

Water Quality Presentation

July 2007



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WHY IS A WASTE WATER PROGRAM IMPORTANT TO BUSINESS?



[China says 60% of its water contaminated by pollution](#)

Kyodo News, Japan - Jun 4, 2007

China said Tuesday that the **water** quality of its rivers and lakes face **pollution**," with 60 percent of the total contaminated to some extent .

[Water Crisis, Water Shortage, Water Wars](#)

Water shortage hobbles industrial production in places as diverse as Sicily ... All the lakes around **Mexico City** have dried and it is now sinking into the ...

www.progress.org/2005/water27.htm - 21k - [Cached](#) - [Similar pages](#)

[India's rivers are drowning in pollution](#)

Health Sentinel - Jun 4, 2007

India's Prime Minister, Manmohan Singh, has also co speech delivered on World **Water** Day in March, ...

[Water theft: a crime blessed by government](#)

Malta Today, Malta - May 28, 2007

At the 4th World **Water** Forum in **Mexico City** last Mar of privatisation and called for governments to re-enter th

[Nor any drop to drink](#)

Mexico City (home to 20 million people) is sinking because the **city** sucks out underground **water** faster than the aquifer can be refilled. ...

whyfiles.org/131fresh_water/ - 10k - [Cached](#) - [Similar pages](#)

Pakistan to raise river pollution issue with India at Indus Commission meeting

From our ANI Correspondent

water table is dropping one meter per year due to overpumping, and the Chinese admit that 300 cities are running short. They are diverting

When a World Bank official suggested several years ago that water wars are not far off, he might have had Egypt on his mind -- or Turkey, Syria and Iraq,

and other diseases. Meanwhile, in Bangladesh, what's been called the "largest poisoning of a population in history" has 35 to 77 million people drinking arsenic-laced water.

[Water pollution a great threat for north India](#)

Merinews, India - May 23, 2007

However, **Pollution** Control Research Institute (PCRI) Hardwar is monitoring and analysis in Western Yamuna Canal under Yamun

Of a population of roughly 6.1 billion, more than 1 billion lack access to potable water.



China

Widespread Scarcity and Pollution



Image: United Nations University Press.

- **700 million Chinese consume contaminated drinking water**
- **300 of 640 major cities face shortages**
- **100 cities face severe water scarcity**

Source: The Straits Times, January 20, 2007

Industrial and Urban Water Use:

Today: 180 B m³/year

2030: 280 B m³/year

Projected Shortage:

11 B m³/year

Source: China Daily, April 20, 2005



Image: Millennium Ecosystem Assessment, 2005.



