



GreenMap.org

GREEN MAP impacts

Reinvigorating communities around the world





Introduction

Keiko Nakagawa (Director of Green Map Aichi) and Misako Yomosa (Executive Director of Green Map Japan, Inc.) conceptualized the **Green Map Impacts** book project in 2007 in order to help people worldwide see and understand the many tangible results that can stem from Green Mapmaking. The publication of a Green Map is not the end of the process, rather it is the starting point for a new appreciation of and engagement with community sustainability. With this book, you can feel the awareness and involvement of Mapmakers and their communities grow as positive environmental changes take place around the globe.

Green Map Impacts started out with articles from the Aichi, Japan region, the prefecture that hosted the successful nature-themed Aichi Expo 2005. This book then expanded to include a selection of global Green Map impacts. Each story is written by local experts and provides first-hand insight into how their Green Map projects impacted biodiversity, education, community building, public planning, workplace practices and more.

We hope **Green Map Impacts'** stories will provide guidance for improving the environment and supporting climate-smart actions in your community. We invite you to get involved locally by creating and/or using Green Maps, too!

Find more about each Green Map project at GreenMap.org
Find this book and additional impacts at GreenMap.org/impacts

What is a Green Map?

A Green Map® is a locally-made map that uses Green Map Icons to highlight sustainability sites, pathways and resources in communities worldwide. Green living, nature, social innovation and cultural sites can be comprehensively charted or presented as theme Green Maps designed for residents and visitors.

Whether printed locally or presented on the Open Green Map social mapping platform, each offers a fresh perspective and engages action for a sustainable future.



Green Map Impacts

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GREEN
MAP
JAPAN

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Regenerating NYC's Natural Environment with Compost

Green Map System | apple@greenmap.org

GreenAppleMap.org

Author: Green Map System



Background: Green Map System's own Local Green Apple Map Project

The New York City Green Apple Map project is the original Green Map. The fifth citywide edition was published, in early 2006 with energy as its theme. A casual discussion about everyday efficiency led to the co-creation of the Compost Green Map of Manhattan in partnership with Lower East Side Ecology Center (LESEC). LESEC runs the island's oldest composting program, providing education and collecting the public's kitchen scraps and plant waste at Union Square Greenmarket, NYC's busiest farmers market.

Together, the two organizations put composting on the map because it is a great way for New Yorkers to save energy, reduce waste and help the environment. Compostables are naturally pro-

The map's debut event



cessed nearby, and the resulting rich soil helps to beautify green spaces. The map charted drop-off sites and places to learn about composting at schools, community gardens and other public locations. Side two introduces waste separation and worm bin composting at home, work, school or outdoors.

The map's compost-colored design includes an interesting fact - it's 100% wind powered! Green Map System's office, the printer and the paper company all chose wind as their energy source. Both a PDF and 100% recycled paper editions were created. A Green Apple composting cycling tour and events with LESEC introduced this small but surprising map to New Yorkers.

Impacts: Changing Waste Reduction's Status

Composting gained respect and the map was in demand. By the time the second edition was published in 2007, the amount of compostable food scraps collected at LESEC's Greenmarket stand had tripled! The third edition includes a link to OpenGreenMap.org/compostnyc where an interactive citywide edition is taking

shape on Green Map System's new social mapping platform.



Compost Green Map of Manhattan, first edition, 2006

30,000 printed copies have been distributed, and thousands of people have downloaded the PDF and visited online composting case studies.

Because of this map, staff at Green Map System put a worm composting bin in the closet to reduce waste every day! The organization has found that this narrowly focused Green Map is ideal for explaining the concept of mapping sustainability to beginners, and have shared the map's graphics and lessons learned though partnering with the global Green Map movement.



Protecting Tideland from Landfill Development

Ise Mikawa Bay Area Network | a-ohya@sc.starcat.ne.jp

<http://www.isemikawa.net>

Author: Yoshie Usami

Background: Reassessing Coastal Natural Resources

Unlike rivers and streets that are closer to our lives, changes in the sea coastline are harder to detect. A community group decided to work to protect the coastline, and formed the Rokujogata Tideland Green Map project to assess the natural environment of Ise and Mikawa Basin on the coast of Aichi prefecture. The area's rich ecological resources were being destroyed by the city's development plan for continuous landfill development in this natural area.

Rokujogata Tideland Green Map (2006)



Ise Mikawa Bay Area Network

Impacts: Green Map as a Communication Tool that Protects Endangered Environments

Rokujogata, a tideland located on the outlet of the Toyo River, is known for its clams. Aichi is proud to be the number one producer.

When the landfill plans were made public, the Green Map team spoke up, hoping to stop the plan by promoting the unknown treasures of the area and the possible damage the landfill could bring to the tideland and clam cultivation. As a result, the team successfully educated people on the issues. The media began to take interest in the issue and the landfill program came to a halt.



Clams are the treasure of Rokujogata

Finding Harmony in the City where the Contemporary and Classic Live Together

Green Map Kamakura | to-kgm@excite.co.jp
Author: Shinsuke Shima, Kamakura Green Map



Background: Through the Lens of Four Distinct Eras

What is the most suitable and best way to promote the environment in the unique and historical city of Kamakura? With this question in mind, the Green Mapmaking team set the direction of the map as a resource suggesting a future model of Kamakura.

The mapmaking took place in large workshops with field research and discussions, while small groups and individuals collected missing information. A shared draft

map was filled gradually as the team collected more information.

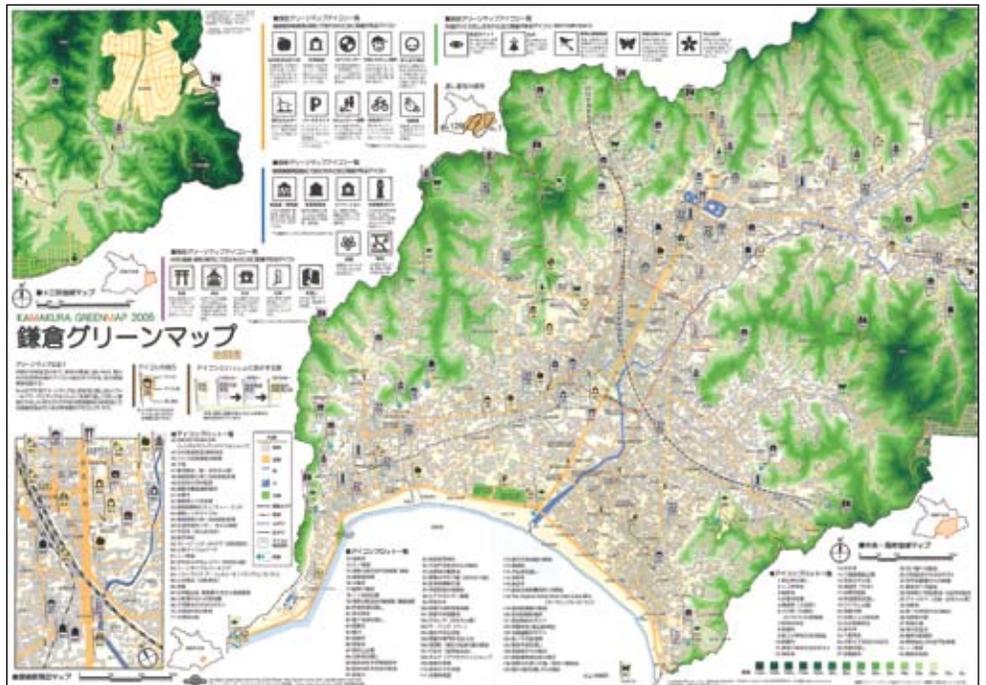
As the research progressed, the team realized each site belonged to one of the four different eras: The Original Natural Landscape, Medieval Era, Modern Weekend Resort Era and Postmodern Tourism and Residence Era. Each site's icon was placed on a color-coded flag indicating its era. Several local icons were created to highlight Kamakura's unique features.

