Great Lakes-Seaway Shipping: North America's Link to Prosperity
Algoma Central Corporation Announces

The Next Generation of Great Lakes Bulk Carrier

LAUNCHING A NEW ERA IN ENVIRONMENTAL EFFICIENCY

Consistent with our commitment to environmental sustainability, Algoma will be introducing a series of new vessels to our existing dry-bulk fleet starting in 2013. The new vessels - called the Equinox Class - will include both self-unloaders and gearless bulk carriers. Developed by Algoma together with a team of world-class vessel designers, architects and engineers; these state-of-the-art vessels represent the next generation of Great Lakes bulk carriers.

The Equinox Class will set the new standard in vessel operating efficiency, environmental performance and safety.

To learn more about Algoma’s Equinox Class vessels and watch an informational video, please visit www.algonet.com
SAVE UP TO 40%

The Discounts Just Got DEEPER with the Service Incentive Program!

If you qualify as New Business on the Seaway you can save up to 20% on tolls. Carriers who also qualify as a New Service on the Seaway could save up to an additional 20% for a 40% total savings on tolls!

These add to the savings of shipping via the Great Lakes St. Lawrence Seaway System.

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As Minister of Transport, Infrastructure and Communities, I congratulate the Chamber of Marine Commerce on this special edition of Canadian Sailings.

The marine industry is essential to Canada’s prosperity. It connects us to our domestic and international trading partners through vital gateways like the Great Lakes-St. Lawrence Seaway. Since 1959, the Seaway has made it possible to move goods across North America and beyond quickly and efficiently. This impressive waterway now boasts modern, innovative technologies that make it one of the most cost-efficient, safe and environmentally sustainable ways to reach markets today.

As a centrepiece of the Continental Gateway, the Seaway links to multimodal connections that extend as far as the Asia-Pacific Gateway and the Atlantic Gateway. These links with road, rail and air create an integrated transportation system that keeps our economy globally competitive, and attracts trade and investment. Marine shipping plays a major role in this integrated system.

Our government understands how important trade is to our economy and to the creation of jobs. That is why we are working with our provincial and private-sector partners to promote Canada’s gateways, and it is why we are investing strategically in transportation infrastructure. That includes investments of over $104 million in marine ports across the country. Our future well-being depends on it.

With those objectives in mind, our government has reduced barriers to trade and is working to resolve regulatory issues. For example, we have eliminated tariffs on machinery and equipment, and we have also harmonized our tariff rules for international maritime containers with those in the United States. These changes make Canada more competitive. We also share the industry’s concern about ballast water requirements that could disrupt marine trade in the Seaway. We will continue to work toward a solution that is practical and environmentally sound, and that satisfies all regulators. All of these considerations are part of our efforts to make government more efficient and effective so that Canadian business can continue to thrive.

The Marine Delivers initiative reminds us all of the Great Lakes-St. Lawrence Seaway’s essential contribution to Canada’s economic success. Our government looks forward to continuing our work with industry to ensure the Seaway remains strong and vital for years to come for the benefit of all Canadians.

The Honourable Denis Lebel
Minister of Transport, Infrastructure and Communities
Now, they have a report that spells out just how important the system is to the economies of Ontario, Quebec, New York, Pennsylvania, Ohio, Indiana, Illinois, Wisconsin, Michigan and Minnesota.

The report – The Economic Impacts of the Great Lakes-St. Lawrence Seaway System – by Martin Associates shows that in 2010, when the economies of both countries were struggling to recover from the economic recession, the Great Lakes-Seaway system generated C$34.6 billion (US$33.6 billion) of total economic activity in Canada and the United States. The ports and marine terminals located throughout the system moved more than 164 million tonnes of cargo.

This activity created a total of 226,833 jobs, the report says. Marine-dependent operations accounted for 92,293 direct jobs, which in turn produced another 66,005 induced jobs in the local economy. As well, 67,905 indirect jobs were supported by C$6.6 billion (US$6.4 billion) of regional purchases by businesses supplying services at the marine terminals and ports.

Terry Johnson, administrator of the U.S. Saint Lawrence Seaway Development Corporation, said the system’s supporters always knew intuitively “that the impact of the waterway was huge. But we didn’t have it quantified in terms of jobs, benefits and incomes.”

The study will give the marine sector a valuable tool with which it can approach government and business decision-makers. “We plan to start briefing and talking about the impact shipping on the Great Lakes has on everyone in the region,” Mr. Johnson said.

He also said that when New York State threatens to close the Seaway with unrealistic ballast water treatment rules, “we know that 72,000 jobs are at risk. Or that C$10.8 billion (US$10.5 billion) in economic activity could be impacted.”

Terence Bowles, president and CEO of the Canadian St. Lawrence Seaway Management Corporation, said: “For over 50 years, the St. Lawrence Seaway has served as a vital link connecting the Great Lakes region of North America to markets across the globe. Given that over 92,000 jobs can be directly attributed to the Great Lakes-Seaway system, according to the Martin study, one can readily appreciate the Seaway’s critical role as the linchpin within this marine transportation network.

“The efficient movement of cargoes ranging from grain, iron ore and steel products to heavy-lift specialty items such as wind energy turbines enables our industries...
Ray Johnston, president of the Chamber of Marine Commerce, said: "The real message we want people to understand is the important role that all the components of Great Lakes-Seaway marine transportation system – ships, ports, terminals and locks – play in supporting the many industries that fuel the North American economy – steel, agriculture, mining and construction. Marine transportation is creating and supporting tens of thousands of jobs across the region while the economy is struggling to recover to pre-2008 recession levels."

Among the study's other findings:

- The 92,923 direct job-holders received C$4.5 billion (US$4.4 billion) of direct wage and salary income.
- A total of C$4.7 billion (US$4.6 billion) of direct, induced and indirect state and local tax revenue was generated by maritime activity operations at the terminals on the system. C$1.6 billion (US$1.5 billion) was paid to local and state/provincial governments, while C$3.14 billion (US$3.1 billion) was paid in federal taxes.
- Shipments on the waterway produced C$14.5 billion (US$14.1 billion) of direct, indirect, induced and local consumption expenditures.
- Direct jobs generated linked to the waterway are nearly equally distributed – 48,288 in Canada and 44,634 in the U.S. – while the majority of induced and indirect jobs are created in the U.S.
- Iron ore movements created the largest number of direct jobs, mainly in steel mills that receive iron ore shipments by water – about 17,000 jobs in Canada and 12,000 in the U.S. The movement of other dry bulk cargoes generated the second largest direct jobs both in ports and private terminals handling and processing dry bulk cargoes such as alumina and other ores, fertilizers and potash. The majority of these direct jobs are in Canada.
- The majority of the tonnage shipped and received at U.S. ports and terminals consists of iron ore, stone aggregates and coal. Iron ore, other dry bulk, grain, petroleum products and coal are the major commodities shipped and received at Canadian ports and terminals. Steel products moving on the Great Lakes creates larger impacts in the U.S. due to the location of major steel fabrication tenants at several of the U.S. Great Lakes ports.
- About 7,600 direct jobs are with Canadian- and U.S.-flag vessel operators and tug-and-barge operations moving cargo on the Great Lakes-St. Lawrence Seaway system, while 3,373 jobs are with freight forwarders and customs brokers arranging for the handling of the cargo. Another nearly 2,000 jobs are with firms providing maritime services such as ship chandling, vessel cargo and hull surveys, ship repair and marine equipment sales and servicing.