Mexico City

Groundwater Depletion and Land Subsidence

Mexico City Aquifer depleted since early 1900s

Subsidence of 26 to 30 feet since 1934

Relocated wells from city center to outskirts

Some areas still sinking ~38 centimeters per year



1973 population: 9 million



2000 population: 18 million

2007 population: 22 million

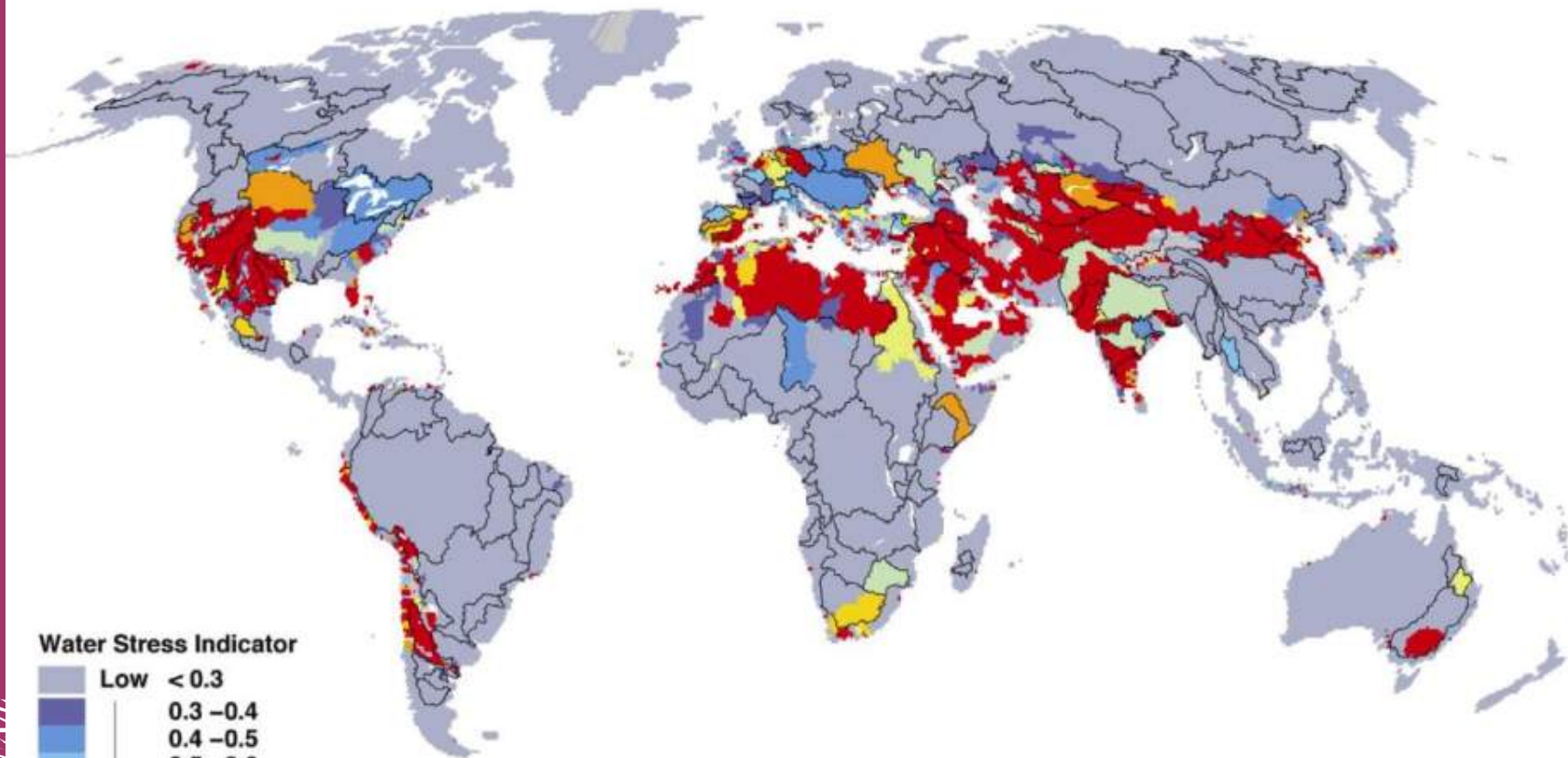
Subsidence Data: New York Times, January 1998
Historic Population Data: United Nations Environment Programme
Current Population Data: <http://www.citypopulation.de/World.html>
Images: United Nations Environment Programme



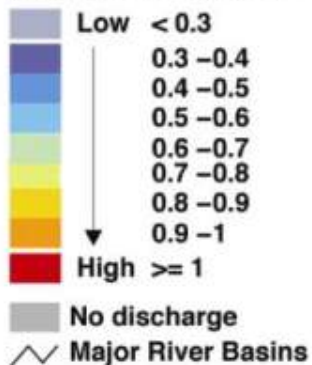
Global Water Scarcity

Water Stress Threatens Human Health and Economic Well-Being

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Water Stress Indicator



The scale is the ratio of total withdrawals to estimated total availability.