Shrine/temple site



On-street sidewalk with local icon
Classic style mailbox (bottom)

Green Map Kamakura and color coding (right)



Original local and Green Map Icons



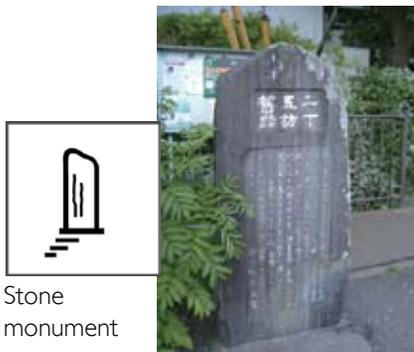
Curved pathway



Narrow back street



Architectural treasure



Stone monument

Impacts: Kamakura's Hidden Charm Emerges

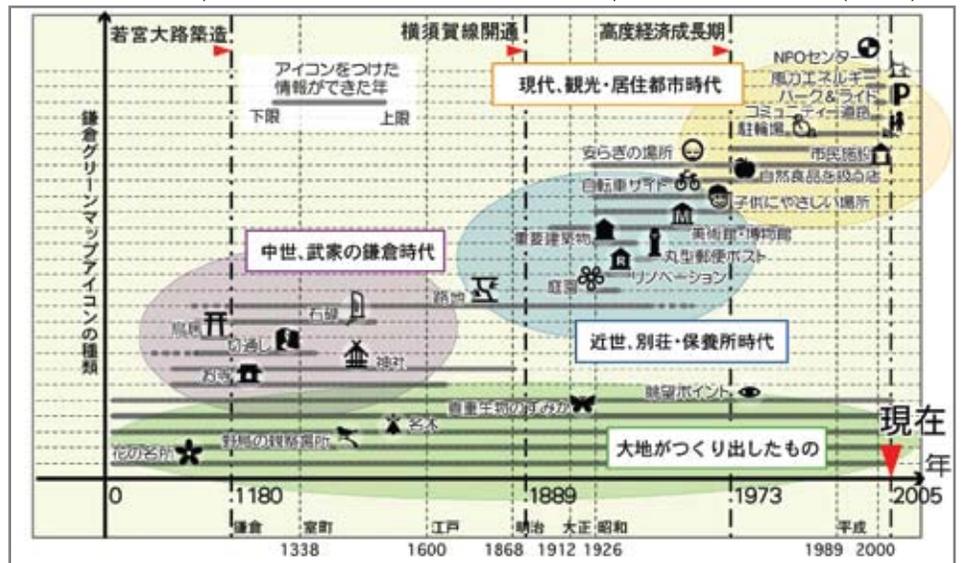
Through field research and categorization, the mapmakers began to define Kamakura's charm. It was universally agreed that the sites that the team had found were important to preserve and highlight.

More challenging than merely recognizing historical architecture such as temples and shrines, they worked to identify other important sites that represent the unique image of Kamakura. For instance, "Roji", narrow back streets, represent an era when wealthy Tokyo residents sought weekend houses in the area. Their narrow design was intentional, allowing pedestrians to walk without the interference of cars. Retain-

ing profound tranquility, the roji is exactly how Kamakurans remember those days. Also, the team paid attention to the decreasing number of classic cylindrical mailboxes, which were common during the Meiji era.

The map gave life to previously invisible sites and subsequently suggested guidelines for an improvement plan. Fresh concepts of ways to better harmonize the old and the new arose as a focus for the community. This idea was generated by the environmental analysis that took place during the mapmaking process. As a result, the map became the strategic tool to create the future of Kamakura.

History and site details on the back of the map date back to 1180 (below)



<p>38. 西御門 この石壁と石柱に、西に在る門を記したことから、現在のこの地名となる。</p>	<p>24. 八雲神社 創始には神輿渡御、神輿渡り(夜)が毎年行われ、花園山ハイキングコースへの入口がある。平安末期、鎌倉の政務所として創設されたのが地元の大町の鎌倉。</p>	<p>39. 海岸の駐輪所 海岸沿いの公園にある駐輪場で、約200台の自転車が、休日の利用者が多く、五層のベンチの利用者も多い。</p>	<p>56. 鎌倉生涯学習センター 市立図書館 鎌倉駅から歩いて3分の所にある市民生活、運動の拠点。生涯学習に関する情報の提供、学習相談、学習文化活動場所の提供、ボランティア人材紹介といった事業を行い、サポートしている。</p>
<p>39. 西御門 この石壁と石柱に、西に在る門を記したことから、現在のこの地名となる。</p>	<p>25. 大町6丁目自由の沢川 鎌倉市庁舎保存会が、日頃からホテルの主要に選んだ建築を維持、管理している。鎌倉市の小動物保護会に指定され、猫カフェやセブスガなども</p>	<p>40. 鎌倉市比呂井地下駐車場 パーク&バスライドのバス乗り換え地点でここから鎌倉駅、徒歩10分程度で入庫できる。フクちゃんマークのバスが利用。</p>	<p>41. ノノ鳥居 鎌倉駅から歩いてくるこの鳥居付近はゆるやかな上り道になっている。そのため、遠くに見界が開けて、空の広がりや海を感じることができる。</p>

Our Common Ground – Green Map Story and Community Impacts

University of Victoria Geography Department and the Office of Community Based Research | info@commongroundproject.ca

<http://www.commongroundproject.ca/>

Author: Maeve Lydon, Common Ground



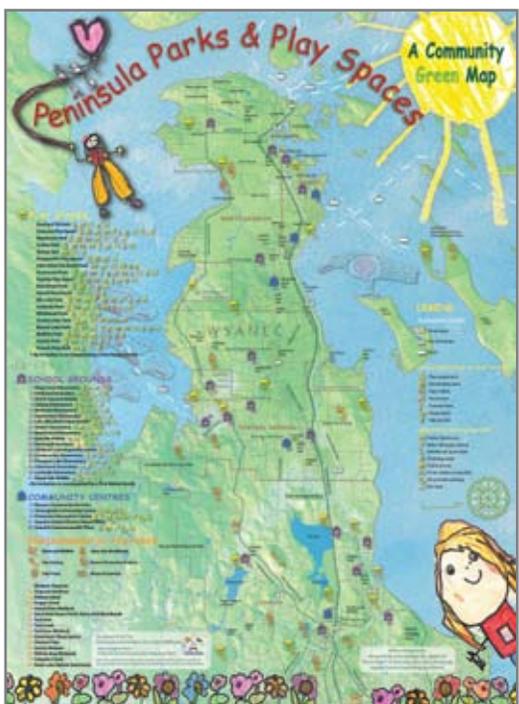
Background: We Make the Place by Mapping!

The Victoria and Region Green Map project began in 1999 as the first spatial regional profile of community and environmental assets and initiatives. Common Ground's enthusiastic newly formed team of community activists, students and planners worked with dynamo cartographer Ken Josephson and the University of Victoria Geography Department.

Making a visually and symbolically beautiful map that accurately portrayed the region and honoured the richness of the indigenous First Nations heritage took five years to complete. First Nations artists provided the map's original place names and local native motifs, and the map includes colorful vignettes that illustrate how community mapping has applications from health research to ensuring that 20,000 pounds of fruit from backyard trees would be picked for food banks.



Victoria and Region Green Map (right)



(Left) Early Childhood "Play" Map" 2007

What is Common Ground?

The Common Ground Community Mapping project began officially in 1998, stemming from several projects with local and global relevance and connections. A diverse group of people interested in sustainability, popular education, bioregionalism, green-, asset- and parish-mapping, aboriginal worldviews and rights, conservation, participatory learning, and GIS converged around the common interest in getting citizens of all ages involved in mapping and planning their communities. Together they named the project 'Our Common Ground.'



(Left) Haida Gwaii Map: Northern Haida Gwaii – (an unpublished community research project: “Mapping with First Nations” 2006

Common Ground also travelled to Cuba in 2003 and participated in Havana mural mapping with the outstanding Mapa Verde Cuba network. (below)



Impacts: Join the “Mad Mappers Tea Party!”

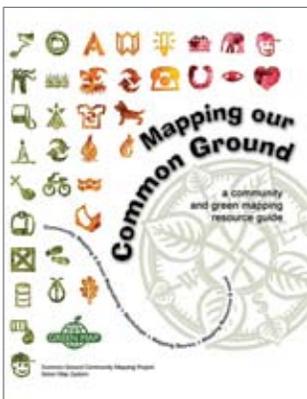
Green Mapmaking became a widespread regional networking and visioning process about sustainability involving 25 different groups as a result of Common Ground’s outreach. Hundreds of participants have gone on to develop smaller maps: schools, street recycling (binners), neighborhoods, sensitive ecosystems (Haida Gwaii). Seven other regional Green Maps have been printed to date; there is a webmap and our

“Mapping our Common Ground” book in English, Spanish (and soon, Portuguese!).

Participatory processes using maps began to be seen by institutional, community and academics alike as a viable planning tool and Green Map System greatly assisted in legitimizing that view. There is also an increased public awareness of indigenous place names, published for the first time on a regional map.