Mr. Bowles said an ongoing challenge for Great Lakes-Seaway supporters is communicating the message about the waterway’s importance. “People don’t realize this, so we have to tell them how what we do affects people’s jobs and livelihoods. We have a very positive impact on peoples’ lives,” he said.

The Seaway has become far more efficient and com-
petitive in recent years and has attracted more new business through incentive tolls, Mr. Bowles noted.

Mr. Johnston said the Martin study adds facts and figures to efforts by the marine industry to create a greater awareness of its role. That will allow the marine industry to make its case from a more solid basis.

“[The study shows] how important the system is to various industries and the economic health of the region,” he said.
Higher Seaway volumes, new vessels buoy marine sector

The Great Lakes-St. Lawrence Seaway system is holding its own in 2011 despite a challenging North American economic climate.

Seaway traffic to the end of August is running 3.5 per cent ahead of the year-ago period. The first two of a flotilla of new ships designed for Great Lakes-Seaway cargo service has arrived. Significant investments are being made in ports. Politicians are talking about marine transport.

There even have been some lucky bounces. What first looked like a poor year for western grain turned around in late summer when the Canadian Wheat Board announced the crop year will be a normal one, which should mean plenty of exports later this year.

While southern U.S. crops have been hit by drought and flooding, the situation in northern states, which can ship through the Seaway, is more encouraging.

Ray Johnston, president of the Chamber of Marine Commerce, says new ships that Algoma Central Corporation, Canada Steamship Lines and Fednav Limited are acquiring “speaks to the level of confidence they have in the industry’s future. There’s also a big commitment by foreign shipowners to include Seaway-sized vessels in their fleets.”

Terence Bowles, president and CEO of the St. Lawrence Seaway Management Corporation (SLSMC), calls the new ships “a bullish endorsement of our system. That’s our future.”

The entire SLSMC board of directors attended the August christening of Algoma Central’s newly arrived Algoma Mariner to recognize the importance of fleet renewal.

“(The waterway) has suffered through the worst economic crisis since the Great Depression,” Mr. Bowles said. “The turnaround in traffic in 2010 and 2011 is very positive news for all we’ve been doing. Without the strike at the U.S. Steel plant in Hamilton, our numbers would be even better.”

The U.S. Lake Carriers’ Association reported that to the end of August LCA members had moved 55.1 million tons of cargo. That’s an increase of 3.2 per cent over the same period last year.

Some 22 million tonnes of cargo moved through the Seaway to the end of August, up 3.5 per cent over the corresponding period in 2010.

Traffic in the Seaway has increased in several cargo categories including grain, salt, petroleum products, and bulk materials used in construction. In the grain sector, farmers will harvest 21.3 million tonnes of wheat and durum in 2011, up from 21 million tonnes last year, and not far off the five-year average of 22.4 million tonnes. Barley production will be up 1 million tonnes to 8 million tonnes. Those numbers bode well for the Seaway.

On the other hand, volumes of iron ore and coal through the waterway have decreased so far this year.

The SLSMC says that while overall shipments trail projections made at the start of the navigation season, the prospects for a strong closing remain good.

New ships – Algoma Central, Canada Steamship Lines and Fednav – have announced investments in new ships so far this year.

Fednav is acquiring three new ships from Japan for $100 million for the Great Lakes-Seaway trade “because we’re very positive about the Seaway’s long-term significance,” said Paul Pathy, Fednav’s co-CEO. “It’s the most economic and environmentally friendly way to move bulk cargo to and from the American heartland.”

Algoma Central received its latest new ship in August – the Algoma Mariner. The vessel, a Coastal Class self-unloader like the Algobay that arrived last year, will become the centerpiece of an effort by the company to promote its expanded operation and the value of marine transport as an alternative to the congested highways and rail lines in the Great Lakes region.

Algoma Central demonstrated its confidence in the future of the waterway earlier this year when it purchased the vessels of longtime collaborator Upper Lakes Group. Algoma Central has ordered eight new Equinox Class freighters, two of which will be owned by the Canadian Wheat Board.

Canada Steamship Lines has
ordered from Chengxi Shipyard in China two more 35,000-deadweight-tonne self-unloaders for Great Lakes-Seaway service. The order brings to four the number of Trillium Class self-unloaders CSL is acquiring. Two already are under construction and expected to be in service next fall. CSL has options for four additional vessels.

The Canadian government triggered the ship-buying spree by removing a 25-per-cent duty on imported ships. Until the new vessels began arriving, the average age of the Canadian fleet was 35 to 40 years.

EXPANDING MARKETS
McKeil Marine Ltd. and Hunt’s Transport Ltd. expanded their joint short-sea shipping service from the Port of Hamilton to Argentia, N.L., this year. The service is intended to provide shippers an alternative to the Marine Atlantic ferry service to Newfoundland. The McKeil Marine/Hunt’s Transport service, which carries everything from construction materials and oversized equipment to general cargo on truck trailers, aims to capitalize on the capacity and fuel efficiency of barge transport. A barge can carry 50 trailers and saves the fuel that would be used in trucking the cargo all the way to Sydney, N.S., for loading onto a ferry. The partners are looking at expanding the service to other Newfoundland destinations.

Mr. Bowles said a lot of uncertainty still surrounds future prospects for the Great Lakes-Seaway. “The outlook is for slow economic growth in the immediate future,” he said. “We haven’t felt this uncertainty in our business yet. Government plans in both countries to encourage economic growth are extremely important for us.”

One positive move for the Great Lakes-Seaway would be the successful conclusion of free-trade talks between Canada and the European Union, Mr. Bowles noted.

And more trade agreements with Latin American countries, such as the one recently concluded with Colombia, would also buoy the prospects for the waterway.

Strong economic growth in India and China is encouraging and could become even more important with the opening of an expanded Panama Canal in 2014, Mr. Bowles said.

