

# Green infrastructure, ecosystem services and their contributions to address climate change in cities: the case of the coastal corridor of the river Mapocho in Santiago de Chile

Por: [Vasquez, AE](#) (Vasquez, Alexis E.)<sup>[1]</sup>

REVISTA DE GEOGRAFIA NORTE GRANDE

Número: 63

Páginas: 63-86

Fecha de publicación: MAY 2016

[Ver impacto de la revista](#)

## Resumen

The paper discusses the arguments in favor of urban green infrastructure and the provision of ecosystem services as key components of urban-ecological systems resilient to climate change. The analytical framework developed here is then applied to the riparian corridor of the Mapocho River in Santiago, in order to discuss its current and potential contributions to tackling climate change. The discussion is based on the evaluation of three key ecosystem services: (1) cooling effects, (2) routes for non-motorized transport, and (3) flood mitigation. The integration of concepts of green infrastructure, ecosystem services and adaptation/mitigation of climate change, provide an appropriate framework to clarify how urban green spaces can contribute to address global warming and the negative effects of climate change. In Santiago, currently the main contribution of Mapocho River's riparian corridor is to mitigate greenhouse gas emissions by acting as an important route for non-motorized transport, particularly for cycling. Currently its contribution to the reduction of atmospheric temperatures and to flood mitigation is limited. The development of a riparian greenway along the Mapocho River could help improve the provision of the three evaluated ecosystem services and thus constitute an important connector in the green infrastructure system in Santiago to address mitigation and adaptation to climate change.

## Palabras clave

**Palabras clave de autor:** [Green infrastructure](#); [ecosystem services](#); [climate change adaptation and mitigation](#)

**KeyWords Plus:** [URBAN AREAS](#); [HUMAN HEALTH](#); [INDICATORS](#)

## Información del autor

**Dirección para petición de copias:** Vasquez, AE (autor para petición de copias)

+ Univ Chile, Dept Geog, Santiago, Chile.

## Direcciones:

+ [ 1 ] Univ Chile, Dept Geog, Santiago, Chile

**Direcciones de correo electrónico:** [alexvasq@u.uchile.cl](mailto:alexvasq@u.uchile.cl)

## Editorial

PONTIFICA UNIV CATOLICA CHILE, INST GEOGRAFIA, AV VICUNA MACKENNA 4860,  
SANTIAGO, 00000, CHILE

## Categorías / Clasificación

Áreas de investigación: Geography; Physical Geography

Categorías de Web of Science: Geography; Geography, Physical

## Información del documento

Tipo de documento: Article

Idioma: Spanish

Número de acceso: **WOS:000386712400005**

ISSN: 0718-3402

## Información de la revista

- Impact Factor: [Journal Citation Reports](#)

## Otra información

Número IDS: EA6CH

Referencias citadas en la Colección principal de Web of Science: [57](#)

Veces citado en la Colección principal de Web of Science: [1](#)