WASHOE COUNTY

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CM/ACM DMC
Finance
DA
Risk Mgt.
HR
Other

STAFF REPORT
BOARD MEETING DATE: October 28, 2008

DATE: October 14, 2008

TO: Board of County Commissioners

FROM: Andy Goodrich, Division Director Air Quality

THROUGH: Dave Childs, Assistant County Manager

SUBJECT: Presentation by the Washoe County Green Team regarding current activities and the 2008-2009 action plan; recommendation to approve International Council for Environmental Initiatives (ICLEI) Local Governments for Sustainability Resolution to proactively reduce our greenhouse gas emissions and if approved, authorize the Chair to sign the resolution and join ICLEI with the annual dues of $2750.00 to be paid by the Health District; and, if membership is approved, appoint one member from the Board of County Commissioners to serve as the primary elected official contact for the ICLEI application. (All Commission Districts.)

SUMMARY

Presentation of the Washoe County Green Team including current activities, and action plan; request to approve International Council for Environmental Initiatives (ICLEI) Local Governments for Sustainability Resolution titled "Local Governments for Sustainability"; approval of membership to ICLEI, an international non-profit dedicated to supporting local governments efforts to build sustainable communities by offering technical and professional support to help build performance based programs; and, dedication of primary Commissioner for ICLEI.

County Priority supported by this item: Preserve and Enhance Our Quality of Life

PREVIOUS ACTION

None

BACKGROUND

Creating sustainable communities requires the knowledge and balance of economic, social, and environmental systems. Throughout the nation, states and local governments recognize the importance of considering the interaction of these complex systems to build sustainable and resilient communities. Local governments are reducing pollutants through a series of activities that simultaneously provide economic and quality of life benefits.

For more than ten years, Washoe County has contributed to a building sustainable community by implementing energy conservation measures, developing infrastructure for

AGENDA ITEM # 14

water reuse systems, incorporating smart planning and purchasing policies, preserving open spaces and supporting our non-profit partners by participating in local community clean up events--to name just a few. We have also benefited from the associated economic and social improvements. A brief sample includes:

- Since acceptance of the Washoe County 2001 Energy Strategy over 1.2 million dollars has been saved through energy efficiency and conservation measures.
- Due to the efforts of our purchasing department and the Health District, Washoe County has been named the best local government in the U.S. for waste reduction.
- Every year, over 2,000 acre feet of drinking water is saved by using treated effluent for non-residential water landscape irrigation.
- In 2008, 116 tons of dumped trash was removed from outdoor recreation areas by Great Truckee Meadows Community Cleanup volunteers.

The inherent complexity and the interaction between our community support systems (for example: water, planning, transportation, air quality, energy efficiency programs) make it impossible for one person to adequately speak to all of the issues; however, the intricacy also necessitates establishing a single source of information and direction to improve the efficiency of our current efforts.

Following support from the Board of County Commissioners at the April 7, 2008 strategic planning retreat, Washoe County Green Team was formalized. **The vision of the Washoe County Green Team is to preserve our resources and sustain our future. As a resource for both employees and citizens, the role of the team is to lead, manage, and implement best practices and programs in Washoe County for creating a sustainable community.**

Green Team Structure and Accomplishments

The Washoe County Green Team works efficiently as a 'virtual department'. Acknowledging the strength in diversity and fiscal benefits we are pulling from our internal employee knowledge base at Washoe County and the Health District. Sixteen staff members from eight departments/divisions participate on the team under the leadership of Andy Goodrich, Division Director of Air Quality.

Since January of 2008, the entire Green Team has met 15 times and has been successful in numerous fields:

- Updated the 2007 Environmental Action Plan,
- Created a central database of current activities for reference and monitoring,
- Drafted a work-plan with established responsibilities, guiding principles and focus areas,
- Participated community events and elicited public feed back including Earth Day, Washoe County Day, Green-Up, and Reno Green Summit,
- Organized Washoe County Conservation Day with over 100 participants and 18 booths,

- Participated in national Energy Star Change a Light Campaign (3rd place at the time of printing),
- Organized education opportunities for team members including two webinars and a reference database in SharePoint, and
- Established working relationships with other local and regional partners including the City of Sparks, City of Reno, University of Nevada Reno, and local non-profits.

Staff continues to work with Nevada Wind LLC and many other stakeholder entities and individuals on various issues related to the construction of the 60 to 150 megawatt wind farm located in the Pah Rah Mountain Range. Currently, the project delivery team has committed to completing the Special Use Permit application by October 15th which will allow for the Planning Commission's consideration of the project at its December meeting. The Regional Plan Schedule is currently under refinement, since there will be both a project of regional significance, and a new transmission corridor in the Regional Utility Corridor Report (RUCR). If approved, construction would begin in the spring of 2009 and the project would begin operating in 2010. The project is estimated to cost approximately $140 to $240 million for Phase I development.

Our goals for the 2008-2009 Budget Year

The Green Team is concentrating this year on developing a strong program and supporting established department goals.

Through six working groups the team is addressing primary issues in sustainability including the built environment, water and wastewater, transportation, energy, waste reduction, and outreach and education. Each working group is formulating tasks for the 2008-2010 year which may include bottled water campaigns, recycling initiatives and other recommendations from the community and elected officials. Tasks will be prioritized by the Green Team's Guiding Principles and reviewed for approval by the Board of County Commissioners in the spring of 2009.

In addition to developing a strong plan Green Team members are completing the following previously approved goals during the 2008-2009 year:

- Increased education on the new internal recycling program.

Highlighted at the Second Annual Conservation Day, the new internal recycling program is now available to all employees. Mike Turner, Public Works Division Director has established centralized drop-off recycling program supported by internal custodial staff. The Green Team will support the new recycling program through an improved employee education program.

- Energy Audit

An Energy Audit of all County Facilities is currently being completed by NORESCO through the Building and Safety Department. This work is tentatively scheduled for completion and review in the spring of 2009.

- Solar Power

The Public Works Department is currently researching opportunities for developing alternative energy resources. Potential initiatives include solar power project in Gerlach.

- Participating in Collaborative Efforts

Coordination is a key guiding principle for the Green Team. During the 2008-2009 year, the team intends to continue cooperative efforts with local partners including supporting efforts for regional recycling, disposal, and education programs including Christmas tree recycling, phonebook recycling, community clean up programs, and Earth Day.