Mr. Johnston said current successes are encouraging for Great Lakes-Seaway stakeholders as they tackle challenges facing the waterway.
“We need regulatory harmony between Canada and the United States,” he said. “The investments by the shipowners are a leap of faith in the face of lingering concerns about U.S. ballast and air emissions rules.”

One big question mark for the Great Lakes fleet remains New York’s proposals for the treatment of ballast water. The state is proposing regulations demanding 100 times the International Maritime Organization’s standards for treating ballast water. The regulations are scheduled to come into effect in August 2013, but technology to comply with the new rules simply does not exist.

Shipowners have shown they are prepared to address environmental concerns, and technology to do that is being developed. “But government and industry have to work together,” Mr. Johnston said.

The Chamber of Marine Commerce president said the government should include Seaway upgrades in any plans for improving port infrastructure. Renewing the Canadian Coast Guard fleet is also important for ensuring Great Lakes-Seaway operations, he said.

■

Some 22 million tonnes of cargo moved through the Seaway to the end of August, up 3.5 per cent over the corresponding period in 2010.
Ports play key role in Great Lakes-Seaway system’s success

PORTS ARE HELPING TO PROPEL THE GROWTH OF BUSINESS ON THE GREAT LAKES-ST. LAWRENCE SEAWAY SYSTEM WITH AMBITIOUS EXPANSION PLANS AND INNOVATIVE SOLUTIONS TO TRANSPORTATION CHALLENGES.

A class example is the Port of Hamilton, where the Hamilton Port Authority has developed plans for $500 million in infrastructure investments and improvements. As of 2010, nearly half of the projects were completed or working their way to the planning and approval process.

Hamilton was also rewarded with a significant increase in traffic in 2010 and the announcement of several major private sector investments in new facilities in the port.

During the past few years, Hamilton has seen the construction of new and expanded terminals for Parrish & Heimbecker, McAsphalt, Vopak and Ruetgers Canada to boost shipments of Ontario grains, asphalt and petroleum oils in addition to pelletized slag through the port.

"Development in the past year has created new capacity and elevated the port across the country and internationally, benefiting business across Hamilton and the broader region," said Hamilton Port Authority president and CEO Bruce Wood.

In Thunder Bay, a new $3-million dedicated shore crane will ratchet up the Lake Superior port's strategic importance for handling bulk traffic, forest products and special project cargoes.

"This crane will raise the port’s profile and definitely attract new business," said Tim Heney, CEO of the Thunder Bay Port Authority.

In the last several years, Thunder Bay has become a strategic transshipment point for various project cargoes destined to the massive developments in the Alberta oil-sands and for the green energy sectors.

In Windsor, a new project has created a multifaceted marine facility for the handling of petroleum products and aggregates in the port.
Wind energy components bound for Port of Indiana-Burns Harbor.

The Port of Indiana-Burns Harbor was cited for posting the largest increase in international cargo traffic of all Great Lakes ports during the 2010 navigation season. The Port of Oswego, N.Y., and the Ogdensburg Bridge and Port Authority were honored for generating significant growth in international cargo last year.

It was the 10th time Oswego has received the Pacesetter Award, the ninth time for Indiana-Burns Harbor, and the sixth for Ogdensburg.

The award is named after Bob Lewis, a former SLSDC trade analyst. In 2010, Indiana-Burns Harbor registered a 73-per-cent increase in tonnage over the previous year. Much of the 351,600 tonnes of international cargo comprised wind components, steel and construction equipment. In addition to the international tonnage, the port shipped 14 times more project cargo in 2010 than the previous year, resulting in a 43-per-cent increase in overall shipments and total traffic of 1.8 million tonnes.

“President Obama has set a goal of doubling U.S. exports and it is this kind of strong performance by the Port of Indiana-Burns Harbor that is going to help do this,” said SLSDC administrator Terry Johnson.

“This port enjoyed one of its best years on record in 2010,” said port

Michael Gravelle (foreground), Ontario’s minister of northern development, mines and forestry, and Tim Heney, CEO of the Thunder Bay Port Authority, with an image of the type of crane that will be delivered to the port.

“Fifty years ago, the most significant infrastructure project in this area was the opening of the St. Lawrence Seaway. Today, the most significant infrastructure project for this area will be the renewal and expansion of our port facilities,” said Gravelle.
director Peter Laman. “We were fortunate to grow our business for the second consecutive year and are also very encouraged that 2011 shipments are more than 20 per cent ahead of last year’s pace.

“Indiana’s economy depends heavily upon our Lake Michigan connections to ocean vessels via the St. Lawrence Seaway, lake carriers transiting the Soo Locks, and river barges moving through the Chicago Area Waterway System. These waterways move vital goods to and from businesses throughout the Midwest and generate more than 100,000 jobs for Indiana.”

The largest shipment of project cargo in the port’s history occurred during the 2010 season when 134 complete wind turbine units arrived on 11 different ships from various Great Lakes locations.

Indiana-Burns Harbor also handled last year its first outgoing shipment of windmill components as two ships loaded with wind turbines sailed from the port to New Brunswick.

Jonathan Daniels, Oswego’s port director, said that port recorded an international tonnage increase of 4 per cent in 2010, handling 183,502 tonnes of cargo. Aluminum shipments were up 37 per cent and movements of soybeans, corn, and wheat rose 33 per cent.

“As a proud member of the St. Lawrence system, we are pleased that we were able to show an increase in international tonnage for the season,” Mr. Daniels said. “This is a testament to the dedication and work ethic of the longshoremen that work efficiently for the benefit of the customers that utilize the Port of Oswego as a critical component of their logistics chain.

“From aluminum to agriculture to transformers, the Port of Oswego stands poised to provide the most flexible and cost-effective services for an ever-expanding clientele.”

The Port of Ogdensburg has expanded its agricultural and heavy-lift capabilities, is creating a new access road for over-dimensional cargo, has developed a port master plan in conjunction with New York State Department of Transportation, and continues to work with the U.S. Army Corps of Engineers to meet future dredging needs.

“While this award recognizes the efforts of the Port of Ogdensburg for increased tonnage, there is no doubt that the Port of Ogdensburg has a bright future as Seaway traffic continues to rebound,” said Wade Davis, executive director of the Ogdensburg Bridge and Port Authority.
Full steam ahead for Great Lakes-Seaway fleet renewal
Huge investments will improve efficiency, environmental performance

The hundreds of millions of dollars being invested in new or almost completely overhauled bulkers and self-unloaders will save money in the long run by transporting significantly more cargo faster using less fuel. The greater fuel efficiency will translate into a much smaller environmental footprint.

