-given-seagrass-test-of-health.html

Dumping moves offshore (New Zealand)

04 September 2013, by Simon Smith

Sediment dredged by Pine Harbour Marina will no longer be dispersed locally now the company has dropped its appeal to the Environment Court. The ecosystem is already healing with increasing amount of cockles, pipis and seagrass, Pohutukawa Coast Community Association spokesman Donald Willan says. "We hope to do another detailed survey this summer but anecdotal evidence is that the seagrass, which is the effective spawning ground for the snapper, is starting to come back in Green Bay."

In 2009 the marina applied for consent to dredge its approach channel and annually dispose of 3000 cubic metres of silt nearby off Motukaraka Island via thin layer disposal for 20 years. The application was declined after it was opposed by the Auckland Regional Council and others, including the community association. The marina appealed the court's decision but has now officially withdrawn the appeal.

Howick historian Alan La Roche was one of those originally against the consent application and says dispersed sediment has decimated shellfish numbers at Cockle Bay beach over the years. The marina has now built a large barge to transport the dredged material further away. "Maritime New Zealand has given them permission to dump it in very deep water off Great Barrier," Mr La Roche says. "But of course that's close to a proposed marine reserve, and it shifts the problem to Great Barrier people away from here," Mr La Roche says. Mr Willan says he is "very pleased" the marina has dropped its appeal. "Under the existing legislation they could continue to dredge and dump under the old resource consent they had until the appeal was resolved."
http://www.stuff.co.nz/auckland/local-news/eastern-courier/9119579/Dumping-moves-offshore

Floating hospital in China dedicated to caring for sea turtles (China)

03 September 2013, UPI.com

A village in China's Hainan province has the world's only floating sea turtle hospital to care for the state-protected endangered species, its founder says. The whitewashed structure sits in the Xincun Port, a floating village where local residents seldom set foot on land, living in wooden cabins set up on rows of fishing rafts.

The hospital was founded by Frederick C. Yeh, a 32-year-old Chinese-American who graduated from medical school at Johns Hopkins University in the United States in 2005. Planning on becoming a medical doctor, on a trip to his childhood home in Hainan in 2007 Yeh discovered sea turtles were being sold for meat and shells in local markets. Deciding to change his career path, in 2008 Yeh founded Sea Turtle 911, a non-profit organization rescuing sea turtles across coastal regions in Hainan. In the past four years, Yeh and a group of volunteers have saved more than 150 turtles, about 100 of which have been released back into the sea.

At his floating hospital, 14 "patients" are currently being treated, including a Hawksbill turtle that lost one of its limbs, a green turtle with a sunken shell, and many other injured or sick olive ridley sea turtles. Yeh and his volunteers are offering training courses across Hainan, calling for children and their families to join his protection efforts.
http://www.upi.com/Science_News/2013/09/03/Floating-hospital-in-China-dedicated-to-caring-for-sea-turtles/UPI-18231378254043/#ixzz2dzTCyiN8

Flood-control water dumping hurting Lake Worth Lagoon (FL, USA)

02 September 2013, by Andy Reid,

Water pollution plaguing coastal waterways during this rainier-than-usual summer is seeping into Palm Beach County's Lake Worth Lagoon with damaging consequences. A rush of stormwater as well as water drained from swollen Lake Okeechobee is getting dumped out of flood-control canals and into the lagoon that reaches from North Palm Beach to Boynton Beach. While the discharges help keep neighborhoods and agricultural land dry, the dumping pollutes the lagoon. Now, seagrass and oyster beds on the southern end of the lagoon are dying, threatening to wipe out fishing grounds and thwarting lagoon restoration efforts that have already cost taxpayers millions.

"It has been very hard on the lagoon," said Daniel Bates, Palm Beach County's deputy director of Environmental Resources Management. "A lot of effort, a lot of money is spent trying to restore habitat in the lagoon. It's frustrating to see everybody's effort take a step back." It's similar to the drainage problems in the Indian River Lagoon to the north, where much bigger discharges of Lake Okeechobee water combined with local runoff is killing fishing grounds, making water unsafe for swimming and prompting outrage from residents and businesses. Everglades restoration

that could get more Lake Okeechobee water flowing to the south offers a long-term alternative to damaging discharges to the coast, but it remains backlogged by costs and political hurdles.