State Climate Change Board

In April of 2007 Governor Jim Gibbons signed an executive order creating the Nevada Climate Change Advisory Committee. The Governor charged the Committee to develop a report in one year's time that would propose recommendations by which Greenhouse Gas (GHG) emissions can be further reduced in Nevada. The 15-committee member appointments included representation from the energy, tourism, and mining industries, academia, environmental groups and several state and local governmental agencies. Andy Goodrich, District Health - Air Quality, was selected to be the chairman of the Committee.

In the final report, the Committee included a brief section on the potential impacts of climate change to the state and a section on accomplishments already achieved in the areas of conservation and alternative energy. The Committee deliberated over 60 draft recommendations and approved 28 final recommendations. The Committee further identified six recommendations as a priority for early action. Those six priority recommendations are: Develop a State Climate Action Plan, Utility Environmental Protection Siting Restrictions, Greenhouse Gas Intensity Reductions, Energy Transmission Corridors, Renewable Portfolio Standard Modifications, and Streamlining Governmental Permitting. Some recommendations will be pursued under current authority; however, many will require amendments to existing state laws. It is anticipated that the Nevada State Energy Office, Nevada Department of Conservation and Natural Resources, and other state agencies will be supporting bills for this objective this coming legislative session.

Although the majority of the recommendations were focused on the electricity generation sector, several will effect local governmental agencies, including: suggested equipment and appliance standards for public facilities, demand side management practices, new building standards for energy efficiency, clean fuels for motor vehicles, solid waste and recycling, and education and outreach.

ICLEI

The Green Team is committed to developing programs that are efficient, quantifiable and accountable. One method of defining our success is through monitoring energy efficiency and greenhouse gas emissions. ICLEI, Local Governments for Sustainability, provides assistances for counties and cities to a adopt policies and implement quantifiable measures for monitoring and mitigation gas emissions through a five step process. The steps, or milestones, allow local governments to understand how decisions affect our energy use.

As the National Association of Counties reports, "emissions reduction programs can benefit communities through reduced energy bills, green space preservation, air quality improvements, reduced traffic congestion, improved transportation choices, and economic development and job creation through energy conversation and new technologies."

Through the adoption of the local government for sustainability resolution, staff recommends that Washoe County join the 450 national cites and counties are members of ICLEI. Membership in ICLEI will provide the Green Team with the technical and professional support to quantify, measure, and report on our greenhouse gas emission reductions (i.e. our carbon footprint). This is a primary step in preparing a Washoe County sustainability plan and Green Team Action Plan.

Membership in ICLEI-Local Governments for Sustainability and completion of Green Team goals requires dedication of a primary contact from the Board of County Commissioners. Staff requests one of the Commissioners volunteer to be the primary contact for the purposes of the ICLEI application process. The ICLEI application also requires that there be staff resources assigned to the project. For the purpose of this application the key staff will be Andy Goodrich, Division Director of Air Quality; Dave Childs, Assistant County Manager; and Sarah Tone, Community Outreach Coordinator.

FISCAL IMPACT

Membership to the ICLEI (International Council for Local Government Initiatives) requires annual dues of $2,750 which would be paid by Division of Air Quality utilizing grant funds (Internal Order 10039).

RECOMMENDATION

Accept the presentation by the Washoe County Green Team regarding current activities and the 2008-2009 action plan; recommendation to approve International Council for Environmental Initiatives (ICLEI) Local Governments for Sustainability Resolution to proactively reduce our greenhouse gas emissions, and, authorize the Chair to sign the resolution and join ICLEI with the annual dues of $2750.00 to be paid by the Health District- Air Quality Division; and, appoint one member from the Board of County Commissioners to serve as the primary elected official contact for the ICLEI application. (All Commission Districts.)

POSSIBLE MOTION

Move to accept the by the Washoe County Green Team regarding current activities and the 2008-2009 action plan; recommendation to approve International Council for Environmental Initiatives (ICLEI) Local Governments for Sustainability Resolution to proactively reduce our greenhouse gas emissions and if approved, authorize the Chair to sign the resolution and join ICLEI with the annual dues of $2750.00 to be paid by the Health District; and, appoint one member from the Board of County Commissioners (*to be named*) to serve as the primary elected official contact for the ICLEI application. (All Commission Districts.)

RESOLUTION
LOCAL GOVERNMENTS FOR SUSTAINABILITY

WHEREAS, Washoe County recognizes that reducing greenhouse gas emissions is a reflection of our success in a building resilient, sustainable community; and

WHEREAS, Washoe County recognizes local government actions taken to reduce greenhouse gas emissions, increase energy efficiency, and provide alternative energy resources has multiple local benefits including a decrease in air pollution, improvement of our quality of life, job creation, economic prosperity, and reduce costs for the local government, its businesses, and its residents; and

WHEREAS, International Council on Local Environmental Initiatives--Local Governments for Sustainability (ICLEI) empowers local governments to set and achieve their climate goals and make tangible progress in building a sustainable community through an international renown inventory, planning, monitoring, and reporting process; and

WHEREAS, The National Association of Counties supports and refers to the tools that for ICLEI provides in the Cities and Counties Climate Protection Program; and

WHEREAS, Washoe County has been invited to join ICLEI and become a partner in the Cities and Counties Climate Protection Program and Washoe County has demonstrated commitment by developing the Washoe County Green Team; now therefore be it

RESOLVED, That Washoe County, Nevada will join ICLEI as a full member and pledges to take a leadership role in promoting public awareness about the causes and impacts of climate change; and be it further

RESOLVED, That Washoe County will undertake ICLEI's five milestones to reduce both greenhouse gas and air pollution emissions throughout the community, and specifically:

- Conduct a greenhouse gas emissions inventory and forecast to determine the source and quantity of greenhouse gas emissions in the jurisdiction;
- Establish a greenhouse gas emissions reduction target;
- Develop an action plan with both existing and future actions which when implemented will meet the local greenhouse gas reduction target;
- Implement the action plan; and,
- Monitor and report progress.

ADOPTED, this 28th day of October, 2008.

_____
Robert M. Larkin, Chairman
Washoe County Commission

ATTEST:

_____
Washoe County Clerk

"Protecting the Environment"

Washoe County's commitment to protect the environment is reflected in almost everything we do. Our strategic priorities reflect a commitment to responsible practices, products and policies that result in environmental, as well as financial, savings.