“Ship design has evolved dramatically since the first Canadian fleets were built for the Seaway and Great Lakes some 40 years ago,” said Wayne Smith, Algoma Central Corporation’s senior vice-president for commercial activities. “We’ve learnt a lot about improving bow shape, stern wave and propulsion efficiency so that these new, larger ships will require much less energy to move each tonne of cargo per kilometre.”

The timing of these investments might seem odd with the economy being so uncertain, but there are several reasons the renewal is occurring now. For starters, some of the existing vessels have reached the point where it’s no longer worthwhile to keep fixing them.

“We’ve actually been planning fleet renewal for years, but several factors – such as the 25-per-cent Canadian duty on imported ships that was in place until a year ago – basically wiped out the economics for a long time,” Mr. Smith said. “That duty had to be removed before we could proceed.”

The current relative strength of the Canadian dollar has helped to get a better price on designing and building new vessels.

Paul Pathy, president and co-CEO of the Fednav Group, said his company’s investments reflect a confidence in the future of the Great Lakes and St. Lawrence Seaway as a major transportation route.

“We believe there will be an economic resurgence in the Canadian and American Midwest, and the Seaway and Great Lakes remain the most economical and environmental means of transporting bulk cargo to and from North America’s heartland,” he said. “We’re already starting to see some of the Midwest begin to reinvent itself with project cargo, such as windmills, being transported to the region by ship.”

A similar sentiment is expressed by Rod Jones, CSL Group’s president and CEO. “The decision (to build the vessels) is a reflection of the confidence our customers continue to show us in international trades and on the Great Lakes-Seaway,” he said. “It also speaks to our corporate commitments of fleet modernization.”

At Algoma, Mr. Smith sees the shipping industry rebounding since the 2008 world financial crisis. “Shippers continue to need affordable, high-quality marine transportation services, and we’re bringing more sustainable ships into service with our investments,” he said. “That should pay off as fuel prices rise again by making us more efficient and competitive.”

Ironically, the downturn actually created an opportunity. “Before the global decline in shipbuilding, it was hard to get high-

Algoma Central Corporation’s new Algoma Mariner.
Illustration of Algoma Central Corporation's Equinox class vessels.

The industry is hopeful its investments in new ships, coupled with some environmental improvements to existing ones, will convince legislators to pursue air-emission reductions by looking at the overall performance of a company’s fleet, rather than imposing deadline conditions on each and every vessel. Such fleet-averaging recognizes the environmental advantages of giving a company time to build new and much more environmentally friendly ships, rather than spending a lot of money to upgrade older vessels that will never be as efficient. Canada is open to the idea, and broaching it with the Environmental Protection Agency (EPA) in the United States.

ALGOMA CENTRAL SPENDING MORE THAN $400 MILLION

Over the past two years, Algoma Central Corporation has invested more than $100 million to replace two ships with a completely new one and another that’s almost entirely overhauled. It’s also spending $300 million to add six brand-new ships to its fleet by 2014.

The owner and operator of the largest Canadian-flagged fleet of dry- and liquid-bulk carriers in the Great Lakes-Seaway has additionally spent almost $190 million since 2002 to renew its double-hull product tankers.

When the MV Algoma Mariner arrived in Port Colborne, Ont., from the Chengxi Shipyard in China on Aug. 25, Algoma christened it as the first completely new Canadian-flagged dry-bulker introduced into the Great Lakes service in more than 25 years.

The Coastal class self-unloader shares the same maximum Seaway dimensions as the MV Algobay delivered to Algoma in April 2010. Both are classed for service in the Great Lakes, St. Lawrence and within 200 nautical miles of the North and South American coasts. The ships carry iron ore, coal, salt, aggregates, grain and other dry-bulk commodities in the Great Lakes, Seaway and along the Atlantic coast.

With the introduction of the new MV Algobay last year, the MV Algoma Mariner, and the soon-to-be constructed Equinox class vessels, Algoma will own and operate one of the most modern and environmentally efficient fleets in the Great Lakes system.

Everything is new on the Algobay except for the refurbished aft and shell from a previous vessel. “With a new engine, generators, avionics, etcetera, it’s virtually a new ship,” Mr. Smith said.

The Algoma Mariner was constructed to replace the retired MV Algoport. While its forebody and cargo-handling systems are identical to the Algobay’s, building from scratch allowed for a completely new design for the stern by Deltamarin – the same company designing Algoma’s new Equinox class vessels.

“We were able to take many of the principles being
incorporated into the Equinox design – especially in the aft and propulsion – to gain about 25-per-cent fuel efficiency in the Mariner over the Algoport,” Mr. Smith said.

The new ships consume approximately 13 per cent less fuel for a saving of about $325,000 on a $2.5-million annual fill-up at $500 per tonne. The remaining 12-per-cent gain is achieved by the larger, more spacious vessel being able to transport more cargo in less time.

A new single slow-speed engine, controllable pitch propeller and advanced control system make the Algoma Mariner significantly more efficient than previous bulk carriers. Tier II engines dramatically reduce nitrogen oxide (NOx) emissions well ahead of international regulations. Variable frequency drives control the equipment using mostly cleaner electricity.

The hull design provides high displacement to maximize transport capacity but minimize bow and stern waves that would reduce fuel efficiency and cause shoreline damage at the ship’s higher speeds.

Other environmental features include a thermal oil heating system that recovers heat from exhaust gases. The unloading areas and covered unloading boom are equipped with features to minimize and capture dust. Wash-water for cleaning cargo holds is recovered into built-in holding tanks.

Algoma’s Equinox class program involves spending $300 million to build a new generation of dry-bulk carriers for the Great Lakes-St. Lawrence trade. The four full-size self-unloaders and two full-size gearless bulkers will be able to carry more cargo at higher speeds using a lot less fuel.

“The Equinox class will be ships built to optimize performance within the Seaway’s constraints in terms of vessel size and depth,” Mr. Smith said. “We’re taking about an estimated 40-per-cent reduction in fuel, compared to conventional ships, largely because the propulsion system is more efficient.”

As a result, greenhouse gases will be reduced by 40 per cent per tonne/kilometre for a total of 7,000 fewer tonnes per vessel annually, when compared to the existing fleet. NOx will be reduced by 46 per cent per tonne/kilometre for a total of 150 fewer tonnes yearly.

The first new Equinox vessel is scheduled for delivery in 2013, with additional ships following later that year into 2014. Algoma will also crew and operate two other Equinox gearless bulkers that the Canadian Wheat Board is buying.

Real-time efficiencies will be tracked, along with emissions. “This will greatly improve our data and help ensure our equipment is working at its optimal level,” Mr. Smith said.

The new Tier II engines will be able to burn diesel
rather than heavy marine fuel if that’s necessary to minimize emissions. “Right now we’re concentrating on how the latest scrubbing technology can minimize SOx (sulphur oxides) and particulate matter from gas exhaust,” Mr. Smith said.

