

Consultores Socio-Ambientales Teléfonos: +507 3983776; 2368117; Celular: +507 64504616; Email: ingemarmd@gmail.com; Web: www.ecoingemar.com



Company registered in the Republic of Panama

Corporate Records:



Support clients in planning, designing, building, and operating projects in general, maintaining high standards of environmental quality and complying always with current national and international environmental regulations.



Environmental Consultant: DEIA-IRC-16-2021

Environmental Auditor: DIVEDA-EAA-04-2021



Lead the field of environmental consulting and auditing, maintaining high moral and ethical values; and becoming a strategic partner of our clients.



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WHY YOUR BEST OPTION?



ingemarmd@gmail.com

fundacionislaiguana@gmail.com



MORE THAN 27 YEARS OF EXPERIENCE

We have successfully managed 11 EIS Category 3; 28 EIS Category 2; more than 200 EIS Category 1; 8 Environmental Audits and PAMA; and 10 Environmental Studies with International Banking standards, including institutional strengthening projects for environmental and social units.



www.ecoingemar.com www.islaiguana.com



Most of our clients stay with us as their Environmental Auditor for follow-up during the construction and operation of their projects; Therefore, our experience covers the entire environmental management process. None of our EIS have been rejected.



Vista Park Building, Ground Floor, Angel Rubio Street, El Carmen, Panama City



EXPERIENCE IN CLIMATE CHANGE AND "GREEN" PRODUCTS

We analyze the impacts of climate change on projects and vice versa. In addition, we created environmental and social management plans for projects that apply for "Green" licenses.



Marco L. Diaz V.
Marine Biologist and
Oceanographer with 34 years
of experience



Donor of the Isla Iguana Foundation



VAST EXPERIENCE IN PUBLIC CONSULTATION

We have successfully completed public consultation processes while developing EIS and 12 public forums.

We have submitted comments and proposals for changes to all processes to modernize the standard governing EIS in Panama.



PORTS AND PANAMA CANAL



PANAMA PORTS COMPANY: PORTS OF BALBOA (PACIFIC OCEAN) AND CRISTOBAL (CARIBBEAN SEA)



Port of Cristóbal, in the city of Colón; and Port of Balboa, in Panama City.



Cristobal: Sep 2005 - Dec 2016

Balboa: ABR 2003 - Dec 2014 ⇒Inspections and quarterly and semi-annual reports were prepared to quantify compliance with the execution of mitigation procedures. Permits were processed.



 \Rightarrow Monitoring:





DREDGING MONITORING AND DISPOSAL IN THE **OPEN SEA**

Cristobal:

Apr 2010 – May 2014

Balboa:

May 2000 - Apr 2008 (various campaigns) Phases I - 4

- ⇒ Fieldwork was carried out one day per week and weekly reports were prepared to quantify compliance with the execution of environmental dredging and disposal procedures.
- ⇒ Environmental Monitoring Work Plans were generated to assist contractors in processing the Dredging Permit before the AMP.















- ⇒ The amount of material dredged and deposited in the open sea was quantified.
- ⇒ It was verified that it was available only in the assigned area following the protocol by quadrants.
- ⇒ Reports of damage to the environment from oil spills.



STUDY OF SEDIMENT MOVEMENT AND **ANCHORING OF THE PORT OF BALBOA**

Nov 2001- Apr 2002

⇒ Measurement of currents using Lagrange Drifting Devices. Mathematical model of currents. Sampling and granulometric analysis of sediments. Preparation of a report with the results obtained and sediment flow at the bottom around the port.







PORTS AND PANAMA CANAL



DEEPENING AND MAINTENANCE OF THE PORT OF BALBOA	2012
PORT OF BALBOA EXPANSION, PHASE 4	Oct 2005–Aug 2006
EXPANSION OF THE CRISTOBAL CONTAINER PORT	2005
MAINTENANCE DREDGING OF THE PORT OF BALBOA	2005
BALBOA CONTAINER PORT LANDFILL, PHASE 3	Dec 2000–Apr 2001
DREDGING AND DISPOSAL OF DREDGED MATERIAL FROM THE BALBOA CONTAINER PORT, PHASE 3	Dec 2000–Mar 2001

 \Rightarrow Base Line, impacts assessment and mitigation procedures:



 \Rightarrow Risk assessment:



⇒Social baseline and public consultancy:





PORTS AND PANAMA CANAL



WIDENING AND DEEPENING OF THE PACIFIC ENTRANCE AND THE SOUTH CANAL APPROACH TO THE PANAMA CANAL

Pacific Entrance of the Panama Canal





May 2008

⇒ Inspections were carried out and the baseline report was prepared to quantify compliance with the implementation of mitigation procedures. Permits were processed, and monitoring was carried out.



 \Rightarrow Monitoring:











BASELINE SAMPLING AND MONITORING OF:



- ⇒ Quality of inland and marine waters, with multiparameter, which allows us to make measurements on the surface up to 30 m deep.
- ⇒ Terrestrial vertebrates Identification of footprints, eses, edges, fog nets, cameras, and traps.



⇒ Fish and aquatic invertebrates, with electric rod, cast net and / or trammel.





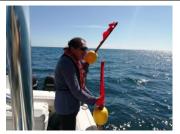
⇒ Aquatic insects, perifiton and plankton, by scraping rocks and plankton net.



⇒ Marine sediments benthos, with Pulsen dredger of 40 cm3. and type ⇒ Coral reefs
Through the
International Transept
methodology.



- ⇒Oceanic and coastal currents with Lagrangian drifters and current meters.
- ⇒ Current simulations
- ⇒ Pollutant dispersion simulations
- ⇒ Wave simulations, using Wind Cast and virtual buoys.



⇒ Environmental
Noise, with sound level meter calibrated on site, humidity and winds are recorded.



 \Rightarrow Logging, erosion, and sedimentation

With drones, ortho-mosaics are generated to verify that logging remains within the project area approved by the authorities, certify if the sediment leaves the



area and track the path of the sediment leaving the area to assess its impacts on the affected surrounding areas.

⇒ Inductions
Training on
environmental,
social,
archaeological,
national, and
international
regulations.