Washoe County Strategic Priorities

- Improve Public Safety, Security and Health
- Preserve and Enhance Our Quality of Life
- Improve Regional Collaboration
- Support a Healthy Economy
- Promote Financial Accountablity
- Provide Excellent Public Services
- Develop Our Workforce

Based on strategic priorities, the County has created a Quality of Life Task Force to report on our efforts to preserve and enhance our quality of life. However, our initatives are not envisioned, recorded and shelved only to be revisited in another year! Building a sustainable community requires involvement by multiple stakeholders.

The Washoe County Green Team is a working group composed of staff from over six county departments and staff from the regional Washoe County District Health Department. The group also works with Green Teams from other local jurisdictions. The Washoe County Green Team's mission is to encourage, inspire, and support Washoe County's efforts to build a sustainable community for the benefit of current residents and future generations.

We have much to be proud of in Washoe County. Examples, highlights, and opportunities for the public to participate are presented here so that residents may better understand how local government responds to our community's needs and contributes to the overall quality of life.

For more information, please contact the Washoe County Community Relations Office at 328-2721.

What is a Sustainable Community?

A sustainable community is commonly described as meeting the needs of the present without compromising the ability of future generations to meet their own needs.

(Brundtland Commission: United Nations commission formed in 1983 to address the economic and social development consequences of the deterioration of the human environment and natural resources.)

Printed on Recycled Paper (of course!)
August 2008: 500 pieces

A Sustainable Community includes You!

Are you interested in helping with waste reduction and recycling programs in our community?

Building a sustainable community requires support from all stakeholders including citizens and local non-profits. To volunteer for a variety of projects from Christmas Tree Recycling, litter index data collection, to supporting the annual Great Truckee Meadows Clean-Up, please contact Keep Truckee Meadows Beautiful at www.ktmb.org or (775) 851-5185.

For information on other local volunteer opportunities, a reference guide for environmental agencies and non-profits, or to participate in local environmental events please contact Nevada-EcoNet online at www.nevadaeconet.org or call (775) 323-3433.

Our Community is Losing Tons:

- 8.44 tons of phone books recycled as part of this year's AT&T sponsored phone book recycling program.
- 16 tons of pollution eliminated through one year of the Air Quality Management Division's Woodstove Changeout Incentives
- 116 tons of dumped trash removed from outdoor recreation areas by Great Truckee Meadows Community Cleanup volunteers in 2008.

County Employees provide information at our conservation fair.

Residential Recycling Resource Guide

NEVADA RECYCLING HOTLINE: 1.800.597.5865

ALUMINUM CANS

Solid Waste Reduction	331-2267
Western Metals	358-8880
	wmrecycling.com

ANTIFREEZE

Reno Drain Oil Service	342-0351
	rdoenvironmental.com
Clean Harbors Env.	331-9400
	cleanharbors.com

APPLIANCES

Solid Waste Reduction	331-2267
Western Metals	358-8880
Waste Management	329-8822
	wm.com

BATTERIES-CAR

Howard's Chevron Inc.	786-2159
Amer. Auto Wreckers	322-9999
Clean Harbors Env.	331-9400

BATTERIES—HOUSEHOLD

Batteries Plus	825-0566

CELLPHONES

Cartridge Recovery	1-866-410-9600
Area Best Buy Locations	

COMPUTERS

Disability Resources	329-1126
Clean Harbors Env.	331-9400

OIL

Reno Drain Oil	342-0351
Clean Harbors Env.	331-9400

OIL BASED PAINT

Clean Harbors Env.	331-9400

Your Trash and Recycling Programs

Did you know that each jurisdiction manages their waste and recycling contracts?

The Cities of Reno and Sparks, Washoe County, Incline Village General Improvement District, and Sun Valley General Improvement District manage franchise agreements for waste disposal. The Washoe County Health District and local non-profits promote recycling and waste reduction, and public outreach campaigns. District Health actively tracks and reports all recycling activities. For more information call (775) 328-6140.

Washoe County's

Environmental Action Update

A guide to Washoe County's projects and policies that support a sustainable Northern Nevada community.

Washoe County, Nevada
Many Communities. One County.

www.washoecounty.us

Responsible government includes…

...Conservation

Named three times as the 'Best Local Government in the U.S.' for waste reduction, Washoe County conserves our valuable financial, material and natural resources:

- $5,000 was saved by recycling 5,500 Christmas Trees at County parks, saving 100 tons of landfill, and making free mulch.
- We recycle paper, plastics, glass and printer cartridges. Even carpet is not wasted at Washoe County! We recycle and replace carpet square by square.
- We save 2,000 acre feet of drinking water annually by using treated effluent for non-residential water landscape irrigation.
- We encourage conservation habits through water meters, tiered water rates, assigned watering days and public education.
- County employees use 19 Hybrid Gasoline/ Electric Vehicles saving gas and protecting our air quality.

Steal our Energy Savings Tips!

In 2001 Washoe County adopted an Energy Strategy that saved over $500,000 in the first two years. The savings continue to this day. Below are examples of our retrofits and conservation habits. Steal them and enjoy the savings at your home!

We use an automatic digital system to monitor office occupancy, outside temperatures and peak energy use that automatically adjusts accordingly. Steal it: Update your manual thermostat to a programmable version. With proper use, the new thermostat could save you $180 a year!

Over 498,000 square feet of fluorescent lights have been replaced with higher efficency blubs, realizing a 27% decrease in power consumption. Steal it: Did you know that installing one compact fluorcent lightblub instead of an incandescent can save you up to $30 in energy and replacement costs? Every year, join the challenge and pledge to switch out one bulb at your house {www.energystar.gov/changealight}.

We replaced small office size refrigerators with centrally located energy star refrigerators. Steal it: Junk your garage refrigerator and/or replace your older model with an energy efficient version. In most households, the refrigerator is the single most energy consuming appliance.

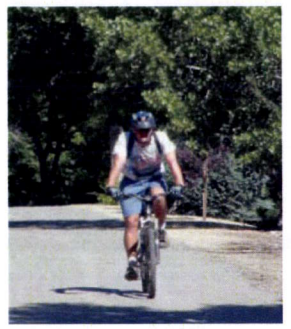
...Conscious Consumption

Did you know recycling aluminum saves 95% of the energy used to make the material from scratch? Like you, Washoe County considers the environmental effects of purchases:

- All paper purchased (over 8,000 cases a year) contain a minimum of 30% post consumer waste products.
- All 2,580 gallons of motor oil purchased is 100% post consumer product.
- An average of 15 tons of steel culvert pipe purchased by the County each year is 100 percent recycled.
- All 850 cases of plastic can liners purchased each year are a minimum 30% post consumer waste.
- All computers purchased by the County have a Silver Rating by the Green Electronic Council.
- 500 computers and printers deemed unusable for County use have been donated to local schools and non-profit agencies.
- All bathroom paper supplies are between 10%-30% post consumer product.
- Janitorial staff use reusable microfiber clean cloths. This reduces paper towel waste and the need for additional cleaning products.
- Environmentally friendly products are used for daily cleaning of kennels at the Regional Animal Services Center.