**FEDNAV INVESTING $400 MILLION PLUS**

Fednav Limited, Canada’s largest ocean-going dry-bulk ship owner and operator, is spending more than $400 million on 14 new vessels over the next three years. The first, an ice-class bulk carrier, was named the Federal Sable during a ceremony at the Ouhua Shipyard in China on Sept. 20.

Another seven ice-class bulkers have been ordered from the same shipyard with deliveries scheduled to continue this year into next.

Fednav has also ordered four ice-class bulk carriers with long-term partners Sumitomo Corporation and Oshima Shipyard in Japan. The four bulkers are being constructed for trade during the winter along the St. Lawrence River and similar cold climate routes. They’re expected to be delivered between 2012 and 2014. Two additional bulk carriers from Oshima will be ready in 2012 and 2013 to trade on the St. Lawrence River, Seaway and the Great Lakes.

The Sable, which will sail on the St. Lawrence River among other waters, is more fuel efficient than Fednav’s previous class of ships, while having a larger cargo hold. As a result, it produces significantly lower emissions per tonne/kilometre. Its Tier II engines have been installed two years prior to international requirements and will significantly reduce NOx.

“The environment is one of our top priorities when we consider the design of a new vessel,” Mr. Pathy said. “It is important to us and to our customers that our vessels not only respect but exceed environmental regulations in Canada and worldwide.”

In early June, Fednav took possession of the Seaway-sized MV Federal Yukina as part of a lease agreement that will result in Fednav purchasing the ship within a few years.

The bulk carrier is 12 per cent more fuel efficient than Fednav’s previous class. The Yukina’s Tier II engine, sleeker hull design and other ergonomic features enable it to operate on 770 tonnes less fuel annually, thereby avoiding 2,200 tonnes of carbon dioxide emissions yearly. It would normally take the planting of 5,000 trees to get rid of that much CO2.

“Our decision to install Tier II engines a full two years before they’re compulsory for new ships reflects our environmental stewardship,” Mr. Pathy said.

The new ships will help to green supply chains, something that’s becoming more of a consideration by cargo shippers in making transportation decisions. “They certainly ask about the company’s environment policy and want to know to what extent we’re taking actions to be as sustainable as possible,” Mr. Pathy said.

As the largest operator of ocean-going vessels within the Seaway, Fednav needs to set an example, Mr. Pathy added. “This investment in new ships and the work that we’ve done to improve our sustainability in a measurable way through the Green Marine environmental program are two key examples of how we take our commitment to the communities we serve very seriously,” he said. “These new technologically superior vessels speak to where we want to go with our business.”

**CSL INTRODUCING NEW TRILLIUM CLASS**

CSL has announced a new generation of self-unloaders that will be known as the Trillium class.

“These ships will be the most advanced and environmentally friendly self-unloaders in the trade,” Mr. Jones said. Named after the official flower of Ontario, Ohio, and China where the ships are being constructed, the three petals and stalks of the new Trillium logo reflect CSL’s three-pronged approach to sustainability in terms of energy, efficiency and the environment.

Construction of the lakeers for Canada Steamship Lines and the Panamax vessels for CSL International are on target for the first deliveries to be made in 2012.

Federal Yukina arrives in Hamilton on its maiden voyage to the Great Lakes.
Like its competitors, CSL is building the new class with Tier II engines that will improve fuel efficiency and reduce emissions. The cargo hull design will likewise increase cargo lift and manoeuvrability, and once again make better use of fuel.

“These new vessels are designed for optimum performance, with the hull design enabling increased loading capacity with some sacrifice to vessel speed,” said Sylvie Lafleur, director of customer service. “This will improve our fuel use by 15 per cent per day, and more importantly, enable us to propel one metric tonne of cargo on a litre of fuel for approximately 500 kilometres, which is 40 per cent more efficient when compared to the last steamship that CSL just retired.”

CSL is having the vessels built at Chengxi Shipyard in China. “Although we’ve been involved in shipbuilding projects over the past few years with both the international and domestic programs, our last ship we built from bow to stern was the CSL Spirit in 2001, so this is a big undertaking,” said Kevin Begley, CSL International’s director for engineering and projects.

“Although we will be employing proven technology, these are not standard ships,” he added. “They’re designed to have a high level of automation, high-quality coatings and a big focus on environmental technology.”

The wide range of new environmental features include: holding tanks for cargo residue and wash water; fixed pitch propellers to remove oil in water hubs; deck machinery designed to run without oil; new garbage-incinerating technology; highly efficient electric motors; vacuum toilets; and, a unique bilge oil skimmer.

New cargo delivery systems are designed to virtually eliminate dust. The booms will be totally covered with a design that facilitates precise cargo direction at the end of each boom. Full cofferdams will broaden spill protection and decrease the noise associated with cargo transfers. It’s hoped that governments will appreciate the huge investments being made to maximize the efficiency and minimize the environmental footprint of new vessels.

“We hope that regulators will take into account all of the optional environmental equipment that CSL is installing when they consider future policy decisions and regulations for the marine industry,” Ms. Lafleur said.
Industry fears New York regulations will shut down Great Lakes-Seaway

New study shows ballast water rules will put 72,000 people out of work

By JULIE GEDEON

NEW RESEARCH SHOWS THAT NEW YORK’S STRINGENT BALLAST WATER REGULATIONS FOR SHIPS TRANSITING THE ST. LAWRENCE SEAWAY WOULD RESULT IN THE LOSS OF 72,000 JOBS AND C$10.8 BILLION (US$10.5 BILLION) IN ECONOMIC ACTIVITY IN CANADA AND THE U.S.

The study, which was carried out by American economic consultants Martin Associates, also showed that more than 75 per cent of those jobs would be lost in Canada, specifically Ontario and Quebec.

As early as Aug. 1, 2013, New York will oblige ships operating within its waters to have equipment that can purify ballast water to a standard 100 times beyond the levels required by the International Maritime Organization (IMO), a United Nations agency.

All new ships constructed after Jan. 1, 2013, must have technology that cleanses ballast water to a level 1,000 times greater than the IMO standards to be able to sail in New York waters.

New York State’s regulators have said that the legislation will protect the Great Lakes and St. Lawrence Seaway from the introduction of new aquatic invasive species. However, both members of the marine industry and scientists have said that New York’s standards are unachievable with existing technology.