© 2003 World Resources Institute

http://www.earthtrends.wri.org/pdf_library/maps/watersheds/gm16.pdf

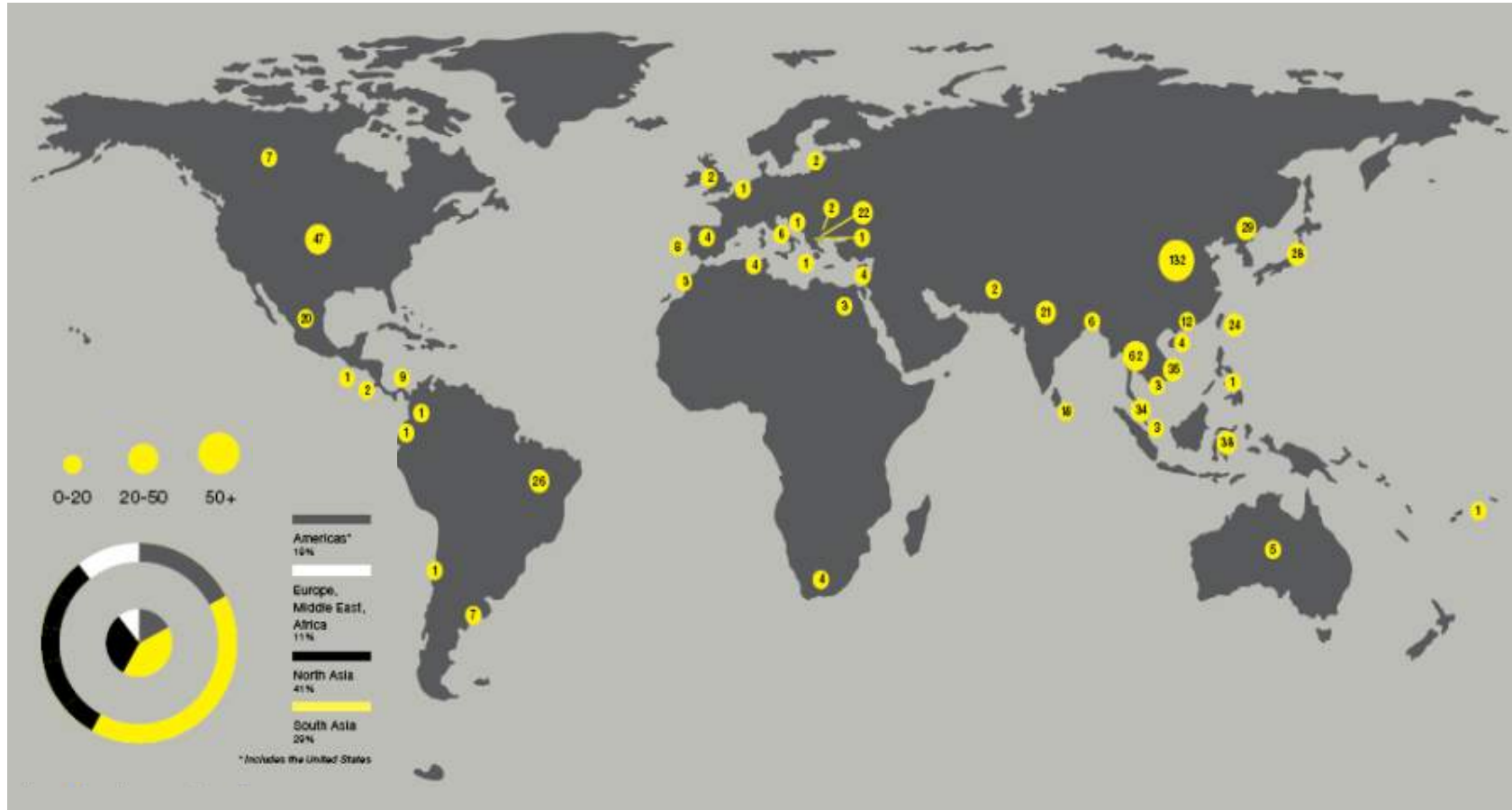




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Nike's Contract Factory Footprint

Facilities in Water-Stressed Locations





Business Risks of Water



Yarns at the start of fabric production in Taiwan.
Image: Chris Helmsworth, Nike WHQ.