...Preserving Clean Air/Clean Water

Our Health District protects our blue skies through the Air Quality Management Division (AQMD). The division concentrates their activites on public education, monitoring, enforcement and reporting programs. The goal is to reduce our contribution of particulate matter-- the gray dust seen in the valley. Common sources of air pollution include construction, vehicles and wood burning activities. Community pollution prevention activites include:



- Idle Reduction Program reduces engine emissions.
- Supporting Alternative Fuels-- 69% of all County owned vehicles use alternative fuels. 90% of all non-emergency vehicles purchased since 2000 run on alternative fuels.
- Nevada Bike to Work Day draws attention to the health and air quality benefits of bicycle commuting.

How do we know the programs are working? Through ongoing efforts by the public and AQMD, local air quality has improved so much that our federal designation of non-attainment has been changed for carbon monoxide!

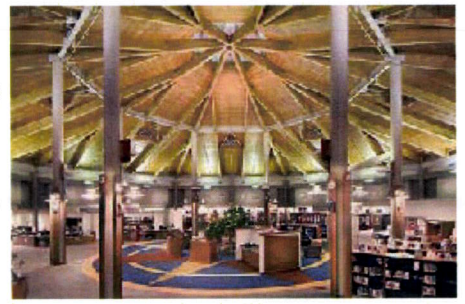
...Protecting Natural Resources & Open Spaces

Protecting our natural resources and open spaces is an essential component to a sustainable community and is consistently identified as a top priority by citizens. Washoe County arranges and participates in many community preservation and planning activities mostly through the Regional Parks and Open Space Department. Tell your friends that we:

- Restore wetlands. Various restoration projects are underway that increase water quality, help reduce flooding and erosion, and protect wildlife habitat.
- Deter trash dumping in open spaces. Free dump vouchers to residents help curb illegal dumping on public lands.The Great Truckee Meadows Community Clean-up uses volunteers to remove debris already dumped in open space areas.
- Plan for protection of future open spaces. The region's Open Space and Natural Resource Plan has been recently updated by County staff through a regional stakeholder participation process.
- Protect approximately 8,000 acres of existing parks, trails, and open space.

...Global Project SMARTs

Our engineering and planning staff are dedicated to creating healthy communities by considering the long term effects of proposed projects.



Our goal is to build and maintain projects that consider economics, energy efficency, product life-cycles, and community connectivity. To do this, staff members are in the process of becoming LEED (Leadership in Energy and Environmental Design) Accredited Professionals so that future projects will meet LEED standards and existing buildings retrofitted to LEED principles.

The future Sparks Justice Court and Galena Creek Visitors Center are examples of upcoming projects using LEED design standards. The new Spanish Springs, Northwest, South Valleys, and Incline Village Libraries incorporate energy efficient features such as environmentally friendly materials and natural light.

The County's Comprehensive Plan and guiding documents direct growth and development projects in our community. To ensure that our community's vision of a sustainable community develops, SMART growth guidelines are being reviewed and incorporated into our Comprehensive Plan and Development Codes. For example:

- The Land Use and Transportation Element (LUTE) of the County's Comprehensive Plan influences future development to abide by sustainable growth practices.
- Goals and policies that heavily promote the use of renewable energy systems and Low Impact Development (LID) standards into our area plans, one component of the Comprehensive Plan.
- A draft ordinance that will provide incentives for projects that meet sustainable development practices is being developed. The ordinance will include incentives for affordable housing development and dedication of land for public purposes as well.

We are also reviewing and updating local codes to promote and encourage the use of alternative energy.

Washoe Green Team
2008-2009 Work-Plan

Vision: Preserving Our Resources, Sustaining Our Future

Mission: To encourage, inspire, and support Washoe County's efforts to build a sustainable community for the benefit of current residents and future generations.

Role: The Washoe County Green Team leads, manages and implements best practices and programs for creating a sustainable community. The team is a resource for both employees and citizens for information and best practices on sustainable living.

Responsibilities: The Washoe County Green Team

- Manages an opportunity list for sustainable programs in Washoe County,
- Prioritizes, identifies and recommends annual and future projects,
- Reviews community proposals and requests and prepares recommendations to Senior Staff and the Board of County Commissioners,
- Implements internal and community sustainability programs,
- Promotes and educates employees and citizens on our activities, and
- Develops and maintains an annual score card to monitor and report on Washoe County activities in the areas of Energy, Water and Wastewater, Transportation, Built Environment, and Waste Reduction.

Guiding Principles:

In identifying immediate and future actions the team will:

- Identify sustainable changes may be made that will result in the biggest benefit for the County and community (ie. 'Low Hanging Fruit').
- Define methods to quantify success of projects (Count your Chickens)
- Consider national and regional models for successful programs (Don't Reinvent the Wheel)
- Work collaboratively with other local stakeholders. (Share the Wealth)
- Focus on internal activities to provide for sustainable future for the entire community (Get it Done!).
- Demonstrate sustainable activities and programs by example. (Walk the Talk)

Focus Areas: Each focus area considers government and community perspectives.