Ray Johnston, president of the Chamber of Marine Commerce, said: “New York State’s regulations will effectively shut down the St. Lawrence Seaway. As this new study shows, that will lead to devastating job losses for Canada at a
time when the country is still struggling to create employ-
ment. The Great Lakes-Seaway already has the most strin-
gent ballast water regulations in the world and no new
invasive species have been discovered due to ballast
water since those rules were put in place in 2006.10

Despite the fact that Canadian scientists have said
that current ballast water management practices are highly
effective at killing possible aquatic invaders, the industry
still supports the installation of ballast water equipment
that meets IMO standards on ocean-going vessels as an
added protection.

The Science Advisory Board of the U.S.
Environmental Protection Agency concluded in July that
any ballast water management standard beyond the IMO
levels is currently unachievable.

Initially considering similar legislation to New York, the
State of Wisconsin revised its rules to follow an IMO stan-
dard in 2014 after a year-long scientific review concluded
that ballast systems at the higher level haven’t been
approved, and technology to verify whether they would
actually work doesn’t exist at present.

New York’s regulations would require all ships to have
the on-board equipment, regardless of whether they actu-
ally take on or discharge ballast within the state’s bound-
aries.

“The disruption to waterborne commerce would be
economically disastrous with hundreds of businesses
reliant on ships left in the lurch,” Mr. Johnston said.

“Forcing this cargo to be transported by rail or truck
would create all kinds of costly delays, and be impossible
in many cases because of the higher expenditure, or the
size or volume of the cargo involved.

“Transferring any significant portion of this cargo to
other transportation modes would also have a serious
environmental impact because ships are the best at mov-
ing large volumes on the least fuel.”

Steve Fisher, executive director of the American Great
Lakes Ports Association, said that the new study also
showed New York’s regulations would have a significant
impact on the U.S. economy. “If the rules come into force,
17,000 jobs and $2 billion of economic activity would be
lost in the eight states bordering the Great Lakes-Seaway
navigation system,” he said. “And this does not even take
into account further repercussions that could arise from the
regulation’s effects on New York coastal ports.”

The Port of Albany along with the New York Shipping
Association (representing vessel operators and marine ter-
minals and the Port of New York and New Jersey) are part
of an unprecedented coalition of Great Lakes-Seaway
stakeholders who have met with Governor Andrew Cuomo
and other New York officials in the hopes of having the
regulation changed.

Ideally, the industry wants New York and all states
and provinces to harmonize their regulations with those
adopted by the IMO as international standards. “It makes
little sense for each state to have different ballast dis-
charge rules,” Mr. Fisher said. “We need harmonized, sci-
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Federal government, marine industry working together

By Rick Dykstra, Member of Parliament, St. Catharines

In St. Catharines, Ont., the Welland Canal is as much a part of our community as RIM (Research in Motion) is to Kitchener, Ont., the oilsands are to Fort McMurray, Alta., and potatoes are to Prince Edward Island. The canal is the transfer point for the shipping industry along the St. Lawrence and the Great Lakes. Access to Lake Erie or Lake Ontario through to the United States or the East all begins with the Welland Canal.

Whether it’s Algoma Central Corporation or Canada Steamship Lines, our Great Lakes and St. Lawrence Seaway have played host to an industry that has, since the inception of our nation, played a vibrant and key role in creating jobs, enhancing trade and delivering products to cities and ports right here in Canada and throughout the U.S.

There has never been a time where opportunity, job creation/retention, economic growth and sustainability have been so strong. The industry is poised for a reinvestment that has been sorely needed for decades.

The amazing part of the story lies within two areas. The first area is the realignment the industry itself realized and implemented over the past four years. The second area is the partnership established between the industry and the federal government.

Whether its shipowners such as Algoma Central, ship repair companies like Seaway Marine and Industrial, shore-side services such as Snider Marine Terminals, unions like Seafarers’ International, or our Great Lakes Pilotage Authority, all stakeholders have realized their focus was to speak, work and move forward together.

With one voice the shipping industry came to the federal government, and rather than just listening to and ignoring the plight of the industry, the government acted.

When the Seafarers’ International Union came forward with a strategy to secure Canadian-flagged vessels for the short-sea shipping industry, the federal government assisted and jobs were created and secured.

Next in the strategy and after careful consultation, on Oct. 1, 2010, the federal government announced that retroactively to Jan. 1 of that year, the 25-per-cent import duty on newly built vessels would be permanently removed. Four years in the making, that announcement has led to two companies investing millions of private sector dollars back into their fleets. Algoma Central Corporation, with eight new ship purchases, and Canada Steamship Lines, with four, will see the industry keep its commitment to its partnership with the federal government and secure thousands of jobs in the industry for the next 40 years. The new ships will also significantly reduce the environmental footprint with respect to fuel consumption and greenhouse gas emissions.

Of course, there is still more to do and the partnership with the federal government on the Great Lakes continues. Currently, the issue of ballast water requirements facing the industry in New York waters is monumental. The State of New York, unlike many other states in the U.S., has not backed away from the new regulations, which would see on new ships ballast water treatment requirements 1,000 times higher than current International Maritime Organization guidelines. The timeline set in place by the State of New York, if not remedied by Aug. 1, 2013, would ostensibly shut down New York waters to Great Lakes shipping and put into jeopardy thousands of jobs. The federal government, through both the Transport Department and our New York and Buffalo consulates, is working with the Chamber of Marine Commerce and other stakeholders to achieve a compromise or alternative strategy to satisfy the state and continue shipping through New York and New Jersey. Heavy lifting and hard work will be required. It will not be easy to work to a resolution, but it is clear the federal government and the industry will be working together to undertake a solution.

During a time of global recession, the partnership between the industry and the federal government has shown that by working and planning together, it will be a truly Canadian success story unrivaled by any in the world. As we work through and out of the recession, it’s clear that along the Great Lakes and within our country, challenging times have been met with a strategy that prepares the industry for the future, ahead of most other shipping countries in the world.
Increase in shipping keeps pilots busy

FROM LES ESCOUMINS TO THUNDER BAY, MARINE PILOTS ARE BUSY ENSURING THE SAFE PASSAGE OF SHIPS THROUGH THE GREAT LAKES-ST. LAWRENCE SEAWAY SYSTEM.

Réjean Lanteigne, CEO of the Laurentian Pilotage Authority (LPA), says the busy traffic levels of 2011 are a pleasant surprise. “Our expectation last year was that 2011 might see growth of about 3 per cent,” he said. “By mid-summer, it was closer to 19 per cent ahead of last year.

“We’re getting a lot more ships and assignments for pilots. Our revenues have increased significantly. It’s going to be a great year for us.”

It’s a similar story for the Great Lakes Pilotage Authority (GLPA). “We’re very busy,” said CEO Robert Lemire. “Our business is up about 28 per cent this year, and about 60 per cent ahead of 2009.”

