



Valuing Ecosystems

2011 Global Conservation Report



January 24, 2012

INTRODUCTION

The Dow Chemical Company appreciates the impacts we have on nature and our dependencies on the critical services that nature provides.

2011 marks the first year that Dow has compiled its global efforts related to Biodiversity and Ecosystem Services into one report. We have a strong history of philanthropic giving focused on protecting and preserving nature. In alignment with the company's 2015 Sustainability Goals, it is common to see Dow volunteers active in their communities and Dow nature preserves in regions where we do business. For years, Dow has been conserving land, donating property and supporting the efforts of local conservation groups and non-governmental organizations through generous grants and donations.

In 2011, we added a bold new dimension of leadership through our collaboration with The Nature Conservancy to determine the business value of ecosystems services.

The information contained in this report identifies where positive impacts occurred throughout the year, and will aid in continuing to implement a corporate strategy that delivers on Dow's Mission, Vision and Values – which include “delivering sustainable solutions to customers” and “Protecting our Planet.”

NEW COLLABORATION PROJECTS

The Nature Conservancy

- Launched 5-year collaboration to help Dow and other companies value and incorporate nature into global business goals, decisions and strategies.

Dow Lands

- Started work on identifying the value and conservation benefit of Dow properties in the United States.

Remediation

- Started work on a “Sustainable Remediation” pilot project to better value ecosystem services in remediation activities.

Life Cycle Assessment (LCA)

- Assessed how to integrate ecosystem services into LCA and chartered an effort to continue into 2012

Dow Focal Point Engagement

- More than 20 global leaders and experts are engaged with The Nature Conservancy collaboration at various levels.
- Initiated discussions between The Nature Conservancy and Dow AgroSciences and Dow Water & Process Solutions businesses to leverage areas of mutual interest and benefit.

HISTORY OF VALUING NATURE

In 1996, Dow needed a new water treatment facility at its Seadrift, Texas operations – at an estimated cost of \$40 million for a traditional gray infrastructure solution. Instead, for \$1.4 million, Dow built beautiful wetlands and natural treatment ponds. Now the land not only treats 5 million gallons of water per day, but also serves as a habitat for a variety of wildlife.

GLOBAL CONSERVATION ACTIVITIES

Data Collection and Definitions

Giving by The Dow Chemical Company and The Dow Chemical Company Foundation for conservation and nature-related activities was collected by site from leaders globally. The data received represents over 90% of sites globally and is sorted into the following categories:

- **Traditional Conservation:** Land or funds given for the direct protection of natural spaces
- **Education and Access:** Funds donated for the education of or access to natural area
- **Ecosystem Service Related:** Actions taken by Dow that have reduced dependence/impact on ecosystem services (e.g., air and water quality improvements, reduction in freshwater use, CO₂ emission reduction) and reduced the Company’s footprint. A number of activities were the result of regulatory-driven projects. This value includes total project costs.

Summary Results by Category

Traditional Conservation

\$932,000

Nature Education and Access

\$368,600

Ecosystem Service Related

\$19,555,000 (includes total project cost)

Methods Development and Valuation

\$1,000,000 The Nature Conservancy

\$100,000 World Resources Institute, Aqueduct Project

\$900,000 in-kind resources from Dow Chemical

Selected highlights from this year are shown on the map below. They are representative of the types of conservation projects done around the world, but do not include all of the actions Dow has taken in this area.



- ① **Ground-Hornbill Conservation – Bryanston, South Africa**
The number of Southern Ground Hornbills has decreased by two thirds and the species is close to becoming officially endangered. Over the past 50 years, Ground Hornbills have lost over 70% of their natural habitat. This research project aims to gain a scientific understanding of the conditions the Ground Hornbills thrive in so that suitable areas to place them in can be identified.
- ② **Habitat Conservation and Wastewater Treatment Plant Upgrade**
 Cartagena, Columbia
- ③ **Mata Atlantica Forest Recovery**
 Franco da Rocha, Brazil
- ④ **Black Skimmer Colony – Freeport, TX, USA**
In the middle of its manufacturing site in Freeport, TX, Dow has an oyster shell parking lot that is protected year-round to enable the successful nesting of one of the largest black skimmer colonies on the

HISTORY OF VALUING NATURE

In 1963, Dow employee Howard Garrett appointed a study committee to explore the possibility of establishing a nature center in Midland, Michigan. By 1965, the Herbert H. and Grace A. Dow Foundation had leased 198 acres of land at the confluence of the Pine and Chippewa Rivers to the Chippewa Nature Center – where Dow products and volunteers continue to play a role in educating the public.

Gulf Coast. In 2011, more than 1,000 skimmers made it their home. On the first Saturday in June, Dow enables members of the public to view and take photos of the skimmers to highlight the need for the conservation of the coastal habitat the skimmers prefer. Dow employees partner with members of the Gulf Coast Bird Observatory to host the event and answer questions.

5 Guadalajara Spring Forest Recovery

Guadalajara, Mexico

6 King Crab Protection

Kasaoka, Japan

7 Bois de l'hopital Nature Preserve

Lauterbourg, France

8 **Peregrine Falcons – Louisville, KY, USA**

One of 12 nesting pairs of Peregrine Falcons in Kentucky have chosen the Louisville site as its home for the last 3 or 4 years. Employees look out for the falcons especially each year when the chicks start flying. The young ones frequently have to be retrieved from inside buildings or rescued and replaced in their nest.

9 Philippine Eagle Adoption

Makati City, Philippines

10 Watershed Initiative Network,

Little Forks Conservancy, and Bay Sail Shipboard Education

Midland, MI, USA

11 Whooping Crane Recovery Program

Hahnville, LA, USA

12 **Braakman Nature Reserve – Terneuzen, The Netherlands**

On Saturday November 19, a group of enthusiastic Dow Terneuzen employees participated in the first Dow nature-volunteers working event in the Braakman nature reserve, adjacent to the site. The activity was part of a new partnership between Dow and Staatsbosbeheer, the non-profit organization that preserves state owned nature reserves. Through this partnership Dow wants to show nature and industry can not only coexist, but can be good neighbors, for instance by engaging employees. In an aligned initiative, the inventory of onsite flora & fauna is being updated to raise awareness that nature values are present inside the fence and engage employees in preserving these where possible.

13 Dow Learning Center at Calgary

Calgary, Canada

14 Energy and CO₂ Reduction

Map Ta Phut, Thailand

15 Wastewater Treatment Upgrade Project

Qingpu, China

16 Robert Bateman Get to Know Nature Project

Fort Saskatchewan, Canada

17 Air Quality Improvements

Varenes, Canada