- Built Environment
- Water and Waste Water
- Transportation
- Energy
- Waste Reduction
- Outreach and Education

February 14, 2008; Updated August 12, 2008; Updated August 25, 2008, Updated October 14, 2008

Washoe County Green Team Working Groups:

Water and Wastewater
- Jeanne Ruefer
- Dave Childs
- Lynda Nelson (initial meeting organizer)
- Yann Ling-Barnes
- Betsy Mellinger
- Sarah Tone

Transportation
- Jean Ely (initial meeting organizer)
- Andy Goodrich
- Yann Ling-Barnes
- Mike Sullens

Energy
- Mike Turner (initial meeting organizer)
- Jean Ely
- Don Jeppson
- Dave Solaro
- Bill Whitney
- John Berkich
- Yann Ling-Barnes
- Andy Goodrich

Waste Reduction
- Mike Sullens
- Dave Solaro (initial meeting organizer)
- Mike Turner
- Lynda Nelson
- John Berkich
- Jean Ely
- Bob Sack
- Sarah Tone

Built Environment
- Lynda Nelson
- Jeanne Ruefer
- Don Jeppson (initial meeting organizer)
- Mike Turner
- Eric Young
- Andy Goodrich

Outreach and Education
- Alice McQuone
- Betsy Mellinger
- Sarah Tone (initial meeting organizer)

February 14, 2008; Updated August 12, 2008; Updated August 25, 2008, Updated October 14, 2008

2008-2009 General Timeline:

October 2008
- Presentation to the Board of County Commissioners
- Membership ICLEI

October 2008-June 2009
- Define Green Team member roles and responsibilities
- Identify primary purpose of each working group and establish key goals
- Prioritize potential action priorities based on Green Team's Guiding Principles
- Complete ICLEI Milestone One: Conduct baseline emissions inventory and forecast
- Publicize new internal recycling program
- Complete Energy Goals
- Participate in Collaborative Efforts

June 2009
- Review and quantify success, distribute information through an updated Environmental Action Update brochure

February 14, 2008; Updated August 12, 2008; Updated August 25, 2008, Updated October 14, 2008

Washoe Green Team Sub-Committee
Summary of Potential Action Priorities from Initial Brainstorm Meetings
September-October 2008

February 14, 2008; Updated August 12, 2008; Updated August 25, 2008, Updated October 14, 2008

Water Committee

10/02/08

Identified Potential Action Priorities:
- Integrate water resource planning and management with other resource planning-interagency collaboration
- Continue education on the sustainable use of water and smart use of existing infrastructure: nexus between water use and energy/carbon footprint
- Change county cod to require low water demand landscaping
- Investigate California SB111 – "Watershed friendly management procedures"
- Develop and adopt standards for gray water systems
- Support/encourage implementation of reclaimed water in new development
- Support low water usage fixtures for infrastructure/facilities (Built-Environment)
- Continue irrigation efficiency practices/ET controllers for all parks
- Support upgrade retrofit on residential/commercial at property sale/exchange
- Investigate 14-point water conservation program (Calif. DWR)
- Develop water budgets for citizen education and conservation
- Support LID storm water/run-off standards
- Support more permeable/porous pavement
- Increase reclaim water for water trucks
- Phase out Perc for dry cleaners and other industrial uses

Energy Committee

9/26/08

Identified Potential Action Priorities:
- County employee opinion survey
- Support additional solar projects in Washoe County.
- Portfolio Manager software for facilities management (free); get up and running
- Provide status reports on NORESCO projects to employees
- Team members to be on the lookout for new energy efficiency technologies and forward to Green Team and Public Works
- Continue to investigate the disposal of fluorescent blubs
- Support/Encourage private alternate energy development
- Investigate LED street lighting
- Support PPA Purchase Provider Agreements (3rd party contracts for energy, i.e. solar)

Transportation Committee

10/02/2008

Identified Potential Action Priorities:

- Green Fleet Policy
  - Identify fuel consumption reduction targets (e.g. 5% in 2009, 10% in 2010, 30% in 2020)
  - Promote/Encourage Hybrids/Alternative Fuels
  - Increase bio-diesel concentration incrementally over several years; B10 in 2009, with higher concentrations in future years.
  - Support for a shared (Reno, Sparks, private, etc.) fueling site for alternative fuels
  - Reduce fleet/Reduce vehicle size

- Green Driving Policies
  - Washoe County policy for employees not to exceed 55 mph
  - Anti-idling campaign with employees
  - Policy prohibiting county vehicles from using drive thru/up windows
  - Driver education on rapid acceleration/erratic braking/tire inflation/cruise control

- Encourage carpooling/Joint RTC's effort for rider match
- Establish videoconference sites between major county facilities
- Coordination of deliveries by county staff to county facilities
- Discount Citi-fare bus passed for all employees
- Incentives to employees that bike, bus, carpool, or otherwise don't drive alone to work.
- Increased awareness of bike lockers/racks for employees.
- Investigate onboard computer backup system, batteries, etc. for enforcement vehicles
- Web link on county website for bike route map

Waste Reduction

Identified Potential Action Priorities:

- Recycling for condo and apartment complexes.

- Received an email from a county employee requesting availability of cardboard recycling.

- Support regional effort to provide cost efficient Fluorescent bulb recycling program.

- Support UNR's annual e-waste recycling program and participate in future years. Confirm the counties program for properly disposing of waste and potential change the waste stream to participate in UNR's efforts.

- Clarify the current procedures for internal recycling including the process, materials that are recyclable, and who recycles the bin. Education the staff on internal recycling program.

- Requested by Betsy Mellinger, internal method to recycle rechargeable and regular batteries.

- There is an interest in developing a link on the Washoe County homepage that will inform employees and exterior customers where to get recycling information. \

- Develop the promotion of re-useable items to help reduce the waste stream. Examples include utilizing reusable coffee cups and water containers in lieu of disposable items.

- Possible subsidy from government on hard to recycle items like computers and electronics. Support annual or semi-annual recycling of electronic items.

Built Environment*

Identifies Potential Action Priorities:
- Construction waste reduction and recycling program.
- Review of capital projects division of pilot project to recycle materials from a tenant improvement construction project at 1 S. Sierra Street. Project includes recycling of demolition and construction debris.

Outreach and Education Committee*

Identified Potential Action Priorities:
- Green web-page accessible from the main Washoe County page
- Attend local and regional conferences to provide information on County's activities and stay informed on new ideas, technologies, and practices.
- Incorporate education into current required signage. For example, required signage warning people not to drink the reclaimed water is an opportunity to explain the use of reclaimed water.
- A frequently updated scorecard on the home page that shows residents and the employees how the county is reaching its green goals.

**Built Environment and Outreach and Education Committee will provide additional material between November and December.*

ICLEI's Five Milestones for Climate Protection

The Five Milestones provide a simple, standardized means of calculating greenhouse gas emissions, of establishing targets to lower emissions, of reducing greenhouse gas emissions and of monitoring, measuring and reporting performance.

The methodology underlying the Five Milestones provides a simple, standardized means of calculating greenhouse gas emissions, of establishing targets to lower emissions, of reducing greenhouse gas emissions and of monitoring, measuring and reporting performance. ICLEI has developed a software tool, Clean Air Climate Protection (CACP), that helps cities comply with the methodology.