- **Cost**
 - Water
 - Hydroelectricity
- **Supply**
 - Availability
 - Quality
- **Competition for resources**
- **Regulatory pressure**
- **Health of employees**
- **Community concern**
- **Limits to growth**
- **Brand image**

Adapted from: Pacific Institute, *Freshwater Resources: Managing the Risks Facing the Private Sector*, August 2004





What Can We Do About Water Risk?

- ✓ **Measure use and discharge**
- ✓ **Assess critical sourcing regions**
 - **Hydrological**
 - **Social**
 - **Economic**
 - **Political**
- ✓ **Establish policy, goals and targets**
- ✓ **Involve supply chain**
- ✓ **Implement best management practices**
- ✓ **Measure and report performance**
- ✓ **Form strategic partnerships**
- ✓ **Commit to continuous improvement**

there is no
finish line





Textiles and Water Use

15 gallons per 1 pound of fabric

120 pounds per 1 pound of fabric

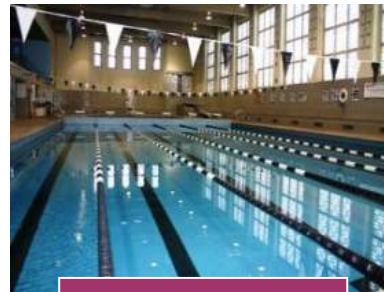
26 liters per 1 kg of fabric

29.5 million kg of fabric in Nike product per year

767,000 m³ of water per year



70 m³



2500 m³



86,300 m³

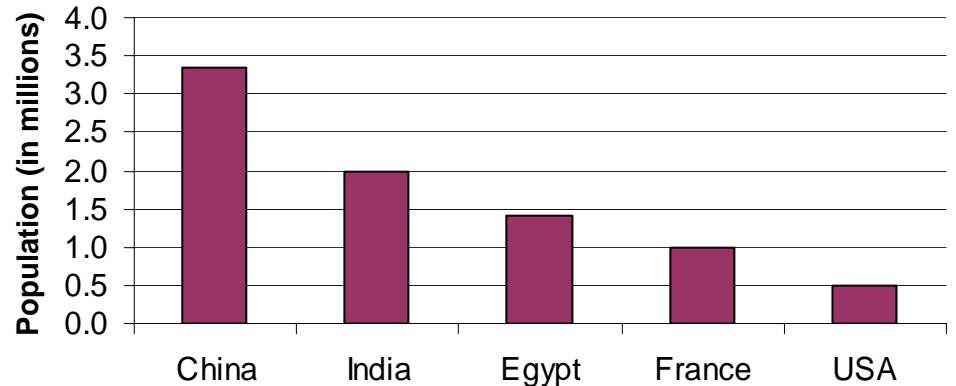




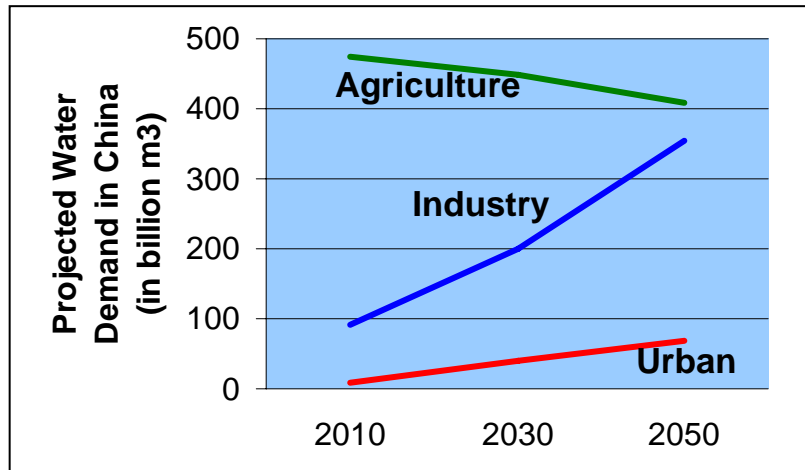
Water Use and Availability

Per-capita Water Use (m ³ /year)	
Mali	4
China	32
India	52
Egypt	77
France	106
USA	215