Common Ground’s next steps include more systematic training, a learning-based website, integrating community and Green Mapmaking into school and university curricula and connecting mapmakers in communities and universities throughout the Americas.

The work of Common Ground is never finished. The road is made by walking, the place (the map), is made by mapping...and the territory is infinite!



(Above) A booklet of mapmaking knowhow

The process of creating the map is as important as the product. (right)



A Hopeful Environmental Education Resource for Public Schools

Fundación Geovida

carlos@greenmap.org / <http://mapasescolares.blogspot.com>

Author: Carlos Martinez, Green Map System



Mapas Verdes charting school buildings and surrounding areas made in 2007 (left). Students created a unique portable mural (below)

Background: Green Maps as Environmental Tools for Low-income Youth

Under the leadership and interdisciplinary approach of Fundación Geovida, a Colombian non-profit organization, the primary motivation for this project was to help low-income youth express their concerns and hopes for the local environment to their peers, educators, older community members, journalists and policy-makers.

Pereira is a traditional coffee growing eco-region facing rapid and unsustainable development. Air and water pollution as well as threats to open and public spaces

are priorities, among other issues.

The project aimed to provide a holistic lesson plan with hands-on environmental activities appropriate for different ages and educational needs, tailored to one rural school, Institución Educativa Gonzalo Mejía Echeverry, and two urban public schools, Colegio Deogracias Cardona and Institución Educativa Suroriental Gustavo Arango Garrido.

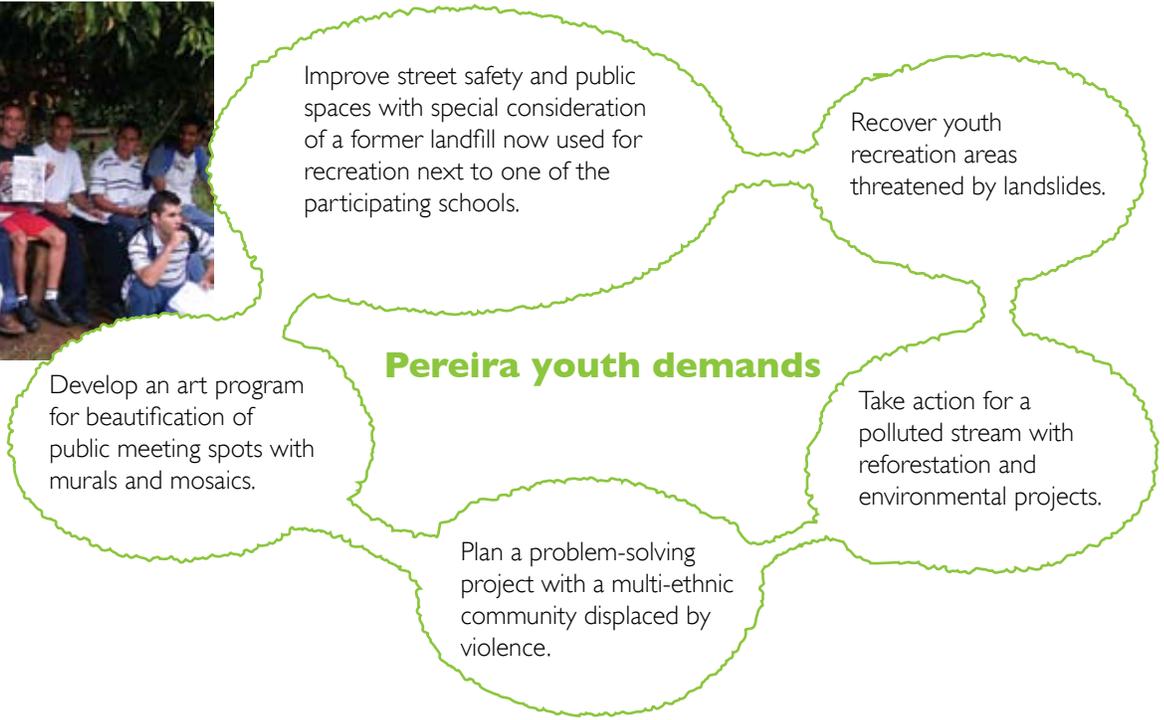
Each school developed a "mobile Green Map mural" that was presented around their cam-

puses and surrounding neighborhoods. They distributed a total of 5,000 printed Green Maps.

As tangible outcomes, these maps offer a message of inspiration that increases the awareness of government and policy makers as to the demands of youth. Each passes on local knowledge as interpreted by the student mapmakers and motivates other communities in Colombia and around the planet to develop projects like this one.



Presenting the maps and findings



Impacts: Creating a Colombian Model for Stronger Public Schools Linking Environmental Education and Community Development Networks

A massive number of young Map-makers participated in experiential trainings, environmental activities and workshops about the sites and situations they were charting. They became engaged in issues related to cartography; sustainable agriculture, food security, reforestation and hydroponics, recycling and waste management; eco-literacy, social responsibility and critical assessment; design and communications; arts and painting, etc.

Their field trips identified elements of natural and cultural significance as well as environmental justice hot spots. Youth became mentors, carrying their first hand experience into their homes and classrooms, multiplying the number of voices calling for action and change.

After the seeds were planted, it was time for harvest. Based on this pilot, Fundacion Geovida began building the foundation for the

adoption of a new contextual environmental curriculum in a growing number of schools, and developing a regional youth mapmaking network that will assist schools with their neighborhood Green Map projects.

Fundacion Geovida is also planning an exchange program with Green Map projects in the global movement. Their aim is to share youth visions of their local environments, to understand the differences, and to develop solutions to common environmental concerns.

Impacts on the youth involved in this experience included the creation of their own sense of place and the facilitation of dialogue that transformed their views of the environment in both their academic and personal lives.

New skills include painting and visual communications skills, research, advocacy, leadership and

teamwork. The students also became active participants in a delightful online blog that promotes their perceptions and progress using new and traditional media tools.

The power of environmental communication has itself become a movement with a message, framed by the maps and their iconography. The messengers in this particular case are young leaders spreading knowledge and demanding a better, more eco-friendly world for everyone.



Young mapmakers in field research

Promoting Bicycling with a Tech-savvy Green Map

Urban Ecology Tokyo, Tama Art University | tokyo@urbanecology.jp

<http://cyclingmap.jp/>

Author: Masahiro Horiuchi, Urban Ecology Tokyo



Background: Sightseeing by Bicycle

It is popular among Tokyo residents to work hard during the week, then take a weekend drive to the countryside. What they don't realize is that the amount of gas used on their 100 km round-trip drive to Mount Fuji generates 35 kg of CO₂. It takes three cedar trees a full year to absorb this amount of CO₂. The Tokyo Cycling Green Map was inspired by a desire to promote alternatives to the weekend drive that would be fun and rewarding.

The first Tokyo Cycling Map offered information on bicycle repair shops, bicycle rentals and hot spas. Recommended cycling routes had fewer cars and traffic. These 'traffic calmed' routes were often missing from traditional maps, since those maps were usually designed with drivers in mind.

The idea was to make people feel comfortable taking a long distance trip by bicycle without having to worry about breakdowns or getting lost.

Soon, an interactive web version was set up for registered users to add new and useful information. The accumulated site and route information is then charted



(Above) The online map was designed to exchange information among bicycle riders in Tokyo area. It provides fun interactive experience.

(Middle) Traditional alley in Tokyo's Mukojima neighborhood. Bicycling provides a detailed view while sightseeing.



(Bottom) Tokyo Earth Day Ride that began in 2003 is now held every year on Earth Day on April 22.



and new printed editions are distributed to local newspapers, municipal offices, rental bicycle shops and at Earth Day events.

