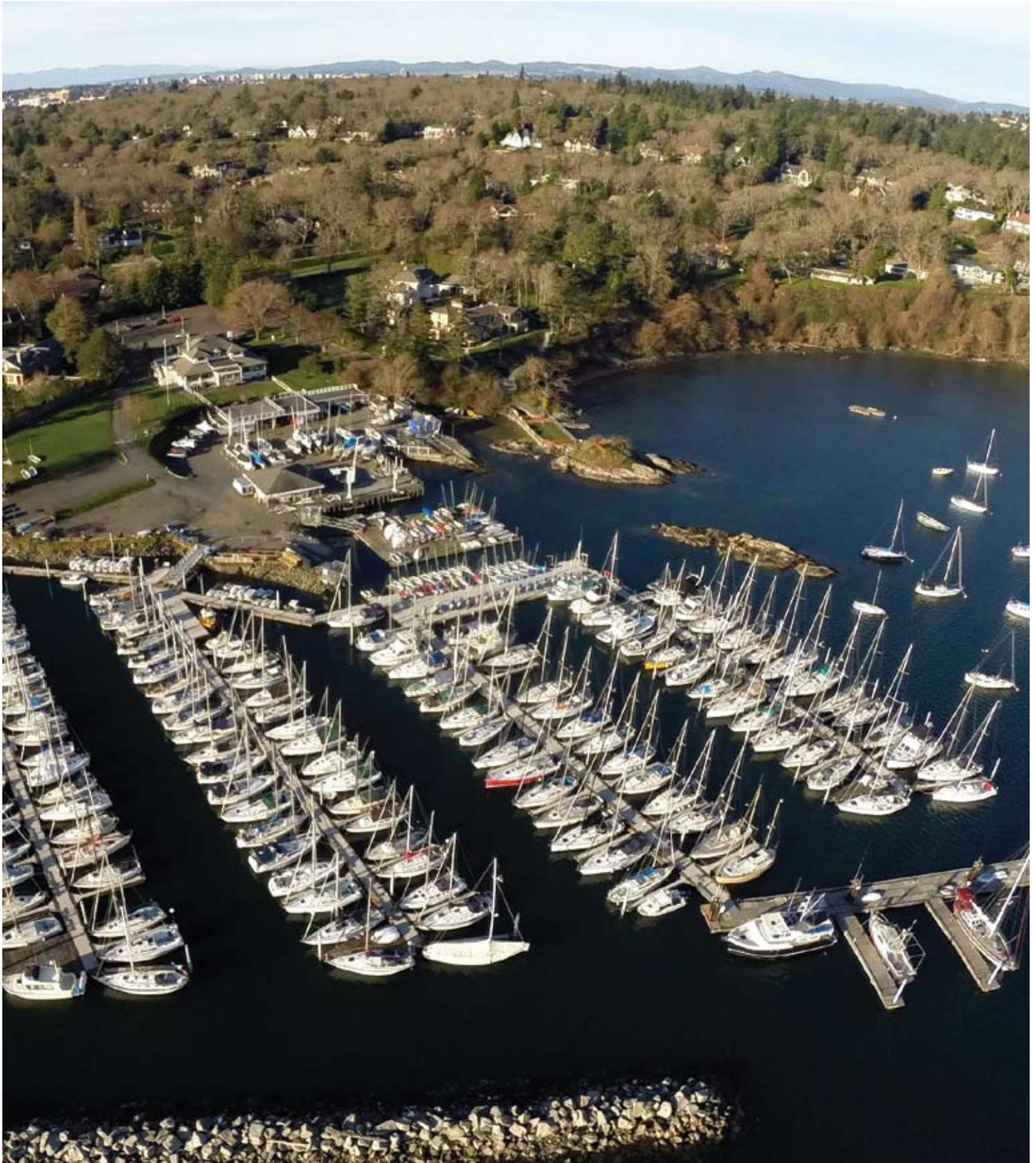


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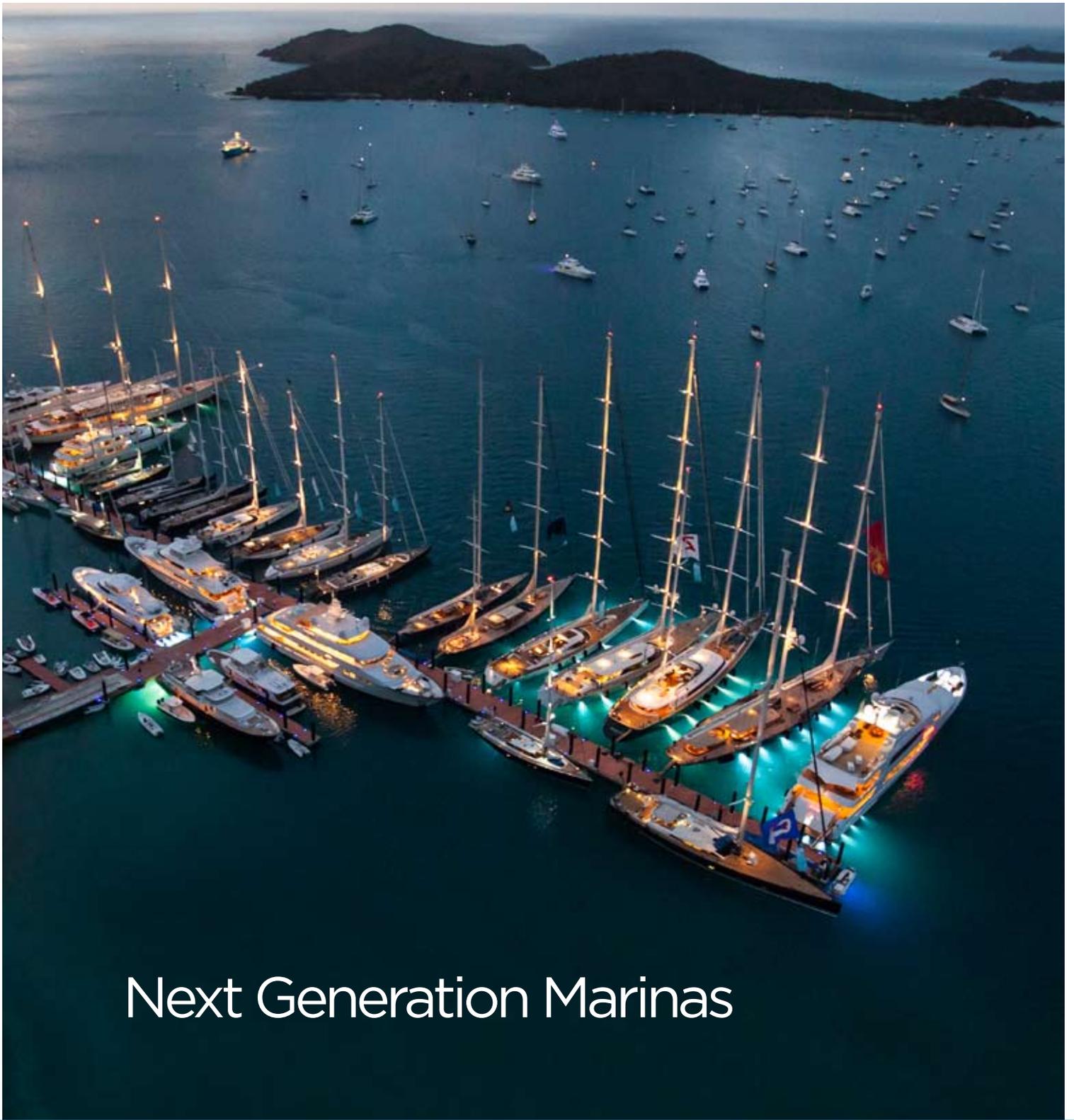
World www.marinaworld.com

September/October 2017

Issue 103



Essential reading for marina and waterfront developers, planners and operators



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Stewards of the environment

by Robert Wilkes

Here is one view of marinas as stewards of the environment:

‘Marinas are businesses and are all about making money like other businesses. They will cut corners and look the other way where the environment is concerned rather than spend the energy, time and money to proactively protect it. Marina operators don’t have the training or just don’t care enough to put in the hard work of environmental stewardship. Marinas and the boats in them are loaded with noxious chemicals that leach into the water, pollute the environment and kill marine life. Boat owners are ‘one-percenters’ with big gas tanks and large carbon footprints who chuck garbage over the side and are a threat to clean water and sensitive marine life.’