The increased flood-control dumping from the canals throws off the delicate balance of salt and fresh water in the estuaries. It also brings pollutants and muck that make conditions worse by clouding the water and keeping much-needed sunlight from reaching the sea grass below the surface. The Snook Islands Natural Area, just north of the Lake Worth Bridge, is one of the spots where water pollution from flood control discharges is killing habitat vital to fish, manatees and wading birds.

Taxpayers since 2005 have invested about $20 million in expanding seagrass beds and oyster reefs and planting mangroves — along with building a boardwalk, fishing pier, docks and other public access attractions — at the 100-acre marine habitat restoration project. Snook Islands was a restoration success story, even becoming home to the largest concentration of Johnson's seagrass, a threatened species. But a recent inspection in the wake of the polluting discharges revealed that all 42 acres of Johnson's seagrass is dead and oysters at the Snook Islands are "declining fast," Bates said. The problem is that there is nowhere else to send the water until Everglades restoration shows more progress, Twyford said.
http://www.sun-sentinel.com/news/palm-beach/fl-water-pollution-palm-20130901,0,4564646.story

GALLERY

Mission Beach, Qld (Australia): 15 - 16 September 2013 *http://www.seagrasswatch.org/gallery.html*

Dunk Island: 15 September 2013
Lugger Bay: 16 September 2013

Mackay Whitsunday, Qld (Australia): 17 - 21 September 2013 *http://www.seagrasswatch.org/gallery.html*

Hamilton Island: 17 September 2013
Sarina Inlet: 18 September 2013
Pioneer Bay: 19 September 2013
Midge Point: 20 September 2013
Hydeaway Bay: 21 September 2013

CONFERENCES

CERF 2013 Conference (San Diego, California, 3-7 November 2013)

22nd Biennial Conference of the Coastal and Estuarine Research Federation
Toward Resilient Coasts and Estuaries, Science for Sustainable Solutions.

CERF advances understanding and wise stewardship of estuarine and coastal ecosystems worldwide. Its mission is to: Promote research in estuarine and coastal ecosystems, Support education of scientists, decision-makers and the public, and Facilitate communication among these groups. The 2013 scientific program offers four days of timely, exciting and diverse information on a vast array of estuarine and coastal subjects. Presentations will include discoveries and synthesis on the adaptive dynamics of coastal and estuarine ecosystems and human ocieties. Participants will explore how these dynamics and adaptations can be understood and managed at regional and global scales. CERF will convene about 1,600 Scientists, Managers and professionals in government, business, nonprofit and related organizations, and Graduate students. From North America's coastal states and provinces, as well as from more than 20 countries around the world, CERF conference attendees are scientists and managers who conduct research and observe/manage change within a variety of global coastal and estuarine habitats.

Topical sessions *http://www.sgmeet.com/cerf2013/topical_sessions.asp* :

SCI-041 Resilience in Coastal Ecosystems, Part 1: Impact of Stressors on Resilience, Stability, and Recovery in Communities Dominated by Seagrass or Benthic Algae
Convened by: Benjamin Fertig and Jessie Jarvis

SCI-042 Resilience in Coastal Ecosystems, Part 2: Evaluating and Conserving Resilience in Indo-Pacific Coastal Marine Habitats
Convened by: Robert Coles, Len McKenzie, Michael Rasheed and Marcus Sheaves

SCI-043 Resilience in Coastal Ecosystems, Part 3: Resiliency of Coastal and Marine Ecosystems and the Services they Provide
Convened by: David Yoskowitz and Jim Morris

Important dates:

3 October 2013 - Early Registration Deadline

Please visit the conference & workshop web site for further details: http://www.erf.org/cerf2013

SEAGRASS-WATCH Workshops 2013

Australia *http://www.seagrasswatch.org/training.html#workshop13*

Broome, WA: 19-21 October 2013

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 30,458 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*
Seagrass-Watch Shop *http://www.seagrasswatch.org/shop.html*
Virtual Herbarium *http://www.seagrasswatch.org/herbarium.html*
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 HQ is supported by the Great Barrier Reef Marine Park Authority (GBRMPA), TropWATER (James Cook University) and by private donations.

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