



# WATERFRONTS WORLDWIDE

Edgewater Resources specializes in the creation, transformation and protection of environments found on either side of the water's edge. Offering a full suite of experts, we provide expertise in every facet of feasibility, design and engineering to clients in waterfront communities around the Globe.





## WHO WE ARE.

Lead by industry trailblazers and a new generation of award-winning talent, Edgewater Resources is a leader in sustainable waterfront design, engineering and development services. We help communities build on their natural strengths to identify and implement projects that foster long term economic prosperity within a context of social, environmental, and economic sustainability

Offering a comprehensive design and development team specializing in marine engineering, coastal engineering, ecological sciences, planning, architecture, landscape architecture, civil engineering, survey, and finance procurement, our expertise covers every facet of feasibility, design, engineering and developmental services.

We specialize in the planning, design, and implementation of sustainable built marinas and urban waterfront environments. Applying a collaborative approach, we combine science, art, design and technology to deliver beautiful, functional and financially feasible marinas and waterfronts based in economic reality. These foundational principles guide every aspect of our work, allowing us to go beyond imagining what a project could be , to developing plans that can actually be financed and built, resulting in projects that achieve measurable economic benefits.

# WHAT WE DO.

Edgewater Resources was founded in 2010 with a specific goal in mind; to provide client solutions based in economic reality. Our core skill set goes beyond traditional design, planning, and engineering expertise to include development finance and economics based on real world experience. Our bottom line approach to sustainability ensures that projects are environmentally sound, aspirational in vision and financially sustainable in execution.

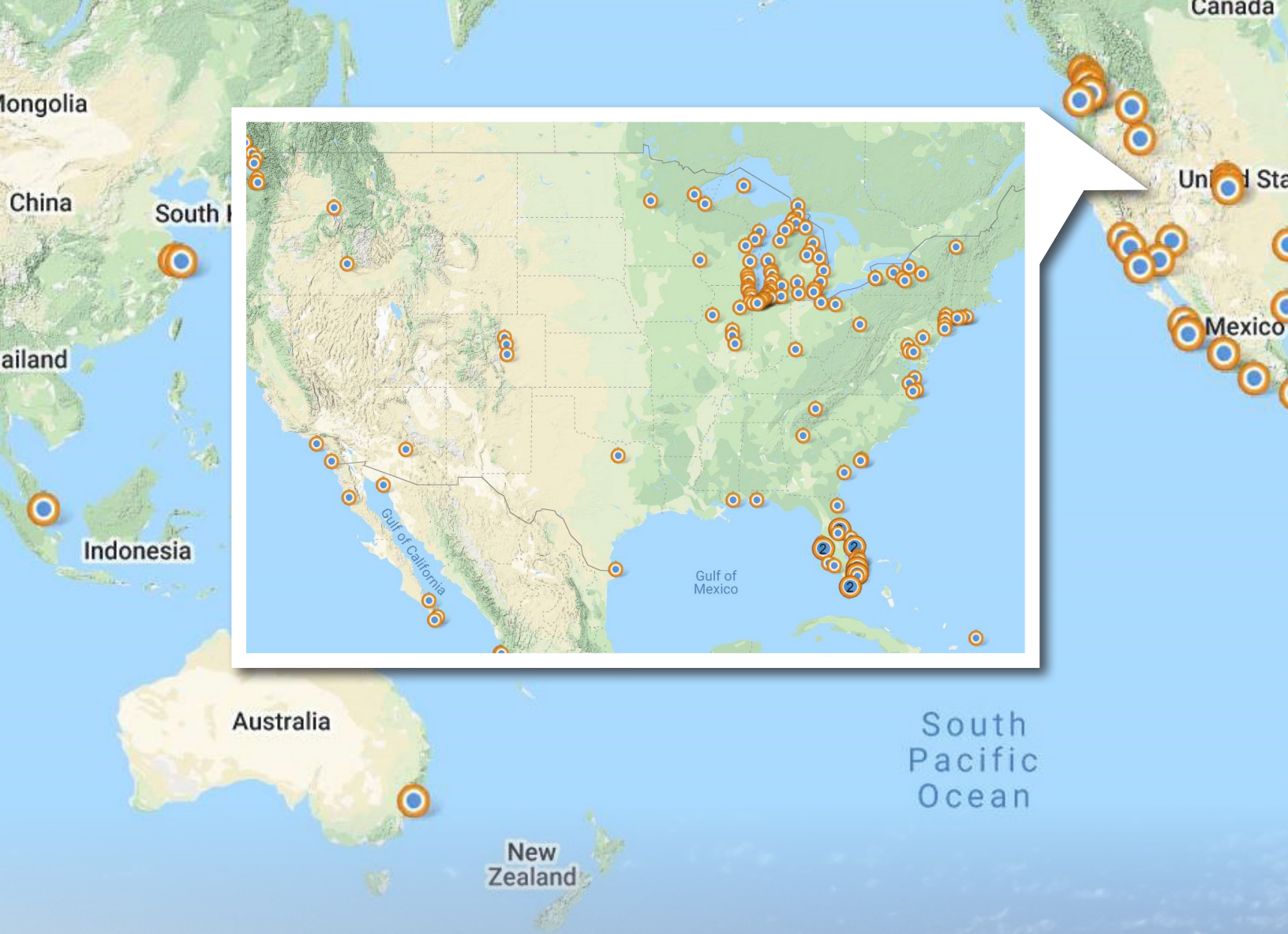
We consider the built environment to be our final deliverable, with the work not complete until the project is built. We help our clients and partners navigate the complex maze of the development and implementation process offering professional assistance from the initial vision through project completion. We work closely with local, regional, and national developers, and collaborate with design and construction firms on our projects. We assist local project design teams with the vision, planning, and physical and economic feasibility for complex waterfront projects. We also provide advice on project design, construction methods, marina operations and marina management.