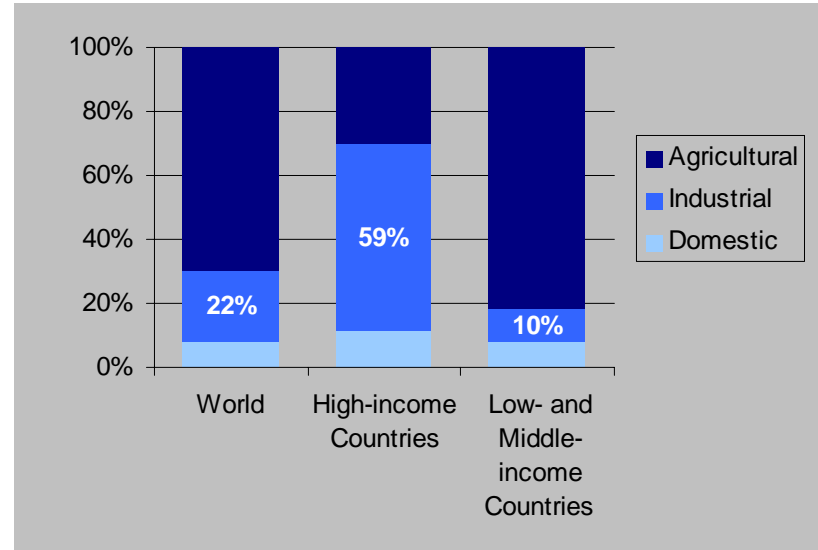
Population that could be supported by supply chain water volume at current per-capita rates of consumption



Sources: Nike Water Program Data
Sustainable Development Policy Institute



Sources: Nike Water Program Data
Sustainable Development Policy Institute



Source: World Business Council for Sustainable Development





Establishing Goals and Targets

Areas of Greatest Risk

Focus on five of BSR's Parameters:

pH, BOD, COD, TSS, color

Indicators of treatment effectiveness

Opportunity for greatest improvement

Metals currently omitted from requirements:

Expensive to test

Infrequent failures

Drinking water standards

vs. wastewater standards



Image: Texas Tech College of Agricultural Sciences and Natural Resources



Nike Water Program Guidelines and Ratings

Three Easy Steps

1. Disclose volume and subcontractors.

Less than 50 m³/day = **BLUE**

Subcontractors over 50 m³ also enroll

2. Comply with local and national regulations.

Yes = **YELLOW**

No = **RED**

3. Meet Five Nike/BSR Guidelines.

Yes = **GREEN**

Rating	Meet Local Regulations?	Meet Nike Guidelines*?
BLUE	Volume of wastewater is less than 50 cubic meters per day *	
GREEN	Yes	Yes*
YELLOW	Yes	No*
RED	No	No

* Nike reserves the right to revise requirements for Supplier Ratings.





Nike Water Program Tools

Easy Communication

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NIKE GLOBAL WATER PROGRAM
FORM 1: REQUEST FOR SUPPLIER INFORMATION

Watermark guidelines from the water industry and over communication of water can create risks, often financial, damage to both people and the environment. Your answer to the following questions will provide Nike with information on the water use and potential environmental impact of wastewater from your facility. Please return this form and any other requested documents to Nike via email USG0303000@nike.com or fax (873) 428-2758.

Facility Information

Nike Supplier Code:	
Nike Location Code:	
Nike Supplier Alias:	
Manufacturer Address:	
Manufacturer Address (Include all ZIPs, but please exclude DL, 00000):	
Supplier Contact Name:	
Supplier Contact Email Address:	
Supplier Contact Phone Number:	
Managing U.S.:	

Other than the address listed above, please provide the name and address of all other locations, dyers, finishers, garment treatment facilities or subcontractors that produce process wastewater (please attach additional pages if necessary). Nike may require additional information about each location listed below.