And the ships are being handled with fewer pilots following a 15-per-cent staff reduction after traffic fell in 2008 in the midst of the recession.

Under Canadian and U.S. regulations, any foreign-flag ship (i.e., non-Canadian or U.S. flag) entering the Great Lakes-Seaway system from overseas is required to hire a Canadian or American pilot to assist with navigation. All vessels, including domestic operators, trading in the St. Lawrence River section of the waterway are subject to compulsory pilotage requirements. Pilots are expert navigators who are familiar with local geography, weather, currents and sailing conditions. The pilot’s expertise supplements the ship’s crew expertise to ensure safe navigation.

The circumstances that fuelled the traffic revival point to the critical importance of having the Great Lakes-St. Lawrence Seaway system in good operating condition, Mr. Lemire said. Without it, getting petroleum products from overseas to customers in Ontario in the first half of 2011 while the Suncor refinery in Sarnia closed for renovation and upgrade would have been a huge and costly logistics challenge.

Shipment of imported petroleum products on the Seaway jumped by 50 per cent in the first half of the year.

Spring flooding on the Mississippi River closed that outlet for American grain and corn exports, but the Seaway came to the rescue.

“These events were good news for the Seaway, but they also demonstrated its importance to the North American economy,” Mr. Lemire said.

Grain and petroleum shipments played a major role in volume increases on the St. Lawrence River as well, Mr. Lanteigne added.

The pilotage organizations have worked hard to hold down their tariffs, mindful of the impact of higher costs on shipping lines, the two men said.

When Mr. Lanteigne arrived at the Laurentian Pilotage Authority in 2005, the authority had a large deficit and rundown facilities. When he retires next summer, he will leave with black ink on the books and all LPA facilities and pilot boats renewed.

The last two renewal projects are underway. The first is rebuilding the pilotage dock in Les Escoumins to better protect the LPA’s launches. The project will take about six months to complete.

The other project is building a new winter pilot boat to replace the 18-year-old vessel in Les Escoumins. “When it’s done, everything will be in good order,” Mr. Lanteigne said.

Mr. Lemire said the Great Lakes-Seaway has also been busy with the movement of windmill components, and large pieces of machinery for Alberta’s energy industry. And shipments of steel are on the rise. “We’re not at the peak but we’re seeing more movements of the finished products as well as the raw materials,” he said.

GLPA pilots are working extra hours to cope with the additional traffic, so the authority hasn’t had to increase staffing levels. Mr. Lemire called the dedication of the pilots “quite impressive.” The GLPA has 60 pilots and it co-ordinates with the 40 American pilots on assignments, where ships are travelling into American waters in the Great Lakes.

“Our pilots are on call all the time,” Mr. Lemire said. “We’ve been able to handle the 60-per-cent increase in traffic with fewer pilots, and also have had no accident or fatigue incidents. We’ll stay in this staff holding pattern for now but we may have to hire in the future.”
Green Marine wins Sustainable Shipping Award

Environmental program has expanded beyond Great Lakes-St. Lawrence region

The award was created to bring attention to innovative efforts being made worldwide to improve the maritime industry’s environmental sustainability. Other nominees in the category this year included the Carbon War Room, DNV, Rightship and Royal Caribbean.

Green Marine, a bi-national, voluntary program established by the marine industry in the Great Lakes-St. Lawrence region, aims to improve participants’ environmental performance beyond regulatory compliance. Their results are independently verified by a third party and shared publicly to demonstrate their environmental commitment.

The program has now expanded to include participants from the West Coast and Atlantic Canada.

David Bolduc, Green Marine’s executive director, accepted the award on behalf of Green Marine at the Radisson Blu Hotel in London, England, before a room filled with environmental and marine industry experts from around the globe.

“Green Marine’s participants deserve to be recognized and applauded for the extraordinary efforts they’ve undertaken to improve their environmental performance, which is why I would like to take this occasion to congratulate all of the shipowners, ports, terminals and shipyards participating in the program for their commitment to the environment and the significant progress they’ve made on this front,” he said.

Ray Johnston, Green Marine’s chair, echoed that sentiment. “This award belongs to everyone who has been involved in making Green Marine a success; it is since its launch less than four years ago,” he said. “It recognizes both the significant commitment by more than 50 marine enterprises towards continual and measurable improvement when it comes to environmental performance, and the numerous hours that our participants, partners and supporters have voluntarily spent to help devise, refine, update or otherwise assist the program in strategic meetings and at conferences, as well as promote its value to others.”

This marked the second year in a row that Green Marine had been selected as a finalist in the Green Shipping Initiative category.

The 2011 judging panel consisted of representatives from transport and environmental organizations, including SustainableShipping.com, the International Chamber of Shipping, World Wildlife Fund (WWF), Maersk Line and Ikea UK.

“Mr. Bolduc particularly appreciated the award for the boost it gives a still fairly young environmental initiative. ‘There’s no doubt this award will greatly broaden Green Marine’s recognition and result, I hope, in many more enterprises joining our program,’ he said. ‘It also inspires us to continue to work hard to ensure that Green Marine achieves even greater heights in the future.’”
PEOPLE IN THE MARINE COMMUNITY

Simon Lebrun
Pilot
Laurentian Pilotage Authority
Montreal, Quebec
19 years in the industry

At age 36, Simon Lebrun has already found his dream career. He captains a wide variety of commercial ships without ever having to leave the city of Montreal for more than 12 hours. “I live in the city. Within 10 to 15 minutes, I go from being in a busy, noisy city to where I’m on a vessel in the completely natural environment of the St. Lawrence,” he says.

Mr. Lebrun takes over the pilotage of international ships larger than 35 metres and Canadian ships larger than 70 metres that transit the St. Lawrence River on their way to and from the Port of Montreal or to and from the St. Lambert Lock. All ocean-going ships operating on the Great Lakes and St. Lawrence Seaway are required by law to hire a U.S. or Canadian pilot to assist with navigation.

Mr. Lebrun brings his training and knowledge of the local waterways to ensure ships safely navigate the system through traffic, weather conditions and changes in water depth. He relishes the challenge of a job that is always changing. “When you have a really large vessel, you have to handle coming up along a berth with the assistance of the tug boats – that is very satisfying,” he says. “It’s always different. Even if you’ve piloted the vessel before, the currents and the weather are always different. That’s when you have to rely on your experience.”

After studying and working in the yachting and small vessel worlds, Mr. Lebrun obtained his Transport Canada licence and nautical science diploma from the Institut Maritime du Québec. He sailed in Canada and around the world on everything from freighters and tankers to passenger ships, earning his captain’s licence before taking his current position with the Corporation of Mid St. Lawrence Pilots, which contracts employees to the Laurentian Pilotage Authority. He is passionate about getting more young people involved with the industry. “A lot of young people in Montreal forget that there are great jobs in the marine industry,” he says. “Marine jobs are well paid and highly skilled. Many positions use sophisticated, state-of-the-art equipment, offering working conditions comparable with shore-side high-tech industries.”