The unique nature of the Edgewater team enables us to provide a broad range of expertise and services to our clients including:

- Regulatory Permitting, Environmental Assessments, and Ecological Mitigation
- Coastal Engineering, Wave Studies, and Modeling
- Marina Planning, Design, and Engineering
- Landscape Architecture, Project Planning, and Public Relations
- Civil, Marine, and Structural Engineering
- Commercial and Residential Architecture and Urban Design
- Professional Land and Hydrographic Surveying
- Development Finance, Economics, and Grant Funding
- Local, National, and International Capital Funding

## WINNER

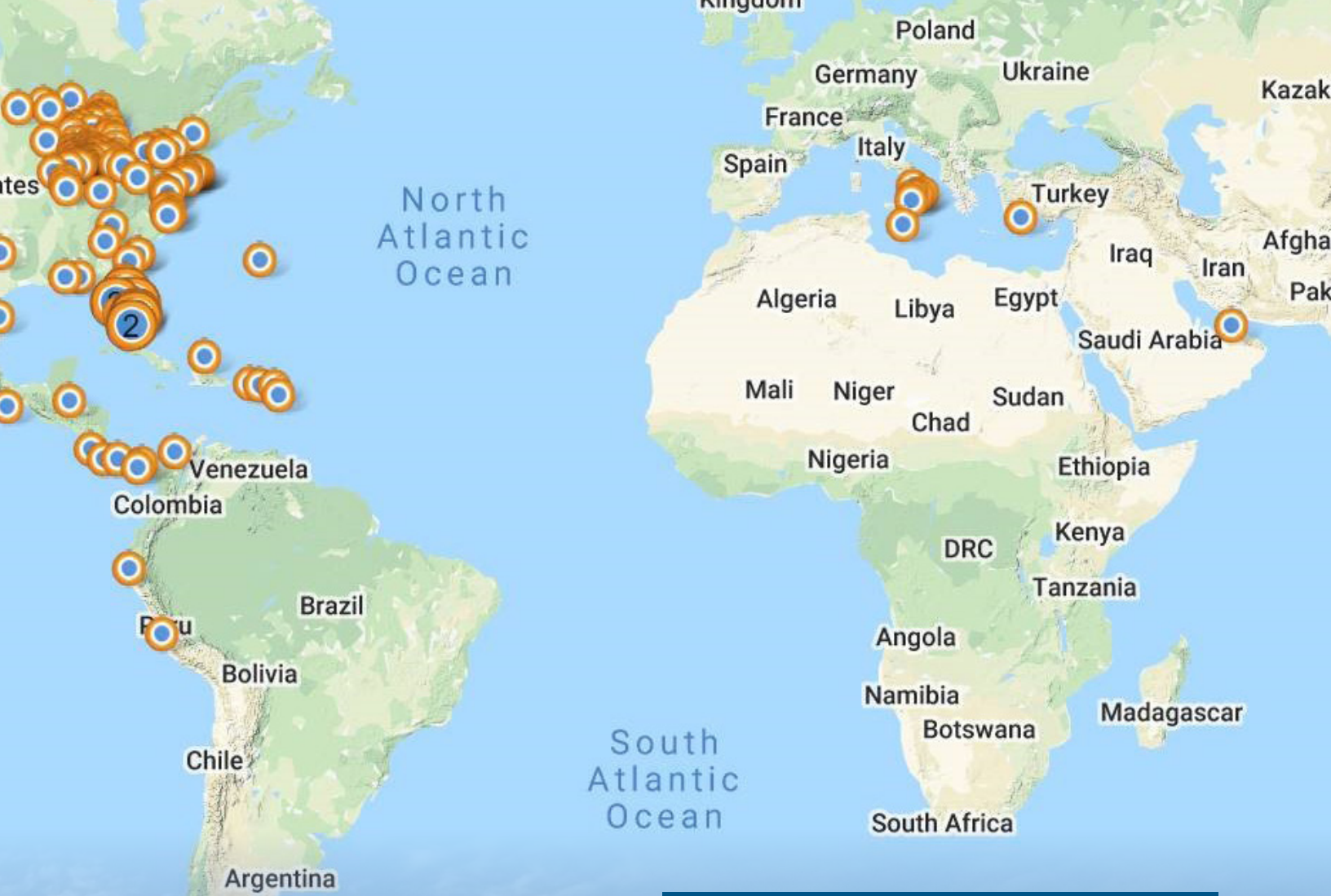
ISS FABIEN COUSTEAU BLUE  
AWARD FOR SUSTAINABLE  
MARINA DESIGN



# WHERE WE WORK.

From international luxury resorts to the mārina down the street, we apply real world experience to deliver beautiful and lasting solutions to every corner of the world.





# MAIN OFFICES

## MICHIGAN

518 Broad St, Suite 200  
St Joseph, MI 49085, USA

## FLORIDA

2001 North Federal Highway, Suite G204  
Pompano Beach, FL 33062, USA

## WISCONSIN

434 S Yellowstone Drive, Suite 203  
Madison, WI 53719, USA



# PRINCIPALS



**RONALD E. SCHULTS, PE** is recognized as one of the most notable waterfront and marina development experts in the world, and often speaks on the topic at national and international conferences. His combined passion for community development, coastal engineering, and sailing inspired him to focus on projects that help preserve our waterways and sustain the economic growth and vitality of waterfront communities across the United States and around the world. In 1979, he founded The Abonmarche Group and grew his international waterfront design group through more than 300 waterfront projects around the world. He has personally developed and financed multiple successful waterfront developments valued in excess of \$150 million, and applies that real world experience on behalf of clients and community partners who are working to create sustainable and responsible waterfront development projects.



**GREGORY WEYKAMP, ASLA, LEED AP, BD+C** has more than twenty five years of experience in the planning and design of the public realm, with an emphasis on implementation of sustainable built landscapes and urban waterfront environments. He is a CLARB Certified landscape architect, and his project experience spans waterfront parks, marinas, master planned communities, urban revitalization, streetscapes, parks and recreation facilities. Greg was the principal and leader of the Chicago office of EDAAW AECOM, one of the most prominent planning and landscape architecture firms in the world.



**KATHERINE WEYKAMP, ASLA, APA** is a planner and urban designer with more than twenty years' experience in urban planning and entitlement projects, including multi-modal transit oriented design projects and mixed-use developments. Working with local municipalities, state and federal agencies and international committees, she has led many projects from initial feasibility through design and construction.



**JACK COX, PE, D.CE, D.PE, D.NE**, has more than 45 years' experience in the design and engineering of complex waterfront and harbor projects around the world. He is internationally recognized for his knowledge and experience in nearshore hydrodynamics, arctic and ice processes, harbor tranquility, breakwaters, fixed and floating marine structures, dredge material disposal, shore protection, port planning, marina design, and risk analysis. He has authored more than fifty coastal and marina related technical publications and is an inaugural Diplomate in the Academy of Coastal, Ocean, Port, and Navigation Engineers.