Name	Address	Business/Product	Wastewater Volume
			... m ³ /day
			... m ³ /day
			... m ³ /day
			... m ³ /day

Form 1 - Nike Request for Supplier Information page 1 of 3

To NIKE
From
Vendors

- # 1 – all suppliers
- Address, Processes
- Influent/Effluent Volume
- Treatment (if any)

- # 2 – over 50 m³/day
- Permit and Regulations
- Lab Test Results

From NIKE
to
Vendors

NIKE GLOBAL WATER PROGRAM
GLOBAL WATER PROGRAM RATINGS AND ACTIONS

Supplier Location Information

Nike Supplier Code:	444001
Nike Location Code:	1000
Location Name:	Supplies Nike, Inc.
Location Address:	100 E. 1st St., 12th Fl., Economic Development Zone, 100, Tianjin, China
Location Contact Name:	Joe Smith
Location Contact Email Address:	joesmith@suppliesnike.com
Location Contact Phone Number:	86 98 23370000
Managing U.S.:	US

Nike Global Water Program Rating

This location has a Nike Global Water Program Rating of **YELLOW**, effective on **February 21, 2021**.

Global Water Program Rating	Most Used and Wastewater Management Method(s)	Best Nike Global Water Program "Goldmark"	Proposed Action
YELLOW	Yes	Yes or No (If No, please specify why)	Minor process or facility modifications may be required.

Proposed Actions

Nike requests that this facility take the following action(s):

To Increase the Rating to GREEN:
 Proposed Strategy: Demand should be lowered to 100 mg/L or less.
 Chemical Oxygen Demand should be lowered to 300 mg/L or less.

Annual Recertification Process

This location should be prepared to re-evaluate contractor guards a new facility on an annual basis as long as that facility, factory or dyer is active. Nike will request updated annual water footprint data on location. Nike may also conduct random audits of wastewater treatment and air data throughout the course of annual recertification process.