ICLEI's Five Milestone Methodology for setting and meeting your climate mitigation goals:

1. **Conduct a baseline emissions inventory and forecast**
   The city first calculates greenhouse gas emissions for a base year (e.g., 2000) and for a forecast year (e.g., 2015). The calculations capture emissions levels from all municipal operations (e.g., city owned and/or operated buildings, streetlights, transit systems, wastewater treatment facilities) and from all community-related activities (e.g., residential and commercial buildings, motor vehicles, waste streams, industry). This inventory and forecast provide a benchmark for planning and monitoring progress.
2. **Adopt an emissions reduction target for the forecast year**
   The city passes a resolution establishing an emission reduction target for the city. The target is essential. It both fosters political will and creates a framework that guides the planning and implementation of measures.
3. **Develop a Local Climate Action Plan**
   The local government then develops a Local Climate Action Plan, ideally with robust public input from all stakeholders. The plan details the policies and measures that the local government will take to reduce greenhouse gas emissions and achieve its emissions reduction target. Most plans include a timeline, a description of financing mechanisms, and an assignment of responsibility to departments and staff. In addition to direct greenhouse gas reduction measures, most plans also incorporate public awareness and education efforts.
4. **Implement policies and measures**
   The city implements the policies and measures contained in their Local Climate Action Plan. Typical policies and measures include energy efficiency improvements to municipal buildings and water treatment facilities, streetlight retrofits, public transit improvements, installation of renewable power applications, and methane recovery from waste management.
5. **Monitor and verify results**
   Monitoring and verifying progress on the implementation of measures to reduce or avoid greenhouse gas emissions is an ongoing process. Monitoring begins once measures are implemented and continues for the life of the measures, providing important feedback that can be use to improve the measures over time. ICLEI's software provides a uniform methodology for cities to report on measures.

October 01, 2007

NACo County
The Voice of America's Counties

Counties share 'what works' at NACo's first Climate Protection Forum

By Charles Taylor
SENIOR STAFF WRITER

County elected officials and staff from across the country shared best practices and concerns, and heard from national experts at NACo's first Climate Protection Forum.

Billed as a "dialogue and peer-to-peer networking opportunity," the forum's goals included giving counties an opportunity to discuss current strategies, future goals and new methods to address climate change — especially regional collaboration. New Castle County (Del.) Councilmember Stephanie McClellan moderated the two-day event, Sept. 20 and 21, in Washington, D.C.

"There's a lot that we know about climate change; we know that the earth is warming," said Judi Greenwald, director of innovative solutions for the Pew Center on Global Climate Change. "Scientists are more than 90 percent sure that this is the case. That's about as sure as scientists ever get about anything."

Photo by Charles Taylor

Commissioner Wally White, LaPlata County, Colo., and Supervisor Jane Halliburton, Story County, Iowa, participate at one of the breakout discussions during NACo's Climate Protection Forum.

Greenhouse gas emissions from the 10 largest U.S. cities account for 10 percent of total emissions nationwide, she said — making local action to lower emissions an important part of the solution.

Cities and counties "have a big role to play, and there are things they can do that higher levels of government can't," Greenwald added, citing local governments' "relevant authority" in determining growth and traffic patterns though building codes, planning and zoning. "So, it is very important that local government takes climate change into account in their decisions."

A key feature of the forum was a series of round-robin roundtable discussions. After each featured speaker's presentation, attendees moved to an assigned table where they had a facilitated discussion with a new group of participants. The speakers also circulated throughout the room to participate in the interchanges.

Topics included: Climate Protection and the Local Role, County Climate Plans, Tools and Resources, Energy Efficiency, Green Building, Behavioral Change: Engage Your Community, Role and Support of Staff Resources, and Land Use Planning and Transportation.

The climate protection/local role discussion yielded a variety of ideas and issues, including:

- Sacramento County, Calif. joined the Chicago Climate Exchange (CCX), and a baseline inventory found it already has begun reducing emissions with a no-idling policy for trucks.
- Salt Lake County, Utah is passing an ordinance for LEED "green building" certification for libraries, community recreation centers, and other public buildings.
- Arlington Co., Va. found that commercial buildings account for 40 percent of greenhouse gas emissions.
- Some cities with taxi cab commissions could explore the possibility of chartering all-hybrid companies.

Participants discussed counties' designating a "change agent" within the organization who is empowered to set targets: a champion with authority from the county board or county executive — to communicate with department heads.

Sections

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Tina Hill, a McHenry County, Ill. commissioner was, perhaps, an unlikely table discussion leader. "I have not bought into the whole global warming thing," she said during a break. "So when this came up, I said let's go see what I can learn.

"I've already moved dramatically," she added. "I was a naysayer, and now I do understand that we have to protect the environment and there are things we can do."

Hill said she finds an economic argument for "going green" more convincing with colleagues — saving energy or money, or creating new business opportunities. "Even at the table, I said, 'Guys I need another word for climate action plan; it's not going to fly, and they gave me clean energy plan."

One of the discussions on public-private partnerships focused on motivating businesses. Participants noted that:

- Establishing new rules for businesses is not the same as partnership. It may, in fact, discourage partnerships.
- Leaders in the business community need to be identified who can become "green" champions.
- Events recognizing local businesses that have EnergyStar or LEED buildings can demonstrate success.
- Working with the Chamber of Commerce, rather than individual businesses, can be a better way to engage the business community.

Among the questions raised were:

- How do you get businesses involved with reducing emissions?
- What other types of partnerships are possible beyond the green building certification model?

Supervisor Jeff Morris from Trinity County, Calif. found the sessions "very collaborative." His most important take-away from the forum: "That there are counties and organizations who have already created many of the tools needed for someone who is just starting out to get moving quickly."

Other forum speakers represented such organizations as ICLEI, the U.S. Green Building Council, EPA, the U.S. State Department and the National Oceanographic and Atmospheric Administration (NOAA) — as well as representatives of several counties that are ahead of the curve in addressing climate change. They included Whatcom County, Wash., Westchester County, N.Y. and Alameda County, Calif.

Garrett Fitzgerald, director of programs, ICLEI-Local Governments for Sustainability, provided guidance on how counties can develop their own climate action plans. The steps include assessing baseline greenhouse gas emissions from all sources, including county government operations, businesses and the community at large; setting emissions-reduction targets and creating an action plan, and monitoring and re-evaluating goals.

ICLEI offers free clean air and climate protection software to its members and the technical assistance to use it, Fitzgerald said. More than 35 counties are ICLEI members, including Orange County, Fla., Washtenaw County, Mich., Chittenden County, Vt., Arlington County, Va. and Multhomah County, Ore.