# RESUMES





#### EDUCATION

Bachelor of Landscape Architecture  
Michigan State University, 1992

#### REGISTRATIONS

Registered Landscape Architect  
State of Illinois  
State of Indiana  
State of Michigan  
State of Ohio  
State of New York  
State of Wisconsin  
CLARB Certified  
Council of Landscape Architecture  
Registration Boards  
LEED Accredited Professional Building  
Design & Construction

#### GREGORY J. WEYKAMP, ASLA, LEED AP, BD+C

Principal / President, Edgewater Resources, LLC

Greg Weykamp has over twenty-seven years of experience in the planning and design of the public realm, with an emphasis on implementation of sustainable built landscapes and urban waterfront environments. His project experience spans waterfront parks, marinas, master planned communities, urban revitalization, streetscapes, parks and recreation facilities, medical and university campuses, and military installations.

#### NAVY PIER MARINA

The Navy Pier Marina project includes the design and development of a new transient marina located at the heart of Chicago's waterfront at Navy Pier. The facility will provide 120 new transient slips on a combination of fixed and floating dock infrastructure. As Principal of the design team, Mr. Weykamp led the design, permitting, planning, and engineering for all aspects of the project.

#### PORT OF ROCHESTER MARINA

The Port of Rochester Marina project includes the transformation of an underutilized asphalt parking lot and ship loading area into a new 180 slips marina serving both seasonal and transient boaters. As Principal of the design team, Mr. Weykamp led the design and implementation of the marine-based elements as well as surrounding site infrastructure of the project.

#### CHICAGO GATEWAY HARBOR

While with EDAA AECOM, Mr. Weykamp served as Principal in Charge and led the combined design and engineering team in the development of a new 250 slip destination harbor for the Chicago Park District. Located adjacent to Navy Pier, the new \$55 million harbor project will reconstruct the historic Dime Pier structure and create a new publicly accessible pier providing views of the Chicago skyline. Key elements include improved pedestrian and bicycle connectivity to downtown Chicago and integration of extensive sustainable design strategies including reuse of existing structures, materials selection, habitat creation, alternative energy generation, and LEED Certified structures.

#### DISCOVERY CENTER GREAT LAKES MARINA

The Discovery Center Great Lakes is home to a range of community and non-profit organizations interpreting historic shipping and boating on the Great Lakes. This project created the master plan for a completely renovated waterfront and marina to provide homes for a number of historic tall ships, wooden sailing vessels, and the Traverse Area Community Sailing program. In addition, a number of seasonal and transient slips will be made available for lease to help fund non-profit activities and offset the cost of construction.

#### LEXINGTON STATE HARBOR

The Lexington State Harbor project includes the condition assessment, marina market analysis, boater survey, and initial planning and design for the renovation and expansion of the 120-slip marina for the Michigan Department of Natural Resources. As Principal of the design team, Mr. Weykamp led the design and planning of all aspects of the project.



## HONORS & AWARDS

Great Lakes Sea Grant Network "Great Lakes Outreach Programming Award," Sustainable Small Harbors Project  
2013 President's Award, American Society of Landscape Architects, Illinois Chapter, 31st Street Harbor, Chicago, Illinois  
ISS Fabien Cousteau Blue Award  
31st Street Harbor, Chicago, Illinois  
AIA Chicago SustainABILITY Leadership Merit Award, 2012, 31st Street Harbor  
First Place, Engineering News Record Midwest "Best Projects" 2012, 31st Street Harbor  
Design Evanston Urban Design Award 2010  
Evanston Lakefront Master Plan  
Air Force Design Award, Planning / Design Guidelines Category, Misawa AB, 2005  
Merit Award for Research, Summer Student Program 2001, Colorado Chapter ASLA, 2001  
Merit Award for Planning, Great Plains Chapter American Society of Landscape Architecture, Omaha City Parks Master Plan, 1999  
National APA Honor Award, GASLA Merit Award,  
Georgia APA Honor Award: Gateway to Coastal Georgia  
Award of Excellence, Atlanta Urban Design Commission: Centennial Olympic Park  
GASLA Honor Award, University of Arkansas, Pine Bluffs  
Award of Excellence, Atlanta Urban Design Commission: John Wesley Dobbs Plaza  
Graphics published in Landscape Architecture Magazine, August 1996  
Graphics published in Landscape Australia Magazine, Issue 2, 1998  
Port of Rochester Marina, Project of the Year, Transportation by the American Public Works Association, New York Chapter  
Holland Civic Center, Honor Award  
2019 Building Award, George & Lucile Heeringa Civic Center, Holland, Michigan

## 31<sup>ST</sup> STREET HARBOR

Mr. Weykamp served as Principal in Charge and led the combined design and engineering team in the development of a new 1000 slip harbor for the Chicago Park District. The design of the new harbor facilities includes a green roof covered parking area that provides heated winter boat storage below expanded park space above. Additionally, the marina project was leveraged to create a new regional destination play area and a new 1.5-acre park space offshore in Lake Michigan, providing views of the Chicago skyline. Key elements include improved pedestrian and bicycle safety by realigning the Lakefront Trail and the integration of extensive sustainable design strategies including green roof covered parking, bioswales, bioinfiltration, materials selection, habitat creation, alternative energy generation, boat wash, and LEED Certified structures.

## EAST TAWAS STATE HARBOR MARINA EXPANSION

The State of Michigan engaged Edgewater Resources in the condition assessment, market analysis, boater survey, and master planning of expansion of the existing state harbor facility in East Tawas, Michigan. Following successful completion of the initial planning process, Mr. Weykamp oversaw design of construction Phase One, including a new pedestrian promenade, fuel system, and floating dock and wave attenuator infrastructure for 48 new slips was completed. Construction of Phase One began in 2016, and opened summer of 2017. Mr. Weykamp then managed the design, bidding, contracting and implementation of Phase Two which included the demolition of over SF of fixed and floating piers along with their replacement with modern floating dockage with code compliant utilities. Phase 2 was completed in Summer 2018 in its entirety and under budget. Mr. Weykamp is currently leading the design team for Phase Three improvements that are scheduled to occurring in Spring 2019.

## WHITEFISH POINT STATE HARBOR

The Whitefish Point State Harbor project includes the condition assessment, marina market analysis, boater survey, and initial planning and design for the renovation and expansion of this harbor of refuge and 12-slip marina along the shores of Lake Superior for the Michigan Department of Natural Resources. As Principal of the design team, Mr. Weykamp led the design and planning of all aspects of the project.