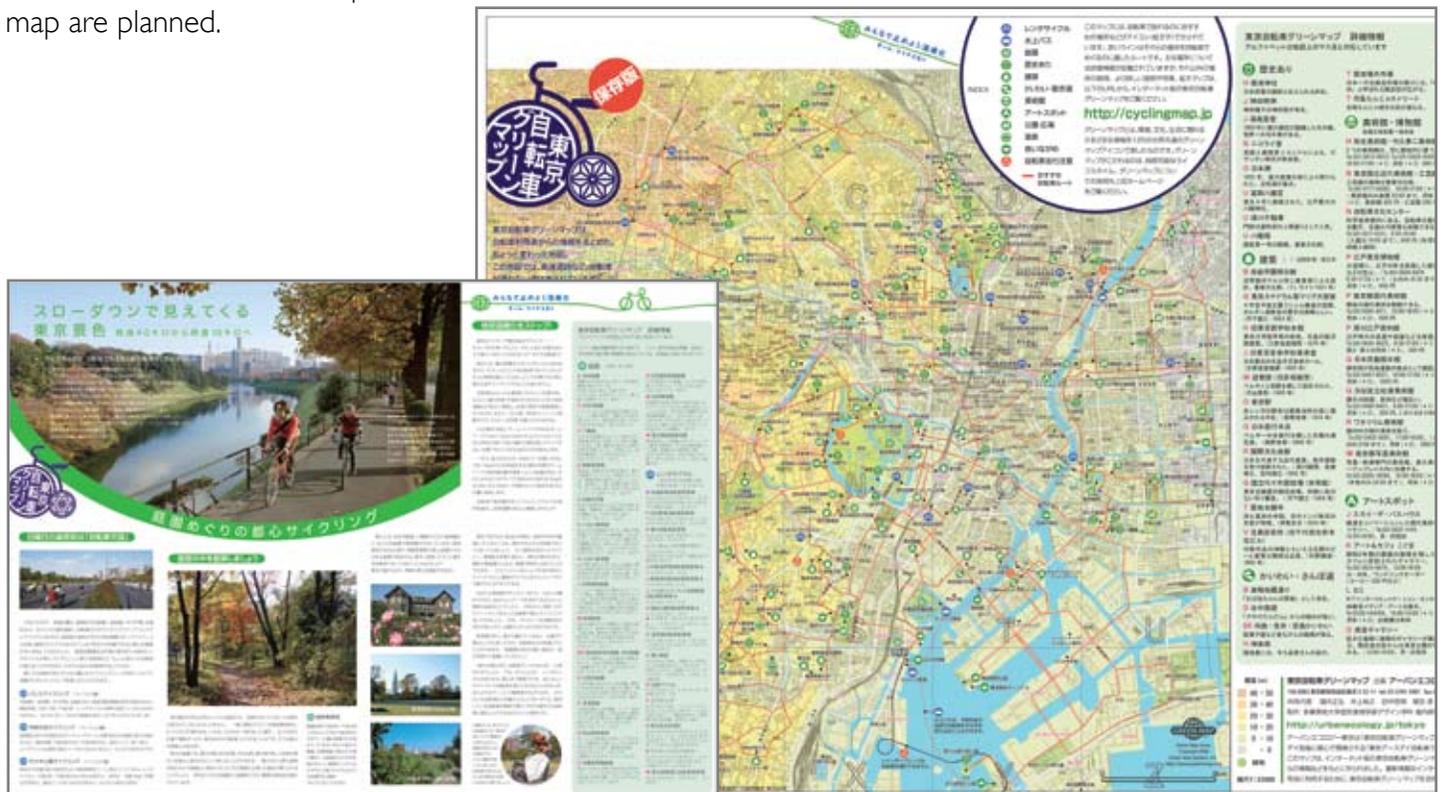
Impacts: Accessible Design with Cyclists in Mind

The design process began by removing highways from the Tokyo Cycling Green Map since they were unsuitable for bicycling. Then colors were added to show elevation, which is very useful for cyclists. Interestingly, the map ended up looking like an old Tokyo map from the Edo period.

The project was partly funded by the Ministry of Environment, with recent support from Shimano Corporation. The Tokyo Cycling Green Map won the Good Design Award in 2007. The Mapmakers are excited by the project's success both as a city planning and personal tool. Future editions that expand the map are planned.



Tokyo Metropolitan Government sponsored 2007's "Stop Global-Warming Awards". The Green Map team won the "Modalshift" Award



Stop Global Warming Initiatives

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www.tei.or.th

Author: Nongpal Chancharoen



Green Maps from 25 cities were exhibited in Bangkok, 2006

Background: A Climate Change Partnership Pairing Municipal Staff and Schoolchildren

Under the project called “Stop Global Warming Project”, Thailand Environment Institute (TEI) has worked with more than 50 local governments at the municipal level aiming to increase awareness about climate change. The project encourages municipalities to work closely with schools and the community to initiate activities that reduce energy consumption and greenhouse gas emissions, leading to a better environment in their city.

The Stop Global Warming project uses Green Map as a situation analysis tool to identify a city’s “strengths”, “weaknesses”, “opportunities” and “threats” using the icons

to visualize 4 main areas: waste minimization, sustainable transport, urban greening and energy efficiency.

Making a Green Map involves the community and youth through workshops organized by the municipality. Teams of students, teachers and municipal staff are established and TEI workshops train adults and activate camp for youth.

The project started in 2005 and to date, Thailand Environment Institute has introduced Green Map System to more than 60 cities nationwide.



Princess Ubonrat visited the Green Map exhibition on Earth Day 2006



Students survey their community to chart green sites and bad sites



Impacts: From Situation Analysis to Strategic Plan

Working with local governments is challenging yet Green Mapmaking is an effective way of informing local authorities about the problems discovered. The project emphasizes cooperation between local governments and schools, with students representing the residents who live in the city. They provide ideas to improve their cities, such as bike lanes, public spaces, waste banks, recycling points etc.

Tungsong, a city located in the south of Thailand, started their Green Map in 2005, charting green sites and pollution sites throughout the city. People of all ages participated. A year later, Tungsong developed the second version of the map using an aerial map as a base map, which shows all the physical characteristics of the city such as parks, roads and waterways etc. Through the Green Map, environmental issues were pri-

oritized and local action plans were developed to address traffic, solid waste management, increasing green area, flood prevention and urban planning.

Trang Municipality, a tourist town on the Andaman Sea, used Green Map to promote “green restaurants” that avoid using non-degradable materials such as Styrofoam and plastics. It is hoped that more restaurants will join the initiative to reduce the waste going to landfill.

Using Green Map as a tool has helped local governments, NGOs, communities, and youth find realistic solutions, which often involve field research and input from the community. Municipalities can use Green Mapmaking to assist in their land-use planning and environmental local action plan to make their city a more sustainable place to live.



TEI's Green Map products may be available at GreenMap.org/store

Trang Green Map visualizes the city as a forest



Think Global, Map Local!

Globally designed, these award-winning icons are used by Green Mapmakers worldwide on locally printed editions and on interactive Open Green Maps.



GreenMap.org/icons

Green Map® Icons Version 3

Sustainable Living

Green Economy



Technology & Design



Mobility



Hazards & Challenges



Nature

Land & Water



Flora



Fauna



Outdoor Activities

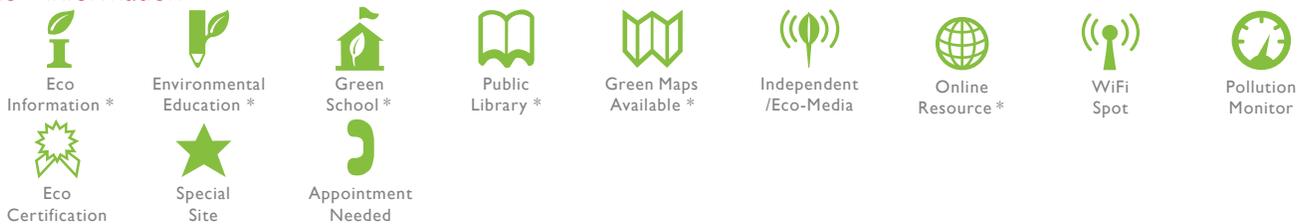


Culture & Society

Cultural Character



Eco - Information



Justice & Activism



Public Works & Landmarks



* Standard Icon Set

Charting Change in the Workplace and Impacting 60,000

Delta Electronics | vincent.chen@delta-foundation.org.tw

<http://www.delta.com.tw/csr/greenmap.asp>

Author: Vincent Chen, Delta Electronic Foundation

Background: Raising the Morale of Employees

Around the world, most people work, but how much do they know about their work environment and their relationship with it? In 2006, Delta Electronics Foundation sought a new way to respond to these questions. In collaboration with the Society of Wilderness, we introduced Green Map System's concepts to Delta Electronics Inc., a company with over 60,000 employees in over 35 locations around the world. With emphasis on energy and carbon reduction issues, Delta's aim was to enhance employees' overall environmental awareness and to encourage each individual to understand their ability to reduce global warming.