Approved by:
 John Prouse, Director of Product Chemistry and EHS

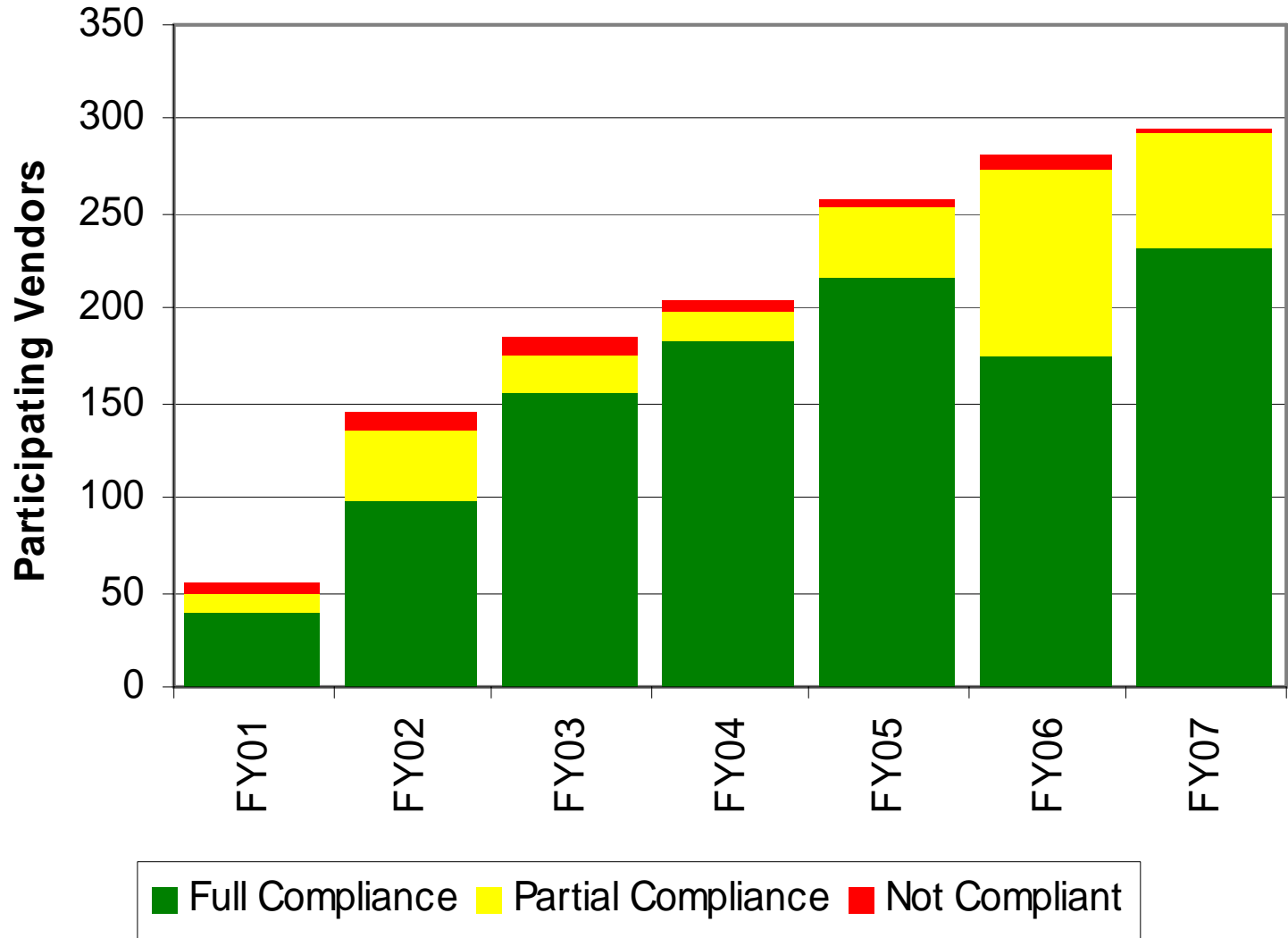
PLEASE CONTACT USG0303000@nike.com with questions or for additional information.
 (883) - Form 2 - Nike Water Program Rating (Rev. 04/2017) page 1 of 2

- # 3 – all suppliers
- Communicate Rating
- Suggest Improvements
- New Supplier Approval