Michel Lavoie
Chief Engineer
Canada Steamship Lines (CSL Niagara)
Montreal, Quebec
35 years in the industry

Born and raised in Les Méchins, Quebec, Michel Lavoie has been immersed in the shipping industry since he was a small child. Several members of his family worked on ships transiting the St. Lawrence in the 1950s and 1960s, and at the age of three he had his first on-board tour from his uncle, a chief engineer with Groupe Desgagnés.

Mr. Lavoie remembers: “I grew up on the St. Lawrence. There was always a ship passing by or at the dock waiting to be loaded with wood pulp for the paper industry. I always said I was going to be a captain but I ended up becoming a chief engineer. I became intrigued by mechanics and how things work.”

For the past five years, Mr. Lavoie has worked on the M/V CSL Niagara, owned and operated by Canada Steamship Lines, which carries wheat, iron ore, coal and other bulk materials on the Great Lakes-Seaway and St. Lawrence River.

He is in charge of a team of eight and is responsible for the safe and efficient operation of all the technical systems and equipment on the ship. This includes everything from engines and electrical systems to loading systems and administrative tasks.

He must also ensure that all of the ship’s equipment meets regulatory standards, which can vary from country to country, and state to state. Mr. Lavoie says that this patchwork of rules often leads to a mountain of paperwork.

Life on a ship can also be challenging in other ways – he’s away from his wife and two grown daughters for two months at a time. But after 35 years in the business, Mr. Lavoie takes it all in his stride. “What I still love the best about this job is when a problem arises – figuring out a solution and fixing it. All of this requires a good team effort,” he says.
Planning, preparing and cleaning up after three square meals a day for 17 people would be a daunting task for most, but Joe Kraft takes it all in stride. As a steward for Grand River Navigation Company, Mr. Kraft plays an important but often overlooked role in ensuring that his crew mates are able to perform well at their respective jobs. He’s the one providing fuel for the human machine.

“Meal time is an important time,” he says. “The men work hard physically, and they need good, healthy food. It’s my job to provide meals that sustain them while they work.”

Mr. Kraft grew up with cooking in his genes – his father and other family members worked for local restaurants, hotels and country clubs, which led Mr. Kraft to think that a degree in hotel management would be the perfect fit for him. But over the course of 14 years in the U.S. Navy and then the U.S. Coast Guard, Mr. Kraft continued to cook for crew mates, and subsequently enrolled in a military culinary school.

It wasn’t until he was stationed in Michigan with the U.S. Coast Guard that Mr. Kraft learned about the Great Lakes maritime industry. He wishes he’d known about it sooner. “The compensation and benefits are great, as are the advancement opportunities,” he says.

A typical rotation for Mr. Kraft is four weeks on board with two weeks off. During those four weeks, Mr. Kraft plans and prepares meals based on his knowledge of what his crew mates like and dislike. “Breakfasts are usually done to order – eggs, oatmeal, sausage/bacon, etc.,” he says. “Lunch often contains a starch for energy. Dinner is served home-style: meat loaf or roast beef, with a healthy alternative such as a fish entrée and salad bar.”

“Since we spend so much time together, it’s important that we work together and get along.” Mr. Kraft ensures that camaraderie by demonstrating an appreciation for the crew’s hard work. Pride in his job is reflected in the effort he takes to serve healthy meals, and understanding the importance of celebrating birthdays and holidays far from families.

“I like my job,” he says. “I’m treated well by the company. And I hope the appreciation I feel is demonstrated in turn by my performance.”

For most of her life, Marilyn Baxter has spent her summers racing 15-foot dinghies in Hamilton Harbour. That pastime inspired her to devote the past 20 years to the clean-up and improvement of the area – first as a citizen volunteer, followed by the executive director position with the Bay Area Restoration Council (BARC) and then as the environmental manager for the Hamilton Port Authority (HPA).

“I have a passion for the environment that was borne out of the fact that I sailed on Hamilton Harbour and really enjoyed the amazing views, but wondered about the water quality. I wanted it to be clean and more accessible to everyone,” she says.

The HPA is a landlord port with 600 acres of land and 700 vessel calls each year. HPA management had been involved for many years with the remediation of the harbour water and lands but wanted to increase its commitment by having a full-time person devoted to the role.

When the HPA offered Ms. Baxter a position in 2006 as its first environmental manager, she jumped at the opportunity. “I could make a difference from the other side of the table,” she says. “To be in an environmental role using my educational background in science and chemistry and be able to help industry and respect nature at the same time is ideal.”

That means making sure federal environmental assessments are done at the planning stages of proposed projects. Baseline studies are also done on soil before new tenants move in and at the end of their lease to determine if there is any contamination. Ms. Baxter regularly inspects the condition of all HPA properties for oil sheens and road dust. The HPA takes the environment seriously, and documents its environmental efforts through the annual Green Marine program audit.

Ms. Baxter also plays an environmental stewardship role with both port staff and tenants on best practices and energy conservation. And she is the port’s environmental representative on major clean-up initiatives such as the remediation of contaminated sediment at Randle Reef and the port’s fish habitat creation project.
The Great Lakes-St. Lawrence Seaway system is an exceptionally rich resource for many reasons. Of course, it provides a unique waterway into the heart of North America, shaping a large part of our history and benefiting the marine industry and the economy. It serves as a source of drinking water for people living nearby, and provides a magnificent setting with multiple opportunities for recreation and tourism. In short, it offers a good living environment for millions of people.

Perhaps less well known is that the St. Lawrence River and the Great Lakes constitute a mix of unique and vital habitats for many plant and animal species, including migratory birds. These habitats include a great diversity of wetlands: freshwater marshes, freshwater intertidal marshes (which are influenced by tides), saltwater and brackish water intertidal marshes, aquatic-grass beds and tidal flats.

For the millions of migratory birds that use the Atlantic flyway, these particularly rich and productive wetlands are welcome staging areas, especially in the spring. Here, the birds rebuild their energy before continuing on to their breeding areas still covered in snow up north. In the fall, these same birds return with their young along the same migration corridor to stop again in the St. Lawrence – this time to replenish their energy reserves for their journey to their wintering grounds farther south. For a species such as the common eider, the vast estuary of the St. Lawrence is a breeding, rearing and moulting habitat for more than 40,000 pairs of nesting birds. Many birds spend the whole winter here.

There are so many reasons why it is essential to pay special attention to this exceptional waterway and flyway.
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