In 2006, the project got underway in five factory and office facilities in Taiwan and the mapping helped identify and implement ways to save resources and CO₂. With good outcomes, sites in Asia, Europe, and North America got involved. In June 2007, Delta held

Pond habitat for indigenous wildlife



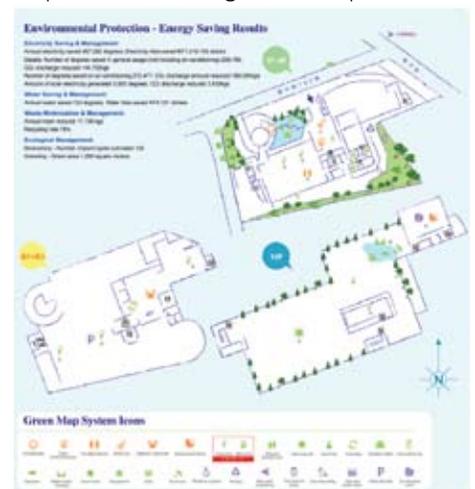
a best practices exchange and the company's Green Mapmakers from Taiwan, China, Japan, Thailand, US, and Netherlands gathered together to share their experiences and to tour extensive working and living facilities at our Wujiang, China plant. Delta's Green Maps chart areas ranging from a single floor of an office building to a 20,000-employee campus with a dozen buildings. Important environmental sites, such as an electric power recycling system, the plant's greenery, employee living areas and recycling achievements were presented on the maps.

By highlighting these green living resources and the company's commitment to environmental protection, the maps encourage employee and public participation in sustainability. The most impressive data is the amount of CO₂ emissions reduced as part of the process which can be found at the top of every Green Map. This is an achievement that can be appreciated by all.

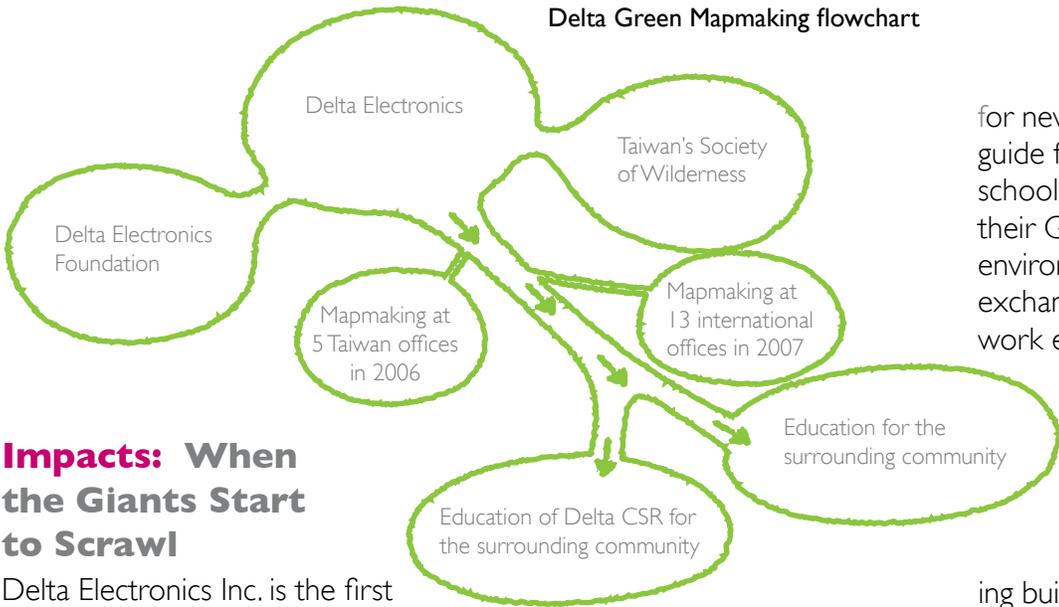
Solar PV system generates clean energy



A total of 336,211 Kg of CO₂ were saved through the process of creating Delta's Taipei Office Building Green Map



Delta Green Mapmaking flowchart



Impacts: When the Giants Start to Scrawl

Delta Electronics Inc. is the first company in the world to adopt Green Map System as a tool to conduct internal environmental education and facilitate work efficiency improvements across the board. Delta's Green Maps are used as a platform to help its employees understand their work environment and issues related, not only to industrial safety, but also regarding employee wellbeing, energy and resource conservation. As a result, production costs and pollution have decreased, and at the same time, productivity and profits have increased. Furthermore, each Green Map aids in fulfilling important issues concerning Delta's commitment to corporate social responsibility (CSR).

Delta's Green Map has had the support of Delta's founder, Mr. Bruce Cheng and CEO Mr. Yancey Hai since the onset of the program.

Delta completed 13 maps charting their factories and offices worldwide in one year. Both the maps, created voluntarily by employees, and the overall mapmaking efforts were recognized by staff members at all levels.

Some of Delta's large-scale manufacturing facilities use their Green Maps as an orientation tool

for new employees and as a tour guide for visitors, including local school children. Employers can use their Green Maps to share their environmental understanding and exchange ideas that make their work environment more energy efficient and healthier. One example: Delta's green building factory in Tainan, Taiwan has been so well received by the public that there are visitors request-

ing building tours on a daily basis. This story is not yet finished. Utilizing the lessons learned from this project, Delta Electronics continuously strives to improve their employees' work environment. More recently Delta has launched an e-learning program that provides new employees the opportunity to learn how to make a Green Map, and bring its positive impacts to their homes.



(Above) Delta's interactive online e-learning tool is linked to GreenMap.org/csr



Delta's Green Mapmakers in Taiwan (left) and Japan (right)



“Expo Money” and “2R”: Advancing the Green Consumer with Two Green Maps

Osu Eco Map Project Team (Green Consumer of Nagoya, Green Map Aichi, Osu Business Association)
nakagawa@es-net.jp | <http://www.gm-aichi.net/active-map/osu-ecomap>
Author: Keiko Nakagawa, Green Map Aichi

Background: Creative Collaboration between the Municipality and Green Consumer Groups

Following Japan's Aichi EXPO 2005, the Osu Green Map project was collaboratively created. There are two major ongoing eco-movements throughout Aichi prefecture related to the World Fair's theme of "Nature's Wisdom", one being "Green Map", and the other "Expo Eco Money". Expo Eco Money is a point-based reward system for green activities such as bringing your own shopping bags. The Nagoya Municipal Office adopted the idea of creating a Green Map in the Osu shopping

district. This lively area has a wide variety of stores, cafes and public spaces, including two new reward redemption counters for Expo Eco Money points, which can be traded in for useful eco-products or trees planted in a CO2 reduction program.

Mapmaking started by strolling the Osu area looking for natural materials, repair shops and stores that sell items that are reused or recycled or in bulk, by weight. The team indicated these stores on the map using Green Map's universal



Osu's lively shopping district

iconography and newly created "Nagoya brand" icons. They also designed a program that rewarded shoppers frequenting these green stores with stamps that could be exchanged for Expo Eco Money.

Osu Eco Map (2007)



Nagoya brand's original icons are paired with Green Map Icons





Oshar-eco Sakae 2R Map (2007) Stylish ("oshare") and "eco" combined

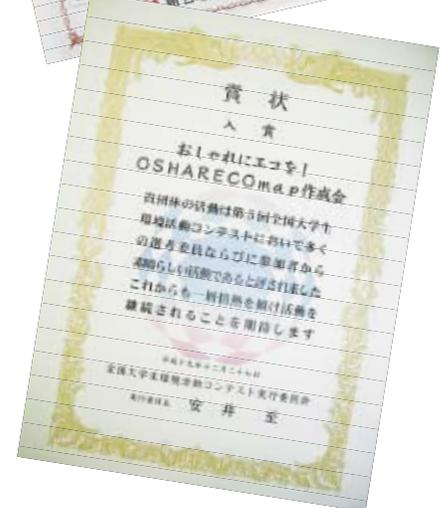
Impacts: Inspire College Students to Create Award-winning 2R Green Map and New Model

Osu Eco Map's success is largely due to the concept brought together by the municipality, non-profit organization, and the local business association. The project also gained attention by the media as a eco-activity collaboration model for local business associations.

Moreover, the map's success and workshops provided local college students with inspiration to create the award winning "2R map" for the city's main shopping district,

Sakae. The students selected businesses based on the 2R concept such as a tea house where Japanese tea is served to bottles brought in by customers instead of disposable plastic bottles. The map was designed to attract young generation and named as "Oshar-eco Sakae 2R Map." (Oshare refers to being stylish in Japanese) The map won an award at ECOCON 2007, the national eco-activity contest among college students.