Now that I’ve got your attention and the hair standing up on the back of your neck, we can at least agree these attitudes and beliefs exist. But this dismal picture is not true, not even close. When it comes to sustainability, clean water, habitat development and every other aspect of marine ecology, marinas and boat owners are doing a great job. They are enthusiastic, knowledgeable and competent stewards of the environment.

We have a deep and persistent perception problem. These false impressions can and do influence decisions by coastal planning boards and regulatory and permitting authorities, especially when they are under pressure from watchdog environmental groups.

Heather Page, principal environmental planner for Anchor QEA, said environmental activists

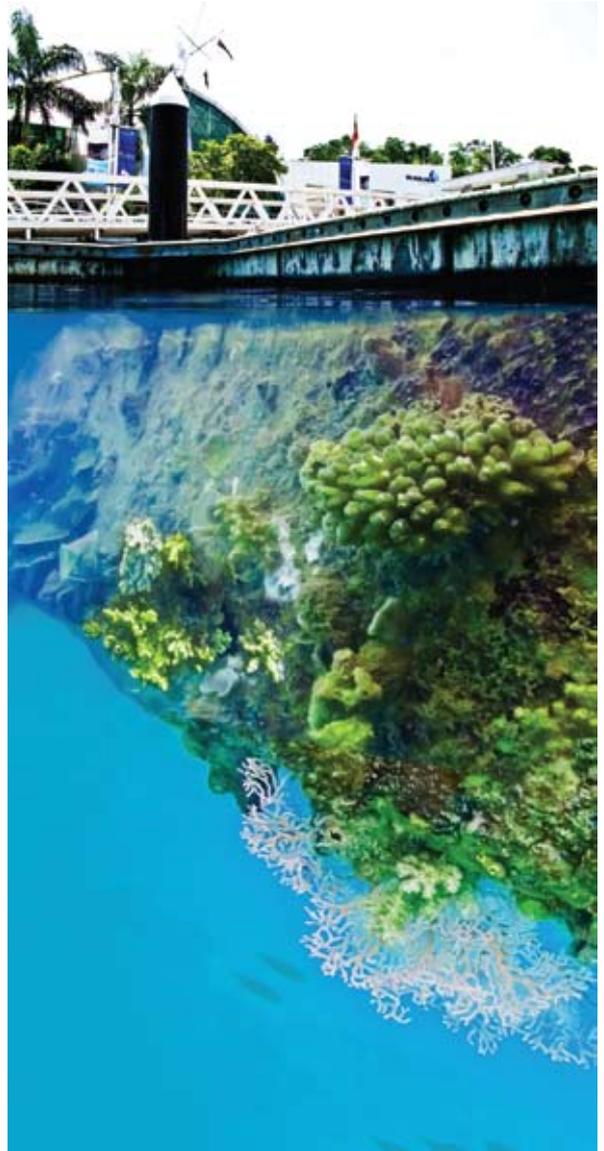
in Washington State travel about looking for violations of the State’s Shoreline Code. Among other things, they look for proper setbacks, view obstruction, public access or development that shouldn’t be where it is. As a result, marinas are difficult to develop in Washington State. If we could convince the public that marinas are a net positive for the environment, more marina developments could be built and the ones that are built could be permitted much faster.

How are we doing?