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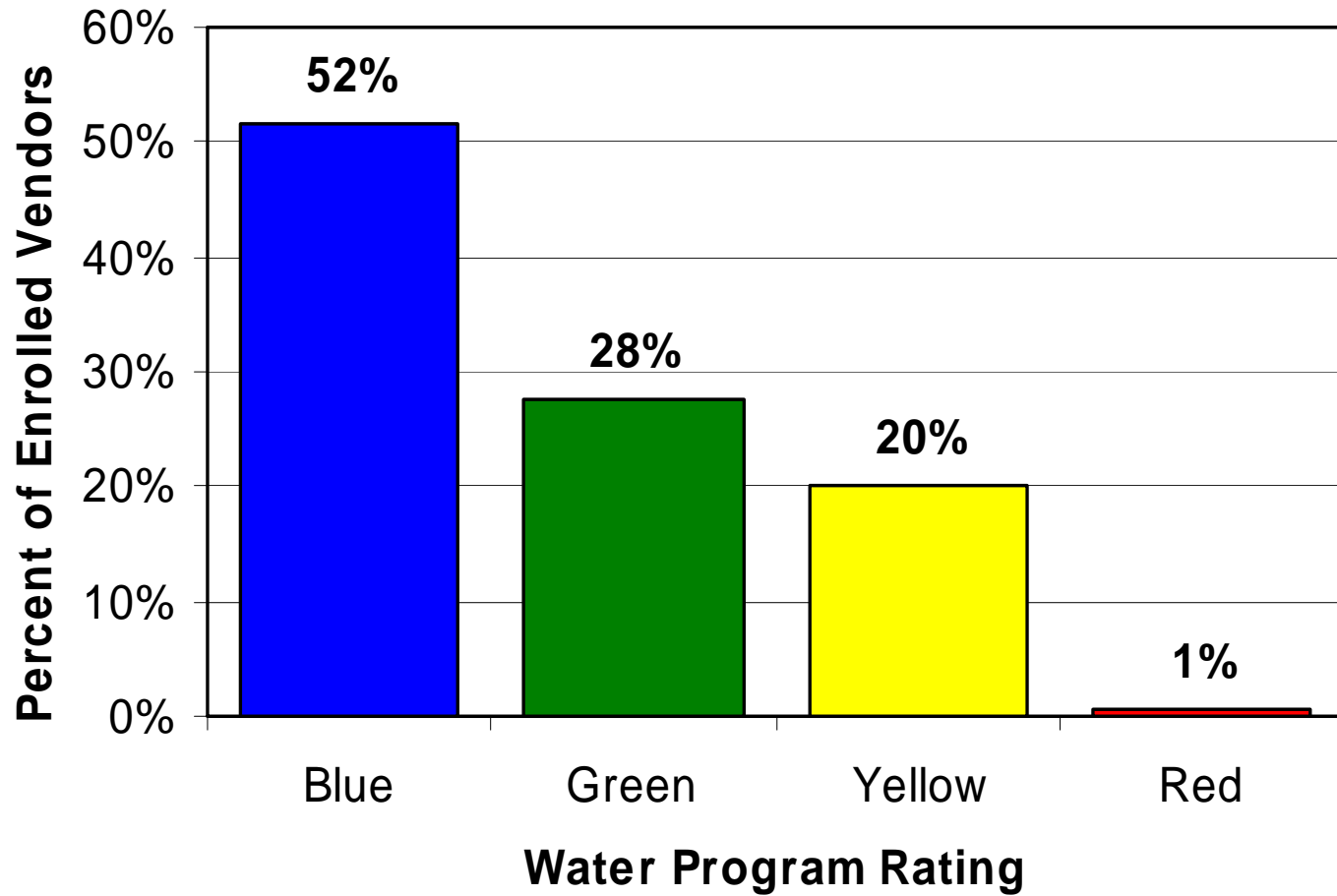
Nike Water Program Compliance





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FY07 Nike Water Program Ratings





Impact: Quality

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14 vendors rated **YELLOW** have improved to **GREEN**:

- Color
- TSS
- BOD

Three vendors have improved from **RED** status:

- Changed subcontractors
- New biological filtration
- Improved pH and BOD





Impact: Annual Quantity

28 billion gallons

107 million cubic meters

1.5 million backyard swimming pools

43,000 Olympic-size swimming pools

1,200 small lakes

Based on 312 operating days/year





What's Next?

Develop web-based form

Collect additional data

Utilize available tools

Educate suppliers

The screenshot shows a web application interface for "Nike Waste Water Management". The header includes a Nike logo and navigation links for "System Administration", "Factory Information", "Password Maintenance", and "Help". A sub-header "Manufacturing/Water Volume" is highlighted. The main content area contains a form with the following elements:

- A label: "Nike Supplier Name: xxxxxxxxxxxxxxxxxxxxxxxx"
- Text: "What type of processes are performed at your facility? Highlight all that apply. If you select other please list those below."
- An input field: "Enter Text:"
- A dropdown menu with the following options: Spinning, Weaving, Knitting, Dyeing, Finishing, Cutting, Laundering, Denim, Trim, Embroidery, Printing, and Other.



Opportunities for AWQWG Collaboration

Share Data

Share Best Practices

Technical Expertise

Database of National Regulations and Permit Systems

Build Industry Awareness / Supplier Training

Promote POTWs