## HARRISVILLE HARBOR

The Harrisville Harbor project includes the condition assessment, initial planning and design, engineering, and architecture services for the renovation and expansion of this 68-slip marina along the shores of Lake Huron for the City of Harrisville. As Principal of the design team, Mr. Weykamp led the design, planning, and engineering team responsible for of all aspects of the project.

## EAGLE HARBOR STATE HARBOR

The Eagle Harbor State Harbor project includes the condition assessment, marina market analysis, community outreach, and initial planning and design for the renovation and expansion of this 15-slip marina along the shores of Lake Superior for the Michigan Department of Natural Resources. As Principal of the design team, Mr. Weykamp led the design and planning of all aspects of the project.

## HELLS GATE STATE PARK MARINA

The Hells Gate State Park Marina project includes the condition assessment, initial planning and design, and final engineering for the renovation and expansion of this 100-slip marina for Idaho Department of Parks & Recreation. As Principal of the design team, Mr. Weykamp led the design and planning of all aspects of the project.

### MICHIGAN DEPARTMENT OF NATURAL RESOURCES STATEWIDE FACILITIES ASSESSMENT – HARBORS, BOATING ACCESS SITES, LOCK & DAM FACILITIES

This project includes the assessment of 82 state and grant-in-aid funded harbors, over 200 boating access sites, and two lock and dam facilities, with the goal of documenting existing conditions, quantifying infrastructure, and establishing program level cost estimates for immediate and long-term improvements. This effort will identify priorities and strategies for capital improvements and deployment of limited resources to best effect for the residents and visitors to the State of Michigan's recreational boating facilities.

### SAMPSON STATE PARK MARINA

The Sampson State Park Marina project includes the condition assessment, marina market analysis, initial planning and design for the complete renovation of this historic marina facility located on Seneca Lake in the Finger Lakes region of New York. As Principal of the design team, Mr. Weykamp led the design and planning of all aspects of the project.

### MICHIGAN MARITIME MUSEUM HARBOR

The Michigan Maritime Museum project includes the condition assessment and initial planning and design for the renovation and expansion of the Michigan Maritime Museum campus. The scope of work includes marine engineering for all harbor elements for the Museum fleet, as well as visiting boats. As Principal of the design team, Mr. Weykamp led the design and planning of all aspects of the project.

### DOUGLAS WATERFRONT MASTER PLAN

Edgewater Resources is working with the City of the Village of Douglas and the community to prepare a waterfront master plan for all properties and key adjacent parcels within the City limits. We are leading the community outreach and stakeholder workshops for all elements of the waterfront, and working with business owners, residents, permitting agencies, and local interest groups. The goal of this effort is to perform a high-level assessment of all properties along the waterfront within the City limits to identify potential opportunities for enhancing public access to the waterfront, as well as identifying potential opportunities for mutually beneficial public/private partnerships and/or acquisition. Potential opportunities, among others, include expansion of public waterfront parks and access trails, creation of new watercraft access sites (canoe, kayak, etc.), creation and/or acquisition of a municipal marina facility, improved ADA compliance, improved connections between adjacent neighborhoods and the waterfront, and facilitation of the long-term harbor planning and dredging efforts.

### LUCKY PEAK STATE PARK MARINA

The Lucky Peak State Park Marina project includes the condition assessment, marina market analysis, boater survey, and initial planning and design for the renovation and expansion of this 298-slip marina for Idaho Department of Parks & Recreation. As Principal of the design team, Mr. Weykamp led the design and planning of all aspects of the project.



#### EDUCATION

Bachelor of Engineering Science  
Purdue University  
Master of Engineering Science  
Purdue University  
Post-graduate Studies in Geophysical Fluid  
Dynamics, University of Chicago  
PhD in Coastal Engineering  
University of Delaware

#### REGISTRATIONS

Registered Professional Engineer  
State of Alaska  
State of Delaware  
State of Florida  
State of Illinois  
State of Indiana  
State of Louisiana  
State of Maryland  
State of Mississippi  
State of New York  
State of New Jersey  
State of Ohio  
State of Rhode Island  
State of South Carolina  
State of Washington  
State of Wisconsin

#### CERTIFICATIONS

Academy of Coastal, Ocean, Port and  
Navigation Engineers  
Diplomate Coastal Engineer  
Diplomate Port Engineer  
Diplomate Navigation Engineer

#### JACK C. COX, P.E., D.CE, D.PE, D.NE

Principal / Coastal Engineer / Director of Engineering, Edgewater Resources, LLC

Mr. Cox is internationally recognized for his credentials in research, engineering, and design of projects involving nearshore hydrodynamics, arctic and ice processes, harbor tranquility, breakwaters, fixed and floating marine structures, dredge material disposal, shore protection, port planning, marina design, and risk analysis. He directs the planning and design of large and complex waterfront and harborworks projects around the world.

Jack is an award-winning lecturer in the topic of coastal engineering. His 45+ years of experience in the marine engineering field spans a full range, from ecologically sensitive planning through final design and construction. He provides expert witness testimony on shoreline processes, harbor and breakwater design, marinas and dockage, contaminated marine sediment dredging and capping, and nearshore recreational issues. He has authored more than fifty coastal and marina related technical publications and is an inaugural Diplomate in the Academy of Coastal, Ocean, Port and Navigation Engineers with specialties in coastal, port and navigation engineering.

#### OCEAN REEF MARINA MASTER PLAN, HARBOR ENTRANCE & BASIN DESIGN

Acting as Principal Engineer, Jack created master plan for 200-slip marina complex. Developed engineering plans and specifications for floating dockage system to operate in 5-meter tides. Created preliminary design for harbor architecture including yacht club facility and shoreline promenades. Configured finger berths and Med-moors to accommodate mega-yachts to 100-meter length.

Engineered a marina entrance channel with integral spending beach to absorb transmitting swell waves. Manipulated entrance approach channel geometry and breakwater alignments to minimize swell diffraction effects. Analyzed vessel maneuvering through entrance channel. Modeled local wave action of spending beach to offer recreational utility and bather safety.

Directed engineering study of wave and current patterns around proposed artificial island complex. Examined swell wave propagation and sedimentation patterns between islands. Assessed impact of addition of breakwaters to island geometries. Developed a harbor configuration to be tranquil and self-flushing. Designed breakwater geometry and armoring to absorb long period waves and shaped to divert and dissipate wave reflections for navigation areas.

