



San Juan Bay Estuary Program
Urban Waters Conference, DC, 2016

San Juan Bay: NEP





Population: 3.6 million, more than:

Wyoming

DC

Vermont

North Dakota

Alaska

South Dakota

Delaware

Montana

Iowa

Connecticut

Oklahoma

Oregon

Rhode Island

Hawaii

Maine

New Hampshire

Idaho

Nebraska

West Virginia

New Mexico

Nevada

Utah

Kansas

Mississippi

Basic info

- US territory since 1898
- US citizens since 1917
- Compulsory military service - PR has participated in all US wars and military interventions.
- US currency
- Can't vote for the President or Congress representatives/senators
- Since 1952 PR has its own constitution under a political formula named "Free Associated State" of the US.
- Current debt: 72 billion dollars, mostly due to vulture funds interests of up to 700%

LOCATION



WATERSHED

3,400 acres/ 16.5 miles of coast





Over 1 million persons in the watershed
80% of the watershed is developed

Population Density: over
8,327 persons per square mile

**The San Juan Bay receives 80% of all products
imported to PR**



San Juan's shipping container volume is greater than the combined cargo volume of Guam, Alaska, and the Hawaiian Islands

9.2 million travelers per year/ LMM International Airport



1.2 million tourists through 700 annual cruise ships



160 bird species



124 fish species



300 wetland plant species



**33% of the Island's remaining
mangrove acreage – located at the
SJBE**



Several species in danger of extinction



East Martín Peña Channel 1936



Martín Peña Channel 1940



Martin Peña Channel 2000's: from 200 feet width to soil at some points





From 1917 to 2000s people living at the Martin Peña Channel's margins used debris and garbage to fill the body of water and build homes over it.

Frequent floods
with raw and
stormwater
sewage.





Martin Peña Urban Waters Ambassador since March 2015

- The general cost of the dredging and rehabilitation project is of \$722 M
- Connect federal and state agencies with local communities to search for funds.
- Developed a Zika prevention campaign in the community.
- Partnership with SBA to develop small businesses.

Martin Peña after dredging



Projects to connect people with urban waters

#1: Citizen science project:
Water quality monthly
monitoring





Projects to connect people with urban waters

#2: Citizen science project:
School-based water quality
monitoring program







Projects to connect people with urban waters

#3: Puerto Rico Water Quality
Monitoring Day













PR's Water
Quality
Monitoring
Day-
coordinated
by the SJBEP

Projects to connect people with urban waters

#4:

Coral reef trail at the Condado Lagoon



DEPLOYMENT: 245 structures- 800lbs each-



DEPLOYMENT



Underwater trail creation







**Condado Lagoon underwater trail
location**













Projects to connect people with urban waters

#5: Large-scale public educational exhibit located at places of high transit



WWW.STUDIO.ORG

BRANCHING FIRE CORAL
Coral de fuego ramificado
Coral de fuego ramificado
Coral de fuego ramificado



LÍNEA DE TIEMPO DEL CAÑO

TIMELINE OF THE CHANNEL

1519
Juan Martín Peña
abandona sus bienes
y se dirige a la isla
de Caparra a
defender la isla.
El primer
gobernador de San Juan.
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1797
Batalla en el puente Martín Peña
contra la invasión británica del
General Sir Ralph Abercromby en
defensa de la isla.
Battle on the Martín Peña bridge
to defend the island against the
British invasion under General Sir
Ralph Abercromby.



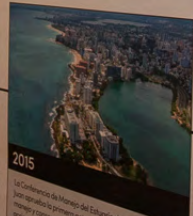
1992
El Gobernador de Puerto Rico firma
la ley que formaliza la creación del
Proyecto Península de Cantera.
The Governor of Puerto Rico signs a
law which formalizes the creation of
the Cantera Peninsula Project.

1992
La Agencia de Protección
Ambiental designa el Estuario
de la Bahía de San Juan como
una zona de importancia en la
agenda de restauración de
Estados Unidos.
The Environmental Protection
Agency designates the San
Juan Bay Estuary a system of
importance in the U.S.
environmental restoration
agenda.



1994
Ocurre el primer evento masivo
ambiental desde la década de los
1980 en la zona del Caño con la
Madre de las Limpiezas,
coordinado por el Proyecto
Península de Cantera.
The first large-scale
environmental-action event takes
place in the area with "The
Mother of All Clean-Ups," an
activity coordinated by the
Cantera Peninsula Project.

1994
Inicia labores el Programa del
Estuario de la Bahía de San Juan
como una entidad independiente
sin fines de lucro. El Programa se
convierte en un promotor para
completar el dragado del Caño.
The San Juan Bay Estuary Program
opens its doors as an independent
non-profit organization. The
Program strongly pushes for
dredging of the east side of the
Channel, and stresses the
importance of reconnecting the Bay
with the San José Lagoon.



2015
La Conferencia de Ministros del Estuario de la Bahía de San
Juan realiza la primera actualización del Plan de San
Juan y la creación del Estuario, que respaldará los
esfuerzos gubernamentales y multisectoriales para
proteger el dragado del Caño.
The San Juan Bay Estuary Management Conference
updates the first update of the Comprehensive
Estuary and Management Plan for the San Juan Bay
Estuary, which supports government and multi-sector
efforts later in being able to dredge of the Channel.

2015 -
Universitas para respaldar el
dragado del Caño Martín Peña,
visita estuario.org para conocer
cómo ayudar.
Let's unite to support the dredging of
the Martín Peña Channel.
Visit estuario.org to learn how
and help.



CAÑO MARTÍN PEÑA

Es parte del Estuario
de la Bahía de San Juan



estuario.org

GRANT EPA CE 99206920

PIÑONES

Forma parte de la cuenca del Estuario
de la Bahía de San Juan



estuuario.org

GRANT EPA CE 99206920



RÍO GRANDE DE LOÍZA

Límite oriental del Estuario
de la Bahía de San Juan



estuario.org

GRANT EPA CE 99205020

7
2

LAGO LAS CURÍAS

Origen de la cuenca del Estuario
de la Bahía de San Juan



estuario.org

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Projects to connect people with urban waters

#6: Community-based red mangrove planting











Projects to connect people with urban waters

#7: Trash Free Waters















Exhibición
AGUAS LIBRES DE BASURA
OTI Group CHIVASUR

20%
CERO BASURA
Estuario.org

Del 60% al 80% de la basura que llega al estuario es plástica.
80%
CERO BASURA
Estuario.org

Cada año llega a nuestros mares 6.4 millones de toneladas de basura.
6.4 MILLONES DE TONELADAS
CERO BASURA
Estuario.org

Projects to connect people with urban waters

#8: Education program and classical music workshops in schools















Projects to connect people with urban waters

#9: Estuary Cinema-Open air screenings in parks and communities



Thank you!





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