Mark Sanders is president of the Marina Recreation Association (MRA), a marina industry association for the Western US and Alaska. He is also the owner of Westpoint Harbor Marina in Redwood City, CA. “Most marinas when we test the water are cleaner than the bay itself,” said Sanders. Westpoint Harbor Marina has a pump-out available to every slip. “Our marina is so clean Stanford University swims its triathlon in our basin. Marinas create marine ecosystems. Studies of concrete docks and concrete or steel pilings show an abundance of sea life similar to when they sink a ship to make a marine sanctuary.”

One such study in Naples, FL, by

Sacramento Marina in California proudly displays its Clean Marina flag.



Concrete docks at Marina at Keppel Bay in Singapore are habitats for various forms of marine life.

Turrell, Hall & Associates quantified over 50 different species of marine life as it followed the life of a new marina for three years. “Marinas made of carbonates are artificial reefs,” said Todd Turrell. “Concrete docks, piles, bulkheads and riprap are habitat. They’re colonised by bivalves, tunicates and other filter feeders that remove particulates and pollutants from the water. That allows sunlight to penetrate so photosynthesis can take place, add oxygen to the water and promote plant growth. If your marina has adequate flushing there is a good chance that the water is as clean as before the marina was built.”

The ‘reef effect’, i.e. marinas as marine habitats, is happening everywhere, not just in Florida. Elliott Bay Marina in Seattle, WA, recently





Tunicate worms colonised on concrete docks in Florida.

environment is better cared for when protected by people who are fully engaged.”

Clean Marina programmes

If boaters aren't the problem, how about marinas? Operators with marketing savvy understand they are not selling 400ft² (37m²) of water space; they're selling a great boating experience. As the Baby Boomers retire, Millennials will own the boats, and they are a generation acutely sensitive to the environment. Soy-milk macchiato-sipping Millennials will not put up with an unclean marina. Operators know that.

Incubated by marina operators in industry associations, clean marina programmes have been developed around the world. One of the earliest began as part of the Marina Recreation Association (MRA) in California but is now independent and non-profit. Kathy O'Brien, marina manager at Sun Harbor Marina in San Diego, is one of the leaders of the California programme.

“We have 25% to 30% of the marinas in California in the programme,” said O'Brien, “which is a lot of marinas. But we have more work to do. While the percentage of the total is not as high

In May this year, Jumeirah Beach Hotel Resort Marina became the first marina in the UAE to earn a Fish Friendly Marina accreditation from the Marina Industries Association (MIA). The marina is actively involved with the Dubai Ministry for Climate Change and Environment to establish opportunities to support healthy fish habitats. Port Denarau Marina in Fiji also earned an accreditation – a first for the South Pacific.

completed a ten-year, US\$125,000 study to compare the before and after effects of installing a marina. The study showed that the basin had 100 times more biological diversity than before the marina went in. Dwight Jones, general manager for Elliott Bay Marina said, “It's discouraging to realise that we get no credit for that. The focus is all on mitigating negative effects of building a marina - when in fact a marina greatly enhances biological diversity. Also, if our marina is in the vicinity of storm water run-off we get unfairly blamed for pollution that is carried from the streets into the bay.”

The fact is it's almost always better for the environment to build a marina than to leave the bay, river or inlet in its natural state. At one site in the Bahamas, an estuary was anaerobic from lack of circulation and the mangroves were retreating. Once a marina and its infrastructure were installed, circulation was created and the mangroves thrived. Even the highly industrialised Port of Los Angeles is experiencing clean water, grasses and fish again after the efforts of a number of environmental agencies and its 15 marinas.

Is boating for the rich?

“Another myth about the industry,” said Sanders of the MRA, “is that marinas and boating are for the rich, the one-percenters. The fact is that the average boater in San Francisco Bay has the same level of income as the average person in the bay.”

The “boating is for the rich” meme can be turned on its head when the economic impact of the industry is

taken into account. The US is half the world market in boats, accounting for \$121 billion in economic benefit and 650,000 jobs. Boating is great for the economy and helps everyone.

Boaters' commitment

Boater sensitivity to environmental issues is high and getting sharper all the time. Sanders related a simple analogy. “When smoking was banned in public buildings some office workers resisted and people looked the other way. Today there is zero tolerance for smoking in buildings. The same thing happened in boating. If someone pollutes the water, ten people will report it.”