ECOCON Award and newspaper article featuring the project



'Bring your own bottle' is filled with tea at one of the eco-sites on the map



Field research presentation



19. Green Map Mandala Borobudur (in progress) | Borobudur Sub-district, Magelang District, Central Java Province, INDONESIA

Preserving Traditional Cultural Assets

Peta Hijau - Green Map Indonesia | joeyakarta@greenmap.or.id

<http://greenmap.or.id>

Author: Elanto Wijoyono, Green Map Indonesia



Background: Mapping our Cultural Heritage

Located in central Java Indonesia, Borobudur, a world heritage site built in the 8th and 9th centuries, is the largest Buddhist Temple in the world. Green Map Mandala Borobudur aims to explore the relationship between the temple and the living environment surrounding it, contribute a record of the area's natural and cultural diversity, and inspire more curiosity and reverence.

Begun in mid-2005, residents of Borobudur helped determine the most important sites to chart, with their stories serving as site descriptions. Led by Jakarta and

Yogyakarta's Green Mapmakers, the ongoing participatory process is supported by the Center of Heritage Conservation, Department of Architecture and Planning, Faculty of Engineering Gadjah Mada University Yogyakarta and Borobudur Tourism Network.



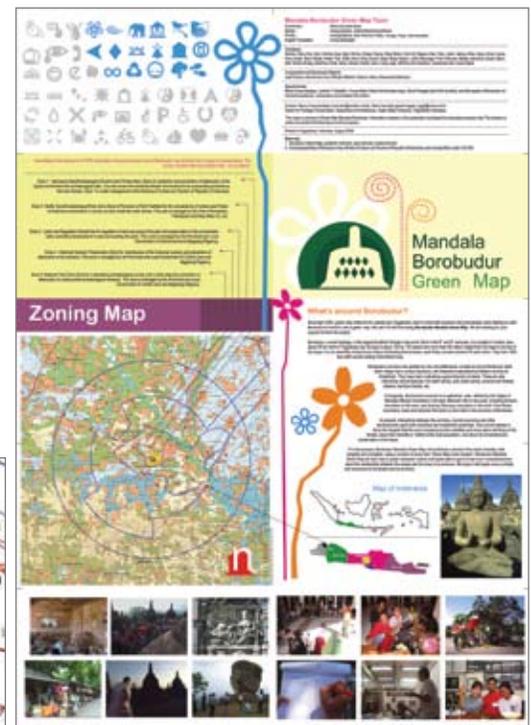
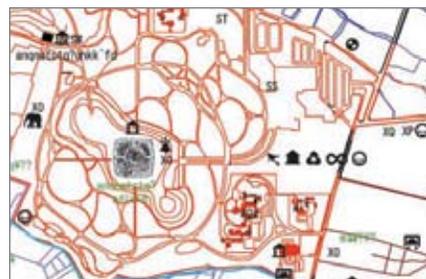
Field research (top), Interviewing residents (left), Discussion (right), Green Map in progress

Impacts: Preserving Borobudur's Future

The Borobudur Green Map has generated important discussions about the future of the unique environment and communities around the temple. With participants' support, the Union of Indonesian Buddhist Students have demanded that the local government and investors stop exploiting the Temple with profit-oriented activities, and to protect this religious and cultural site. They highlighted Borobudur's role as the area's sole tourist attraction and the damage caused by visitors.

The comprehensive cultural landscape conservation concept formulated through Green Mapmaking strengthened the bargaining posi-

tion of the local community in the making of the masterplan. When completed, the Borobudur Green Map will introduce and offer alternative tourism options in villages around the temple, which will, in turn, increase the economic growth in the surrounding communities as well.



Wetland Restoration in Taipei County

Society of Wilderness, Taiwan | sow@sow.org.tw

http://SOW.org.tw

Author: Society of Wilderness, Taiwan



Background: Connection Between the Wetland and Community

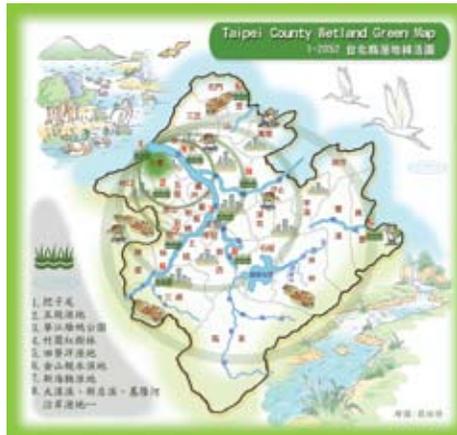
Taiwan's Society of Wilderness (SOW) was founded in 1995 with objectives of nature education and conservation. Activated by more than 11,000 family members and many volunteers, SOW is a significant non-profit organization in Taiwan. Since 2001, SOW started to promote Green Map by training volunteer guides to assist mapmakers in charting their communities. 58 folding

Green Maps have been published to date, including city, community, school and corporate maps. In June 2007, SOW hosted the Asia Green Map Hub Meeting in Taipei.

In 2004, SOW adopted the wetland along the TanShui River from Taipei County Government. In the 1 square kilometer wetland, SOW carried out ecology restoration, education, research and investigation. For Earth Day 2007, 10,000 copies of the

TanShui River Corridor Green Map were published. The maps are distributed to local people and visitors for biking, tours and teaching school outdoors.

Since the TanShui River passes through the center of Taipei, we expect that the wetland ecosphere is closely linked to communities. Therefore wetland conservation can be linked to citizens' daily life through Green Maps.



Creation of a floating island

Taipei County Wetland and TanShui River Corridor Green Maps



Mortonagrion Hiroseii Asahina - First discovered in Taiwan, IUCN has listed it as a threatened species



Impacts: From 1 Square Kilometer to 2,052 Square Kilometers

Inspired by the TanShui River Corridor Green Map, a Taipei County Wetland Green Map is expected to be completed in 3 years, charting a total area of 2,052 square kilometers. Students and teachers will chart the wetland and community as a living circle, which encourages citizens to cherish the green treasures nearby. We also expect Taipei County's wetland habitats to be connected as a network to improve the existing environment for birds and other wetland animals.

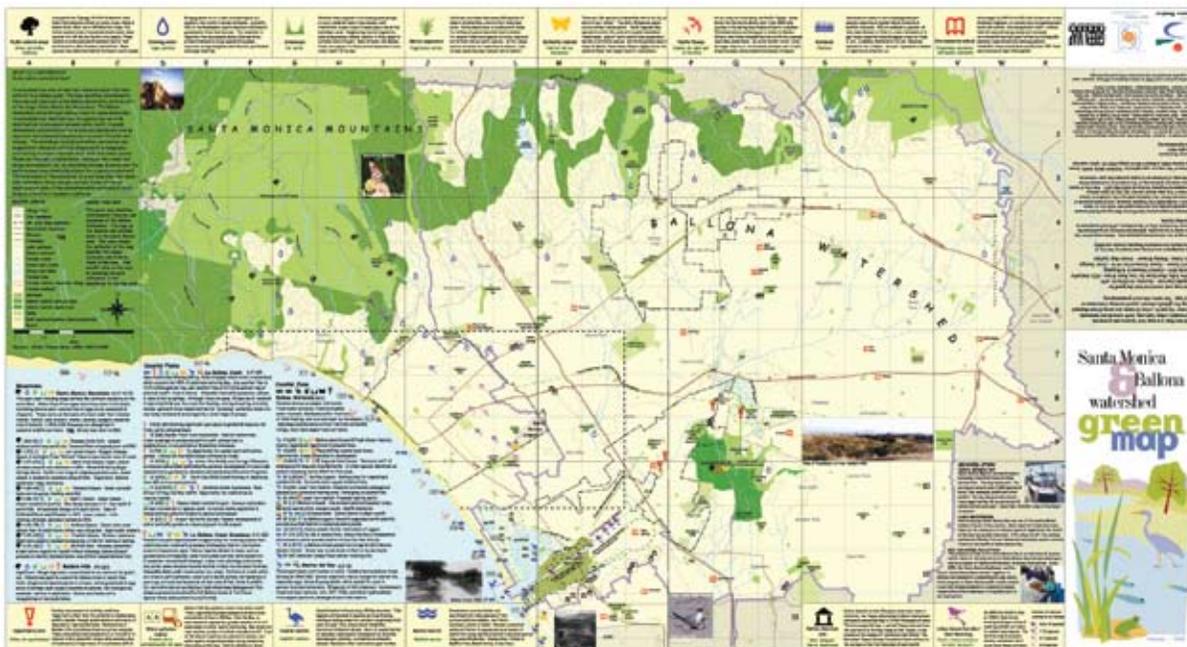
Special thanks to Lai Rong Jiao, a high school teacher and member of SOW who is the key person behind the TanShui River wetland conservation and the Wetland Green Map.