#### FORT PIERCE MARINA BREAKWATER & DOCKAGE DESIGN

Directed design of "living shoreline" harbor wave protection system as Principal Designer, including design of rubble mound breakwaters disguised as natural islands and reefs, fixed panel breakwaters for current deflection and sedimentation control, and floating wave attenuators for revenue generating harbor wave sheltering. Incorporated habitat mitigation features into the marina layout and design. Directed model testing of design to control sedimentation and tidal current patterns.

#### SLIDING LEAF GATE FOR LOCKED HARBOR

As Principal Designer, developed design for a mechanized buoyant leaf gate to isolate harbor berthing area from variable water levels and wave penetration. Design required resistance to ice loads and wave loads with the ability for rapid deployment using low power-driven chain-drive loop system.

## HONORS + AWARDS

Adjunct Professor of Practice in The Department of Civil and Environmental Engineering, University of Wisconsin  
Assistant Director for The Docks and Marinas Program, Department of Engineering Professional Development, University of Wisconsin

Board of Trustees of The Academy of Coastal, Ocean, Port and Navigation Engineers (Acopne) / Trustee for Navigation and Coastal Engineering  
Inaugural Diplomate in The Fields of Coastal, Port and Navigation Engineering, Acopne/Asce

US Representative and Deputy Chairman for The Piac Recreational Boating Commission - 18 Years

Tsunami Technical Advisory Board, University of Washington

Special Presidential License Recipient to Practice Marine Engineering - Cyprus

Patent Holder for "Quay Wall with Absorption Blocks and Interconnecting Flow Paths" Patent No.: US 9,896,814 B2,  
Past Chairman for The Asce Coastal Practice and Cold Regions Engineering Technical Committees

Principal Author and Lecturer for The Asce Manual 50 for Planning and Design of Small Craft Harbors and The Piac Marina Design Guidelines Manual and The International Marina Designer Training Program

Principal Designer for The First Hurricane Scale Living Shoreline Protection Scheme at The Ft Pierce Fl Marina, which Received The 2016 Copri Project Excellence Award.

Pioneered the use of Tandem Breakwaters and Floating Wave Attenuators to Extend Functionality of Wave Protection into Otherwise Unacceptable Ranges

Author of Fema Wave Overtopping and Propagation Theory and Methodology.

## BUENA VENTURA MARINA

Directed planning and engineering for a lagoon style marina basin carved from the mouth of the Rio Hato River. The design entailed accommodating excessive tidal level fluctuations with a part time accessible moat style marina basin. Water quality was sustained using previously detented stormwater allowed to cascade into the basin for re-oxygenation. Navigational performance and safety were maximized with analysis of optimal stream channel alignments and basin shape.

## MAKRONISOS MARINA

Directed site master planning, harborworks engineering and final design of a 600-slip marina and waterfront resort village including the design of an yacht harbor and protective breakwater, land reclamation, artificial recreational pocket beaches, boat repair yard, haul out systems and dry boat storage, government security and quarantine dock, residential villas, high rise condominiums, and a commercial core for year round economic generators as Principal Designer and Engineer.

## HARBOR OF AMERICAS

Developed master plan for a 450-slip marina complex and floating village. As Principal Engineer, Jack formulated unique curved dockage geometry to circumscribe a pristine live coral reef and nature preserve island. Integrated wave attenuation features into the dockage plan. Created a mega-yacht inner "icon" basin surrounded by a floating marina village, and a fleet mix from 40 ft to 250 ft. Supported environmental impact assessment including modeling of oil spills in the marina embayment.

## PUNTA LOROS MARINA

As Principal Designer, conducted ground reconnaissance of shoreline, estuary and river mouth to assess feasibility of siting a mega-yacht marina as part of the seven-star resort development by Jumeirah at the promontory location. Examined wave exposure, coastal geomorphology and conjectured nearshore water depths for navigation. Configured a stage nearshore breakwater entrance design with an inland marina basin.

## ST. GEORGE ISLAND HARBOR

Developed harbor entrance and breakwater, while serving as Harbor Designer including re-alignments and basin geometries to reduce wave penetration and harmonic response in harbor. Assessed navigability and maneuvering/berthing requirements for ocean going supply barge deliveries and Bering Sea fishing fleet offload operations. Reviewed and analyzed ADCP wave and current measurements collected at site and results of numerical modeling of harbor wave response. Recommended harbor reconfigurations to mitigate the harbor agitation.

## PLAYA BLANCA MARINA

While acting as Principal Designer, conducted aerial reconnaissance of shoreline and geomorphic assessment to determine expected littoral response to structural changes at the beach. Created marina concept at mouth of river intended to be non-shoaling. Devised a headland/pocket breach solution to replace hard breakwater armoring, creating erosion protection and beach stabilization more sympathetic to the natural shoreline, and providing an extension of recreational opportunities to the resort area around the marina. Formulated a marina layout for a generic 200 slip marina.



#### EDUCATION

Bachelor of Science, Civil Engineering  
Michigan State University, 2011

#### REGISTRATIONS

Registered Professional Engineer  
State of Florida  
State of Idaho  
State of Indiana  
State of Michigan  
State of New York  
State of Ohio  
State of Wisconsin

#### PUBLICATIONS / LECTURES

“St. Joseph Coastal Study” FEMA Great Lakes Coastal Flood Study, 2012 & NOAA Great Lakes Coastal Resiliency Planning Guide, 2013

“Design & Construction of a Modern Floating Dock Facility” MSPE, Muskegon Chapter, 2015

#### COLIN HASSENGER, PE

##### PROJECT ENGINEER & PROJECT MANAGER

Colin Hassenger has an array of experience ranging from survey field work to shoreline protection design, marina design and construction oversight. Mr. Hassenger joined Edgewater Resources in 2011 and has since been extensively involved in numerous marina and waterfront projects. Mr. Hassenger has led the design and implementation of numerous waterfront projects ranging from private residential shorelines to 100+ vessel municipal marinas.

#### EAST TAWAS STATE HARBOR MARINA EXPANSION

Following successful completion of the initial planning process, Mr. Hassenger led the detailed design of construction Phase One as Project Engineer/Project Manager, including a new pedestrian promenade, fuel system, and floating dock and wave attenuator infrastructure for 48 new slips was completed. Mr. Hassenger then led the design, bidding, contracting and implementation of Phase Two which included the demolition of over SF of fixed and floating piers with modern floating dockage and code compliant utilities.