Phil Purcell, CEO/president of the Marine Industries Association of South Florida, said, “Boaters are the best stewards of the environment. The fees they pay for boat registration and fishing licences support environmental programmes on the water. The





Marina at Keppel Bay has installed sleek, unobtrusive pump-out hydrants.

as we would like it, it is amazing to me how marinas new to the programme are virtually qualified when they walk in the door. That's because they are already following good practices. That's heartening, because it's just a matter of documenting their work. Operators are realising the need to document their performance to change public perceptions. It doesn't count if you don't document it."

O'Brien, as part of the Clean Marina Program, works with state and local government agencies to educate them on the industry's accomplishments. "The Interagency Coordinating Committee (IACC) meets quarterly to mesh together their programmes and work out overlaps and conflicts between agencies," said O'Brien. "We attend and make presentations to show them our programme and answer their questions. We also think it's important that our programme is from industry and not from government. Most government bodies are not close enough to our day to day activities to fully understand the issues and to know the most viable ways to address them."

Australia has a similar clean marina programme with interesting adaptations. Michelle Macready is new in her position at the Marine Industries Association (MIA) based in Sydney. She is taking over the management of their robust Clean Marina Program. Their programme has four levels of certification. Levels 1 and

2 are introductory and self-assessed. Level three requires an independent assessment every three years. Most marinas in the programme are at Level 3. Level 4 awards an internationally recognised accreditation through ISO 14001. Currently, only a handful of marinas are at Level 4. There are also 'Fish-Friendly' designations for marinas that meet additional special requirements.

Long-term environmental issues

Environmental concerns encompass long-range issues such as sustainability, climate change and global warming. The least controversial part of that discussion is sea level rise. There is no doubt sea levels are rising, the only real question is how much and how fast. Balboa Island in Newport Beach, CA, has had inundations during 'king' tides and is already dealing with the problem.

Adam Gale, a managing planner also with Anchor QEA, said, "Our planning for the sea wall is based on the California Coastal Commission Sea Level Rise Policy Guidance. We look at potential effects now and in the future. We can modify the height of the sea wall either in phases or as part of the original design." Balboa Island is currently constructing a 9in (23cm) coping on top of the existing walls to provide flood protection during high tide events.

Sustainability is less controversial than global warming and generally applauded. One of the leaders in sustainability is Sun Harbor Marina in San Diego, the first marina to receive a LEED certification recognising high-performance environmentally-conscious design. Sustainable materials and technologies are used throughout the property from the upland buildings to the concrete floating docks.

Strengthening our voice

Are marinas good stewards of the environment? Yes, clearly. Are we getting the word out to the public? Yes and no. A good place to start is to educate people in our own industry so

that they have the tools to communicate the positive story about the job we're doing. Equipped with the facts, developers, operators, vendors and others can begin to educate the public and have an influence on decision makers in regulatory agencies.

Environmental activists driven by near-religious fervour are difficult to convince. They will continue to stand in the way of shoreline development of any kind. But a knowledgeable industry with documented programmes and scientific data in hand will make us more effective and persuasive.

Among the public, positive attitudes toward our industry can be advanced by clean marina boater education programmes, by seeing proudly displayed clean marina flags and certifications, and by the very fact that the marina's operating practices are indeed environmentally sound. Our marine industry associations such as MRA in California and MIA in Sydney, and others, are hard at work presenting our case to regulators and permitting authorities.

These organisations should be supported. As small businesses, we don't normally have the time to fight for our industry. Our industry associations stay on top of regulatory issues and are there when we most need them. If you're a marina operator, become a member of your regional marina industry association and get accredited by the clean marina programme near you. Take a class and volunteer for a board or committee. The membership fees you pay to support these organisations are well worth it. The more we speak as one, the stronger our voice.

Recycling and rubbish bins, such as these at Stockton Marina in California, can be designed to look attractive.



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