Santa Monica and the Ballona Watershed Green Map

Duvivier Architects, Isabelle Duvivier | isabelle@idarchitect.com
www.LAGreenMap.org | www.idarchitect.com
Author: Isabelle Duvivier, Duvivier Architects



Background: Charting One of the Most Cinematically Depicted Land Masses on the Planet



Santa Monica and the Ballona Watershed Green Map

After completing graduate school in architecture, I returned to the city of my teenage years, Santa Monica, and began to discover the nature in my hometown. As I voraciously gathered information on native flora, fauna and waterways, I decided I had to make a Santa Monica and Ballona Watershed Green Map to help residents and visitors visualize the breadth and diversity of the local environment.

Visualizing a watershed on a map (as opposed to a city or other political region) gives us the unique opportunity to look at the relationships between water, earth, and people. Encompassing La Ballona

Creek, Hollywood, Beverly Hills, Santa Monica, Venice, Culver City and portions of Los Angeles, the map charts the largest wilderness within any world city, Topanga State Park, where one can still find mountain lions and bobcats. Thousands of birds stop in the Ballona Wetlands during migrations along the Pacific Flyway from Alaska to Mexico. In addition to open space and wetlands the Green Map also shows locations of endangered species, creek and rivers, former Native American sites and ocean water quality grades. With the help of Dafna Kohn, and support from the City of Santa Monica, all of these elements were mapped.

It is my hope that the reader of this map will see this region from a watershed perspective and appreciate the wealth of natural features we have as well as what we need to preserve, restore or recreate native habitat.





My Watershed, the Ocean and Me – A Kids' Green Map



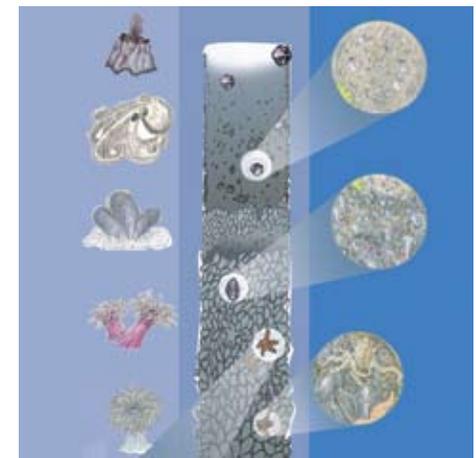
Impacts: Connecting with Nature

The Santa Monica and Ballona Watershed Green Map is used by residents, tourists, teachers, students, non-profits and public agencies for discussions about water quality and conservation, habitats and the impact of non-native species, the consequences of sprawl and consumer choices on the natural and built environment, and the interconnectedness of our actions and policy decisions. Covered in the Los Angeles Times and other publications, the map is used by many organizations and is distributed at farmers markets, tourist bureaus, libraries and local businesses.

In addition to edible plant and watershed tours, our mapmaking has led to projects including the Malibu Creek Green Map (for our own Living Lightly in Our Watersheds Guide), the Santa Monica Col-

lege Green Map (by the EcoClub at Santa Monica College) and the LA Metro Green Map (for the American Institute of Architects conference). Most recently we published My Watershed, the Ocean and Me – A Kids' Green Map to explore and protect wildlife that lives under the Santa Monica Pier.

On a personal note, this mapmaking has had significant impacts on my career. I was awarded the City of Santa Monica's Sustainable Leadership Award in 2004 and the Chamber of Commerce's Sustainable Quality Award in 1999 and 2002 for my role in advancing the city's commitment to reducing its global footprint. Additionally the map led a state agency to hire me as a consultant facilitating restoration of the newly acquired Ballona Wetlands. Additionally, I have spent



the last year mapping all of Los Angeles County for a regional clean-up of impaired water bodies.

In the 3 years since the Santa Monica and Ballona Watershed Green Map was published, it has advanced understanding of our natural resources and has engaged the general public, especially young people. In the near future we hope to create more educational Green Maps of the entire Los Angeles Region.

Young mapmakers at the wildlife club (right)
Ballona Watershed Wildlife (below)



Senior Views Unite Community

Green Map Yokohama | rie-n@yk.rim.or.jp
Author: Rie Nakamura, Green Map Yokohama

Background: Creating Community: ‘Silver’ Green Mapmaking from a Senior Citizen’s Vantage Point

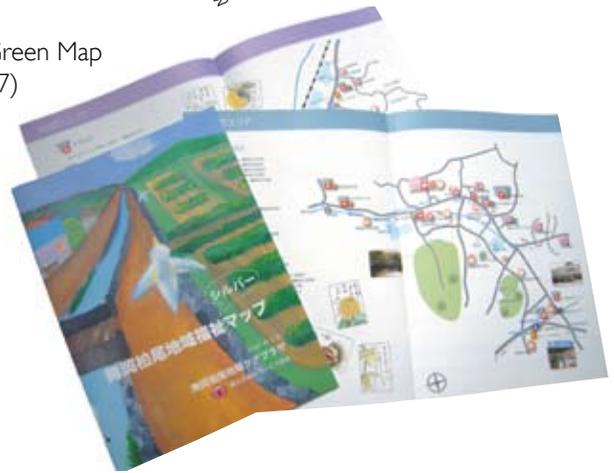
Based on the walking Green Map of Maioka Kashio created with the local middle school in 2006, Maioka Kashio Nursing Home implemented a Green Mapmaking project with the experiences of seniors as its main focus.

The map includes information on seasonal nature and social resources as well as nursing homes, hospitals, doctor’s offices, pharmacies, and other helpful services.

The Green Mapmakers used a wheelchair in their field research to assess and convey the impact of even the gentlest slopes on accessibility.



Maioka Kashio Green Map for Seniors (2007)



Maioka Kashio Walking Map (2006, below) became the basis for the seniors’ map



Impacts: Seniors Lead the Way

The mapmaking project changed the attitudes of the local seniors, who often waited passively for useful information to be given to them. This project provided them with the opportunity to lead a hands on experience, gain useful information, and connect with various



generations in their community.

The field research team consisted of local nursing home residents and 38 students from nearby Maioka Middle School. The use of wheelchairs provided the participants with awareness of specific issues (slopes, elevators, wheelchair accessible restrooms and more) in their community. Some of the other senior-friendly sites charted include community stores, benches, and socializing spaces such as public bathhouses and barber shops.

Design inspiration came from the Yellow Pages phone book because of its familiarity and friendliness. An art student at Maioka Middle School made the colorful cover illustrations. The final product communicated warmth and friendliness thanks to the hand-drawn and lettered images contributed by volunteers.



The Walkable Community: City Planning Through Green Mapmaking

Green Map Owariasahi | fwnh2388@mb.infoweb.ne.jp

Author: Yoshie Usami & Hiromi Wakasugi

Background: Walking Research Yields Fresh Discoveries

The ideas that were first introduced by Owariasahi's Green Map team in 2003 continue to interest residents in field research walks. Theme walks allow participants to undertake research specific to their interests. Popular themes include nature, history, welfare, traffic, scenic and lifestyle, with each theme having its own route and brief introduction on a flyer. The teams host as many as 10 research walks a year. The collected data is shown on a Green Map made for the city's annual fair.



Encounter with a neighborhood historian during field research



Tutorial on how to use the broom plant



Owariasahi Green Map (2005)

Impacts: The Green Map Contributes to City Planning

The Green Mapmakers' research was submitted to the Owariasahi Environmental Office. The city officials' improvement planning benefited from the detailed discoveries collected by the Green Map team. For example, a dumpsite on the

river was cleaned up only after Mr. Wakasugi and the Green Mapmakers brought it to the City's attention. When other citizen complaints failed to solve the dumpsite problem, the Green Mapmakers spurred officials to action. The map thus

became a resource and a source of support for environmental officials when asking the planning department for action. Mr. Wakasugi continues to participate in the City's workshops to contribute the planning expertise and awareness gained through this process.

Water quality testing based on the Mapmakers' environmental assessments



The Green Map has also been used to support careful development. The City conducted water quality tests based on the map's environmental assessment, and it led to the creation of a walking path in the northern forest of Owariasahi, connecting residents with the area's natural resources.