#### PORT OF ROCHESTER MARINA

The Port of Rochester Marina project includes the transformation of an underutilized asphalt parking lot and ship loading area into a new 180 slips marina serving both seasonal and transient boaters. As part of the overall project design team, Mr. Hassenger, acting as Project Engineer, performed the design and implementation oversight of the marine-based elements of the project along with coordinating their connectivity to the surrounding site infrastructure. The facility opened Spring 2016 and remained fully functional during the record high Lake Ontario water levels of 2017.

#### DISCOVERY CENTER GREAT LAKES MARINA

The Discovery Center Great Lakes is home to a range of community and non-profit organizations interpreting historic shipping and boating on the Great Lakes. Mr. Hassenger served as Project Engineer. This project created the master plan for a completely renovated waterfront and marina to provide homes for a number of historic tall ships, wooden sailing vessels, and the Traverse Area Community Sailing program. In addition, several seasonal and transient slips will be made available for lease to help fund non-profit activities and offset the cost of construction.

#### NELSON PARK MARINA

The Nelson Park Marina project involved the replacement of existing functional obsolete municipal slips with a new durable system with modern utilities (electricity and potable water) along with a public promenade and gathering area. Mr. Hassenger served as Engineer during this project which was Phase I of the greater Nelson Park Master Plan which includes the revitalization of the 180-acre Nelson Park and adjacent parkland along the shores of Lake Decatur in Decatur, Illinois, with the fundamental goal of achieving both financial stability for the park and spurring economic growth within the greater Decatur Economy.

#### TRAIL CREEK MARINA IMPROVEMENTS PROJECT

Mr. Hassenger served as Engineer and Assistant Project Manager and construction inspector for the replacement of a dilapidated shoreline with a new durable seawall to allow for easier access and parking accommodation for the marina's patrons. The project also addressed some significant utility and site infrastructure deficiencies to correct potential hazards and create modern services. Mr. Hassenger was actively involved in the project from inception through completion.

#### BROOKLYN BRIDGE PARK MARINA

Mr. Hassenger worked to help create a new luxury marina in Brooklyn, New York as Engineer and Assistant Project Manager. The project involves the creation of a new marina facility with full accommodations for vessels from small sailing dinghies through 200'+ super yachts. The project site is a former industrial shipping pier that has been partially removed and repurposed into public park space, creating a unique set of challenges and design constraints. Due to its size and location, the project requires detailed utility routing analysis and coordination with the surrounding public park to ensure compatibility with the current layout along with the park's proposed future improvements.

#### CAROLINE BAY MARINA, BERMUDA

Caroline Bay Marina is a luxury marina on the south side of Morgan's Point in Southhampton, Bermuda. The facility features floating concrete wave attenuators protecting aluminum-framed floating docks on the interior with concrete floats and high-end furnishings. The facility can accommodate 100+ vessels and caters to 200' superyachts with its Mediterranean-style mooring system for large vessels. Mr. Hassenger was instrumental in the design, permitting, bidding, contracting and construction management of the marina while serving as the Project Engineer and Project Manager. In addition, the \$7M marina facility required coordination and integration with an adjacent \$200M upland development in which Mr. Hassenger designed and coordinated utility, pedestrian, and structural connections between the two projects with teams of other consultants.

#### HARRISVILLE HARBOR

As acting Project Engineer/Project Manager, Mr. Hassenger assisted the City of Harrisville and the Harrisville Harbor commission on the multi-phased reconstruction of their marina. Along with the Commission, Mr. Hassenger developed a phasing plan to reconstruct the entire marina facility over 4 years and in 4 phases to meet available grant funding and overall project budget requirements while still keeping the facility operational and income-generating between phases. The phased construction was coordinated with MDNR representatives to ensure grant requirements were satisfied and cost remained in budget. The first two phases of construction are currently complete while design of the third phases is in progress with a Spring 2019 anticipated starting date.

#### WASHINGTON PARK MARINA SAND RELOCATION PROJECT

Mr. Hassenger served as Assistant Project Manager and Engineer for the removal and relocation of over 7,000 cubic yards of material from within the marina basin. The project involved removing the material along with developing mitigation strategies to help reduce future maintenance requirements. Due to its potential influence on the adjacent waterway, the project involved significant communication and coordination with governing agencies to ensure compliance.



# PROJECTS



**CLIENT**  
**CHICAGO PARKS DISTRICT**

**LOCATION**  
**CHICAGO, ILLINOIS**

## 31<sup>ST</sup> STREET HARBOR

The 31st Street Harbor project is a \$103 million, 1,015-slip marina and waterfront park just south of downtown Chicago. The project includes the creation of a 1.5-acre waterfront park integrated in a 2,200 foot long stone revetment structure in Lake Michigan. The project opened in May of 2012 and created significant waterfront and traffic calming/pedestrian circulation improvements to the area, including the elimination of all four conflicts between the Lakefront Trail and vehicular traffic.

Renovation of the existing concrete revetment shoreline protection system into a softer and greener edge will create a more welcoming waterfront promenade interface between the new green roof covered parking facility and the water's edge. Construction of a new regional playground, picnic areas, and reconfigured regional bike paths integrate the project into the community, and ensure that all members of the community benefit from the project.

The project received the ISS Fabien Cousteau Blue Award, recognizing the achievement of the highest standards of harbor sustainability, as well as LEED Gold Certification; the President's Award, American Society of Landscape Architects, Illinois Chapter; AIA Chicago SustainABILITY Leadership Merit Award; and First Place, Engineering News Record Midwest "Best Projects" 2012.

**SERVICES:** CIVIL ENGINEERING, MARINA DESIGN, LANDSCAPE ARCHITECTURE, PLANNING







**CLIENT**  
**CITY OF ROCHESTER**

**LOCATION**  
**ROCHESTER, NEW YORK**

## PORT OF ROCHESTER

The Port of Rochester Marina opened in the spring of 2016, converting acres of underutilized, impervious asphalt parking and ferry loading areas into a new active public waterfront with a new park, public promenade, and a 158-slip marina serving both seasonal and transient boaters. Excavation of the marina basin removed 98,000 cubic yards of regulated fill, and incorporated energy reduction solutions including pervious paving, bioinfiltration, sustainable kebonny decking, and individual metering. The project also provided the final link to complete the seven mile public pedestrian promenade linking downtown Rochester to Lake Ontario and spur reinvestment into the former Terminal building.