Glen Bowles, a county planner from Orange County, N.C. (also an ICLEI member), left the forum feeling positive about his county's efforts. But he also lamented the many "different sources of standards to follow."

"This is also the source of my dilemma," he said: "What standard or standards should we use, and why should we adopt certain energy and water conservation standards over others?"

To continue the dialogue, NACo has established an Online County Climate Discussion Forum at *www.naco.org/climatediscussion*. To post a discussion topic or question, click on the relevant subject area and then click "Add New Post" in the red bar at the top of any page.

PDF files of forum speakers' PowerPoint presentations are available online at *www.naco.org/climateprotection*.

Bowles hopes the forum is the first of many. "The value for such forums, and why NACo should continue them is the cross-fertilization of ideas, applications, and processes from one local jurisdiction to another and between different regions," he said.

"Just talking to people about their successes and problems within the roundtable format was an excellent allocation of 'gray matter.'"

For more information about the forum or NACo's County Climate Protection Program, contact Kelly Zonderwyk at 202/942-4224, e-mail *kzonderwyk@naco.org* or visit *www.naco.org/climateprotection*.

NACo and Climate Protection

Earlier this year, NACo's Board of Directors adopted policy calling on Congress and the George W. Bush administration to take practical actions to reduce the risks of global warming. The policy states that: "NACo supports immediate and long-range efforts by the federal government to involve all levels of stakeholders to mitigate possible sources of climate change now through a series of practical incentives and through more federal funding."

In March 2007, NACo also launched its Green Government Initiative to serve as a catalyst between local governments and the private sector to facilitate green government practices, products and policies that result in financial and environmental savings. The initiative is a comprehensive resource on all things green for counties including energy efficiency, renewable and alternative energy, green building, water quality, land use, purchasing and recycling.

Governor Jim Gibbons'
NEVADA CLIMATE CHANGE
Advisory Committee Final Report

EXECUTIVE SUMMARY

On April 10, 2007, Governor Jim Gibbons signed an executive order that created the Nevada Climate Change Advisory Committee (NCCAC) The executive order directed the Committee to propose recommendations by which Greenhouse Gas (GHG) emissions can be further reduced in Nevada.

Climate change refers to any significant change in measures of climate, such as temperature, precipitation or wind, lasting for decades or longer. The term is also widely used to describe the impact on the environment from the emissions of GHGs and is often synonymously used with the term "global warming." Six gases that are commonly accepted as GHGs are carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perflouorocarbons (PFCs), and sulfur hexafloride (SF6).

The Governor, with the assistance of the Nevada State Energy Office, assembled the NCCAC from a diverse group of public agency personnel, private industry representatives, interest groups, and the public at large. At the first NCCAC meeting, the Governor asked the Committee to review policies and impacts related to climate change in Nevada. He emphasized the need for actionable, Nevada-centered solutions. The committee agreed to create a three-part report delineating the potential impacts, highlighting accomplishments, and offering recommendations to address climate change in Nevada. Through the public meetings, the Committee invited several experts to provide presentations on energy transmission, wind energy, water resource issues, and geologic carbon sequestration.

Impacts of Climate Change

In formulating the Impacts section of the report, all Committee members were asked to research information pertaining to climate change issues specific to Nevada or the southwest US. The goal for the Committee was to provide a general overview of potential impacts from a change in the climate. Data was provided that indicated forecasted climate changes would have an undesirable impact on public health in the Silver State. High temperatures could result in direct public health concerns with heat sickness, increased troposphere ozone pollution, and increased dust and particulate matter concentrations. Some of the other issues addressed included: significant impacts to water resources for Nevada with increased drought conditions in the southern part of the state and less snowfall although more precipitation in the Sierra increasing the likelihood of area flooding and less summertime reserves; Decreasing water reserves could lead to more forest and wild land fires with potential greater intensity and devastating consequences; and the disappearance of some native species of fauna and increased invasive weed species. Agriculture practices and recreation opportunities in Nevada could also be negatively impacted.

Nevada's Accomplishments

The Accomplishments section was quickly and unanimously identified as a critical section to the report. Nevada is a leader in many energy initiatives. In 1997 Nevada was one of the first states to adopt a Renewable Portfolio Standard (RPS), which is now among the most progressive in the US. In the past year, two of the world's largest solar projects began operations in Nevada, the 64MW Nevada Solar One, and the 14MW Solar Star facility at Nellis Air Force Base, resulting in Nevada becoming the largest solar energy producer per capita in the United States. Nevada is the largest geothermal power producer per capita in the nation. Several significant wind farm projects are now in the planning

phase and beginning the permitting process for construction. The Committee developed a matrix to be included in the report. The matrix indicates a variety of actions and initiatives that are either completed or underway by the cities, counties and State of Nevada. The matrix also shows a significant number of green measures that are currently being implemented in the State.

Recommendations

After a period time of developing and collecting recommendations, the Committee agreed to a three-tiered rating system for ranking the recommendations. A recommendation was given a "1" if there was consensus that it should move forward to the main body of final report and ultimately be considered by the Governor. A recommendation rating of "2" was given for those that were considered by the Committee but for which there was no unanimity to move the recommendation to the main body of the report. The Committee agreed that these recommendations would be listed in the appendix of the report to indicate the Committee considered them. And lastly, a recommendation was rated as a "3" if it was considered by the committee and a consensus was reached to not include it in the main report. These recommendations were to be included in an appendix to indicate to the reader of the report they were also considered. The majority of recommendations that received a rating of "3" were duplicative of other recommendations. Other reasons for a 3-rating were that it was determined the policy or action was already being implemented or underway in the State, the recommendation was simply infeasible or inappropriate for the State, additional information or research was needed on the recommendation to move forward, or lastly, the recommendation was retracted by the originator. The committee felt it was important the final document include all 47 recommendations regardless of the rating, as this would demonstrate the breadth of recommendations the committee considered.

Recommendations were also grouped into categories or economic sectors as identified in the *Nevada Greenhouse Gas Inventory and Reference Case Projections, 1990-2020*, prepared by the Center for Climate Strategies. Three subcommittees were formed and assigned the task of further developing the recommendations by sector type. The subcommittees were: Electricity Production and Use, Transportation, and Waste/Agriculture/Other. Public meetings were held by each sub-committee. All final recommendations from the subcommittees were presented to the full committee for review and acceptance. The final recommendations generally consist of; 1) a "Finding" section to outline the concept; 2) a "Background" section to provide supporting evidence(s); 3) a "Recommendation(s)" section to propose actions; and 4) an "Impacts" section to address cost, funding source, staffing, and regulation or law modification related to the actions. These recommendations have considered that complete cost-to-benefit analyses are not available at this time.