Rediscovering the Human-Scale in Yokohama

Green Map Yokohama, NICE Yokohama, YC Document | dezine@mail.goo.ne.jp

<http://www.greenmap-yokohama.net/news/news060508.html>

Author: Ann Aoki, Takahashi Akira



Background: Green Map = Bicycle Road Map

The compact Hama Chari Green Map of Yokohama's Bay Area is A3 size, 3 by 6 inches unfolding to 12 by 16 inches. Published by Green Map Yokohama, the back of the map was designed like a newsletter, featuring articles about the area's environment, culture and tourism. This free map was distributed at the seven rental bicycle stations in the Bay Area as well as in Yokohama's hotels and tourism information offices reaching both Japanese and foreign visitors.

The mapmaking project is a partnership involving NICE Yokohama organization and YC Document. Nice Yokohama is non-profit that runs "Hama Chari", a bicycle rental service that rents formerly abandoned, freshly repaired bicycles. YC Document is a local print shop that printed it at a "not for profit" rate.



Hama Chari Road Map & Green Map Yokohama (2006)

Yokohama Car Free Day



Impacts: Expanding the Eco Movement Along with Yokohama Car-Free Day

Yokohama is part of an international circle of cities that host an annual World Car-Free Day. First introduced in France in 1997, Car-Free Day has since gained widespread support. Today, Car-Free Day is celebrated on September 22 by more than 1000 cities all over the world.

It's hard work for community groups to lead these large public events, a responsibility that is usually undertaken by the municipal government. However, Yokohama Car-Free Day was initiated in an office building where all associated organizations were housed, includ-

ing Green Map Yokohama and NICE Yokohama, both of whom helped plan, promote and celebrate Car-Free Day. Tasks included researching, designing and publishing the Hama Chari Green Map, developing public relations and addressing legal issues surrounding the elimination of cars from Yokohama's streets. In 2005, the team celebrated its first successful event. The car-free area will expand each year.

Reusables Categorized and Mapped

Radius Glasgow | info@deargreenplace.org

<http://deargreenplace.org>

Author: Glasgow Green Map team

Background: More than 100 Reuse Shops Discovered

Glasgow, Glaschu in Gaelic meaning “dear green place” is the largest city in Scotland. Despite the many parks and green spaces the city is far from being green in a truly sustainable sense. With a motorway extension underway and massive program of regeneration focused on developing Glasgow as the retail capital of Scotland, environmental sustainability is

consistently overlooked.

Given the city’s size, the first Glasgow-wide Green Map is a thematic map focusing on Reuse. Marketed under the brand Dear Green Place, it features over 100 charity shops, community enterprises and grassroots environmental organisations who provide reuse opportuni-

ties. The map aims to raise public awareness of this under-appreciated sector and the social, economic and environmental benefits they bring to the city.

20,000 copies of the Green Map are being distributed through a network of charity shops, libraries and community events.



Glasgow's Dear Green Place Map, front and back



Charity shop after charity shop, the mapmakers spent up!

Impacts: Design Transformation

Icons representing 14 categories of household items have been created for the project. Arranged in a standard grid, they help people identify where to donate and buy reusable goods more effectively. In addition, graphics encouraging people to use public transport, cycle and walk were incorporated into the map.

The map has been developed in collaboration with the Glas-

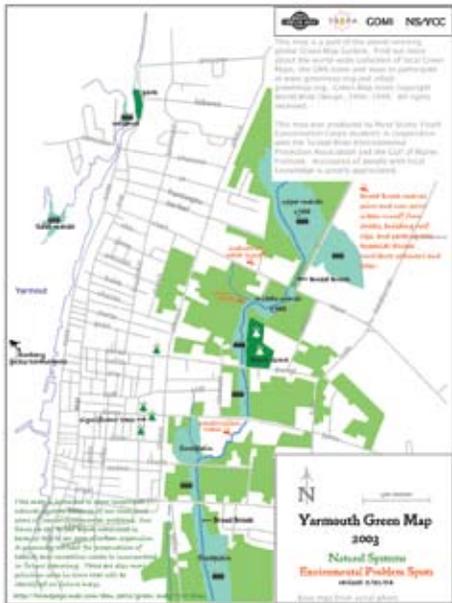
gow Community Recycling Forum, Glasgow School of Art and Generous Scotland – a national program promoting waste awareness in charity shops. The project was coordinated by a small team of volunteer Mapmakers and supported by the creative organisation Radius Glasgow. To inform the design process, university students worked in charity shops and tested out design

concepts with customers. This is the first time that comprehensive information about reuse opportunities has been provided in such an accessible format. The project has increased liaison between the featured organisations and generated publicity for them, many of whom operate with very limited marketing budgets.

The data and design of the printed map formed the basis of a web-based version to follow.

More Unique Impacts

City Planning Based on Youth Maps



Yarmouth, Nova Scotia, CANADA
 - A series of youth maps provided a fresh sense of awareness to the community. This inspiration led to the conservation of rivers in the Broad Brook area. Currently, the team is proposing safe and attractive bikeways within town and a loop path through the Chebogue area.

Protecting Mangroves

Guangzhou, Guangdong province, CHINA - Created by China Mangrove Conservation Network, this project introduces the coastal mangrove wetlands to the surrounding communities. Mangrove trees protect land from ocean waves and high tides. The Green Mapmakers hope to promote public awareness of the value of the mangroves through this Green Map project.

Overcoming Disaster

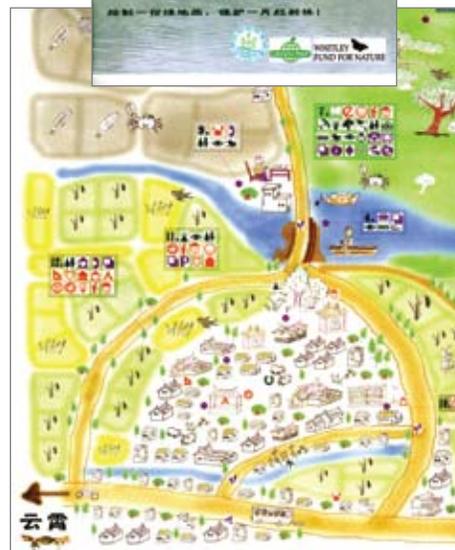
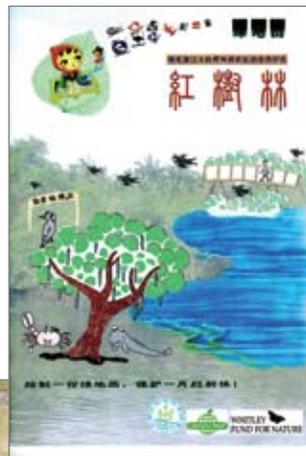
Banda Aceh, INDONESIA - Banda Aceh Tsunami Memorial Green Map was created in a effort to rebuild an environmentally friendly future in the area destroyed by the tsunami of 2004. Both a memory map and a guide for planning, it was published one year after the disaster.



Banda Aceh Tsunami Memorial Green Map

Rediscovering Cultural History

Santiago CHILE - having published several different pilot maps, the Ciudad Viva (Living City) project created an inclusive process for creating a large scale Green Map of Santiago. The map includes heritage sites, recycling centers, eco-transportation and community organizations. Its cultural history section is called the "Map of Memories" for its unique content contributed by senior citizens.



Guangdong Coastal Mangrove Wetlands Green Map (cover and inside).





Aichi's Many Green Map Projects

Uniting the Prefecture through Green Mapmaking

Aichi, JAPAN - The World's Fair, EXPO 2005, was themed as "Nature's Wisdom" to promote environmental awareness. Green Map Aichi was established in November 2002 to support sustainable communities and citizens participation in EXPO. More than 40 local communities were involved and Green

Map Aichi created the necessary tools to assist in mapmaking, exhibits and public events at EXPO. Several of the projects in this book grew from this effort. Green Map Aichi's 20 members meet regularly to exchange information and teach each other on a continuing basis.



Green Map Aichi website

Aichi Green Map | nakagawa@es-net.jp
<http://www.gm-aichi.net/>
 Editor: Keiko Nakagawa

Green Map Impacts

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At work in Aichi (above) and New York (below)



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Every effort has been made to ensure the accuracy of the information in this book. Due to possible change in the activities and practice of Green Mapmakers, the publisher cannot accept responsibility for any errors that occur, or their consequences.





Think Global, Map Local!