The original master plan vision for a marina in this location was proposed in 1965, and over five decades, a number of subsequent master plans proposed the construction of the marina as a key public amenity for the neighborhood. The key to building broad public support and moving forward with the marina in 2012 was the completion of a marina market analysis that showed strong demand, identified accurate slip sizing and mix, and an understanding of the potential impact of a new public marina on nearby private facilities. The analysis identified a demand for larger slips (60'-80') than currently offered in the local market. In its first year of operation, the marina was 56% occupied at slip leasing rates more than 20% higher than those initially recommended in the study.



Funding and implementation of the project required a combination of local funds, bond funding, grants, and public private partnerships that will help revitalize the local economy. Labella and Edgewater Resources worked together to complete this project, with each firm undertaking separate portions of the scope. Generally speaking, Edgewater was responsible for marine and landscape design while LaBella undertook the landside infrastructure design and SEQR aspects of the project.

**SERVICES:** CIVIL ENGINEERING, MARINA DESIGN, SHORE PROTECTION, LANDSCAPE ARCHITECTURE, PLANNING, COASTAL ENGINEERING





# ARA MACAO RESORT & MARINA

CLIENT  
IOVEST

LOCATION  
ARA MACAO, BELIZE

The Ara Macao Resort & Marina is located on the Placencia Peninsula in Southern Belize, Central America. In 2012, IoVest Development contracted with Edgewater Resources to re-position and develop the spectacular 600 Acres which features a mile long sandy beach on the Caribbean Sea.

The Ara Macao Resort & Marina Master Plan currently offers 34 Ocean front home sites, 48 Ocean front Condos and 24 Marina Condos. The Resort will feature a 96 slip marina, with direct access to the Caribbean Sea. Phase II plans for a boutique hotel along with 3 additional mid-rise buildings and additional Marina Condominiums.

In addition to carving out 500 acres dedicated as a nature preserve, Edgewater Resources has carefully planned and integrated the landscape to create a residential community nestled within the native habitat of coastal Belize. Named for the native Scarlett Macau, the project will protect habitat while creating a beautiful new community.



**SERVICES:** MARKET ANALYSIS, REAL ESTATE SERVICES, DEVELOPMENT PLANNING SERVICE, MASTER PLANNING



**CLIENT**  
**DTMB**

**LOCATION**  
**EAST TAWAS STATE HARBOR,**  
**MICHIGAN**

## **EAST TAWAS STATE HARBOR**

Edgewater has provided a full life-cycle services for the East Tawas State Harbor project from initial assessment and feasibility studies to construction administration during completion. Initially we provided an improvement plan which assessed the physical condition of East Tawas State Harbor, analyzed the current marina market in the region, identify market trends, and presented stakeholder feedback. The information collected guided the preparation of a development plan for East Tawas State Harbor.

The goals of this project are to guide the future development of the harbor, provide modern boating amenities, improve accessibility, respond to boater preferences, and integrate the harbor more closely with the community of East Tawas. We created a financially realistic phasing plan that allowed the client to see the vision through to implementation. Completion of phases I & II of the proposed improvements outlined in the concept improvements plan were achieved in early summer of 2017 and 2018 respectively.

The East Tawas Phase III design is complete and has been approved by both DTMB and LARA. Phase III of the project includes renewal of obsolete dockage, an interior renovation and new addition of boater's amenities including a boater's lounge, laundry and staff offices. This phase of the project is currently under construction and is scheduled to be completed in the spring of 2020.

**SERVICES:** FEASIBILITY, MARKET RESEARCH, CIVIL ENGINEERING, ARCHITECTURE, MARINA DESIGN, PERMITTING, CONSTRUCTION ADMINISTRATION





**CLIENT**  
**BROOKLYN BRIDGE PARK**  
**MARINA, LLC**

**LOCATION**  
**BROOKLYN, NEW YORK**

## ONE® 15 BROOKLYN BRIDGE PARK MARINA

ONE° 15 Brooklyn Marina is New York Harbor's newest marina that will be home to both seasonal docking facilities of the highest quality and an exceptional community boating program that will make boating available to residents of all ages, abilities, and incomes. Located within the heart of Brooklyn's resurgent waterfront, this new facility will be a part of the award winning Brooklyn Bridge Park.

The project will include 125 slips ranging from 40' to 100' on a floating dock system protected by a floating wave attenuator, creating the calmest marina basin in New York Harbor. Broadside mooring for superyachts up to 250' will be available. The Sail Club and Harbor Club will provide first class amenities for tenants.

The marina will also incorporate a wide range of sustainable technologies to make this marina one of the "greenest" marinas in the world. This will include specially textured concrete panels to create habitat, and floating wetlands to make this project a model for future New York Harbor marinas.

**SERVICES:** LANDSCAPE ARCHITECTURE, CIVIL/MARINE ENGINEERING, COMMUNITY OUTREACH, FINANCING, AND DEVELOPMENT ECONOMICS





**CLIENT**  
**MICHIGAN CITY PORT AUTHORITY**

**LOCATION**  
**MICHIGAN CITY, INDIANA**

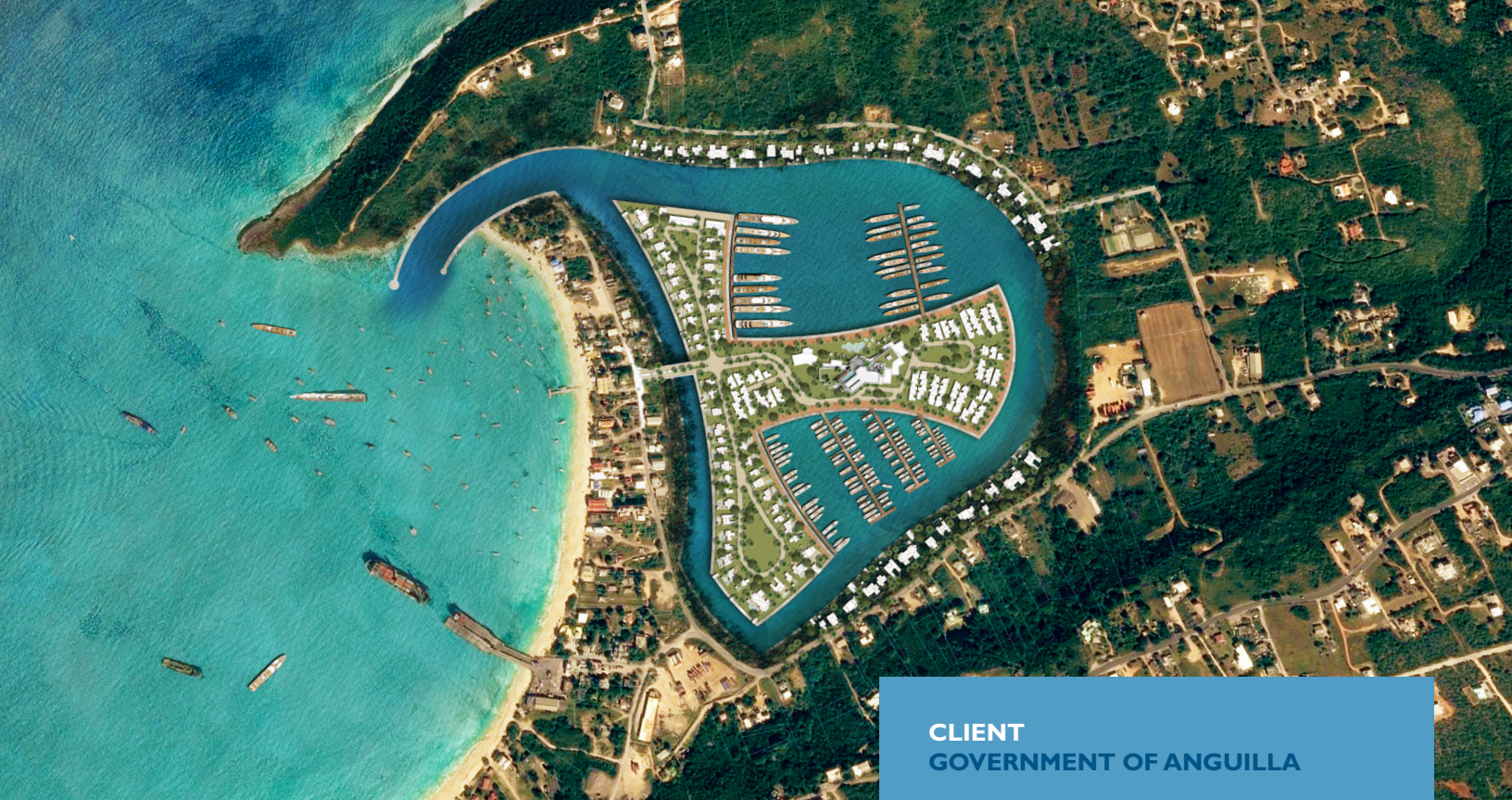
## TRAIL CREEK MARINA SHORELINE

Edgewater Resources worked with the Michigan City Port Authority to make improvements to their Trail Creek Marina facility. The site's existing shoreline consisted of various dilapidated retention structures, so the project focused on shoreline improvements and associated land-side needs. Improvements included removal and replacement of shoreline treatments with a steel sheet pile seawall anchored with helical tiebacks. Helical tiebacks were used in lieu of traditional anchors due to the proximity of existing underground utilities and insufficient shallow soil layers. The project included stabilization of a failing lift wing wall, dredging, slip expansion, ADA-Accessibility, boater gathering areas, lighting, utility improvements, ground fault protection, and a state-of-the-art fish cleaning station.

Edgewater was actively involved from infancy to completion, by providing planning services, conditions assessment, surveying, procuring soil sampling and investigations, grant procurement, final design, bid and award, and construction administration. The project was funded by MCPA user fees with assistance from a U.S. Fish and Wildlife Service Sport Fish Restoration Grant, administered by the Indiana Department of Natural Resources.



**SERVICES:** PLANNING SERVICES, CONDITIONS ASSESSMENT, SURVEYING, GRANT PROCUREMENT, FINAL DESIGN, BIDDING, CONSTRUCTION ADMIN



**CLIENT**  
**GOVERNMENT OF ANGUILLA**

**LOCATION**  
**ANGUILLA**

# ANGUILLA MEGAYACHT

Edgewater Resources was asked by the Government of Anguilla to consider the feasibility of building a megayacht marina on any one of 13 separate sites on the island. As part of our initial research, we settled on five sites to explore for the study: Little Harbour, Rendezvous Bay, Sandy Ground, Blowing Point and Scrub Island.

In order to fully assess the feasibility of building a megayacht marina in Anguilla Edgewater conducted research and developed recommendations based in the following areas: Marina Market Analysis, Site Analysis and Evaluations for all Five sites: Environmental Summary, Wildlife Summary, Searise, Development Economics.

Our team of architects, engineers, and biologists worked in close collaboration to develop 5 marina concept plans and a full Feasibility Study which was published by the Government of Anguilla in July of 2018. Edgewater Resources hand delivered the report to the people of Anguilla and conducted a town hall style discussion which resulted in the study being well received by both the Government and the people. Following the success of the Feasibility Study, Edgewater was subsequently contracted by the Government of Anguilla to lead the development and investor efforts of the approved marina locations to bring a new industry to the island of Anguilla. The scope of work under this MOU is currently in progress.



**SERVICES:** MEGAYACHT FEASIBILITY, MARKET RESEARCH,  
ENVIRONMENTAL FEASIBILITY, ECONOMIC FEASIBILITY



**CLIENT**  
**KEPPEL GROUP**

**LOCATION**  
**KEPPEL BAY, SINGAPORE**

## MARINA AT KEPPELBAY

The Marina at Keppel Bay was a former shipyard containing four large dry docks. The Project converted this industrial-use site into a world class 168 berth marina accommodating superyachts up to 280'. Located on the Southern coast of Singapore, the project was named "Best New Asian Marina/Yacht Club" at the Christofle Asian Boating Awards in 2008, and was the first Marina Industries Association of Australia Certified Clean Marina in Asia. Subsequently, the marina earned the 5 Gold Anchors rating for excellence in service and facilities, the highest rating available from MIAA.

Ronald Schults was responsible for the initial feasibility study that outlined how the development of an international destination marina and yacht club at this location could increase the value of adjacent residential development projects. The marina project created value and economic development potential that has ultimately led to the creation of Reflections at Keppel Bay, which includes approximately 3,000 upscale residential units, a showpiece development designed by Daniel Libeskind. The marina itself includes both transient and seasonal berths.

The initial financial and marine feasibility studies - which also included coastal studies, marine traffic study, berthing layout (tender and selection), bridge protection risk assessment and advisement, Phase II marina expansion feasibility, and general marina consultancy services - created the necessary confidence within the Singaporean authorities to accept their initial concepts and approve the project contingent on satisfying the concerns of several special interest groups.

**SERVICES:** MARINA DESIGN