The Committee deliberated and approved 28 recommendations from the subcommittees. The following is a list of recommendations the Committee agreed to move to the final report:

Electricity Consumption:

- Energy Transmission Corridors
- Energy Efficient Appliance/Equipment Standards for Public Facilities
- Renewable Portfolio Standard Modification Proposal
- Continued Support for Biomass Conversion to Electricity and Fuel
- Greenhouse Gas Reduction (Intensity)
- Greenhouse Gas Reduction (Support Federal Efforts)
- Utility Environmental Protection Act Siting Restrictions

Residential/Commercial/Industrial:

- Demand Side Management
- Create New Efficient Building Standards
- Continued Support for Brownfield Development
- Water Impacts
- Energy Efficient Building Codes

Transportation:

- Advanced Travel Center Electrification
- Clean-Fueled Bus Program
- Clean Fuels and Clean Vehicle Incentive Program
- Monitor the Status of California Motor Vehicle Emissions
- Standards for Greenhouse Gases
- Reduce GHG Emissions from Motor Vehicles (DEP/DMV)
- State Fleets Alternative Fuel Cars
- Environmental Study for High Speed Train between Las Vegas and Anaheim
- Incentives for Ethanol-Blended Fuels
- Incentives for Bio-Diesel Fuels

Waste/Agriculture/Other:

- Sequestration Initiative
- Recycling Market Development Board
- Continued Support of Solid Waste Recycling Efforts
- Dairy Waste to Energy
- Education and Outreach
- Streamline Governmental Permitting and Review Process at State and Federal Levels
- Develop a State Climate Action Plan

The Committee agreed to identify six priority recommendations. These recommendations were chosen based on importance and actionability in the near term with current or minimal additional resources. The following recommendations were selected:

- Develop a State Climate Action Plan
- Utility Environmental Protection Act Siting Restrictions
- Greenhouse Gas Reduction (Intensity)
- Energy Transmission Corridors
- Renewable Portfolio Standard Modification Proposal
- Streamline Governmental Permitting and Review Process at State and Federal Levels

A full description of these recommendations is contained in the report.

Throughout the Committee's discussions of all the recommendations there was a recurring desire to see additional resources committed to the State Energy Office. Although many of the recommendations will be impacting various state agencies, it was overwhelming recognized that the majority of these actions will be centered in the Energy Office, and due to its current diminutive size, additional resources are critical to our success as a State to achieve GHG reductions.

This report will be delivered to Governor Jim Gibbons in early June 2008. The Report represents the work of the Nevada Climate Change Advisory Committee as a whole entity and does not reflect any individual member's personal views on this subject.

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December 19, 2007

Tags: Innovation, Social Responsibility, Environmental Activism, Sales and Marketing
5 Readers Recommended this Article

Message in a Bottle

By Charles Fishman

The largest bottled-water factory in North America is located on the outskirts of Hollis, Maine. In the back of the plant stretches the staging area for finished product: 24 million bottles of Poland Spring water. As far as the eye can see, there are double-stacked pallets packed with half-pint bottles, half-liters, liters, "Aquapods" for school lunches, and 2.5-gallon jugs for the refrigerator.

Really, it is a lake of Poland Spring water, conveniently celled off in plastic, extending across 6 acres, 8 feet high. A week ago, the lake was still underground; within five days, it will all be gone, to supermarkets and convenience stores across the Northeast, replaced by another lake's worth of bottles.

Looking at the piles of water, you can have only one thought: Americans sure are thirsty.

Bottled water has become the indispensable prop in our lives and our culture. It starts the day in lunch boxes; it goes to every meeting, lecture hall, and soccer match; it's in our cubicles at work; in the cup holder of the treadmill at the gym; and it's rattling around half-finished on the floor of every minivan in America. Fiji Water shows up on the ABC show *Brothers & Sisters*; Poland Spring cameos routinely on NBC's *The Office*. Every hotel room offers bottled water for sale, alongside the increasingly ignored ice bucket and drinking glasses. At Whole Foods, the upscale emporium of the organic and exotic, bottled water is the number-one item by units sold.

Thirty years ago, bottled water barely existed as a business in the United States. Last year, we spent more on Poland Spring, Fiji Water, Evian, Aquafina, and Dasani than we spent on iPods or movie tickets--$15 billion. It will be $16 billion this year.

Bottled water is the food phenomenon of our times. We--a generation raised on tap water and water fountains--drink a billion bottles of water a week, and we're raising a generation that views tap water with disdain and water fountains with suspicion. We've come to pay

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good money--two or three or four times the cost of gasoline--for a product we have always gotten, and can still get, for free, from taps in our homes.

When we buy a bottle of water, what we're often buying is the bottle itself, as much as the water. We're buying the convenience--a bottle at the 7-Eleven isn't the same product as tap water, any more than a cup of coffee at Starbucks is the same as a cup of coffee from the Krups machine on your kitchen counter. And we're buying the artful story the water companies tell us about the water: where it comes from, how healthy it is, what it says about us. Surely among the choices we can make, bottled water isn't just good, it's positively virtuous.

Except for this: Bottled water is often simply an indulgence, and despite the stories we tell ourselves, it is not a benign indulgence. We're moving 1 billion bottles of water around a week in ships, trains, and trucks in the United States alone. That's a weekly convoy equivalent to 37,800 18-wheelers delivering water. (Water weighs 81/3 pounds a gallon. It's so heavy you can't fill an 18-wheeler with bottled water--you have to leave empty space.)

Meanwhile, one out of six people in the world has no dependable, safe drinking water. The global economy has contrived to deny the most fundamental element of life to 1 billion people, while delivering to us an array of water "varieties" from around the globe, not one of which we actually need. That tension is only complicated by the fact that if we suddenly decided not to purchase the lake of Poland Spring water in Hollis, Maine, none of that water would find its way to people who really are thirsty.

A chilled plastic bottle of water in the convenience-store cooler is the perfect symbol of this moment in American commerce and culture. It acknowledges our demand for instant gratification, our vanity, our token concern for health. Its packaging and transport depend entirely on cheap fossil fuel. Yes, it's just a bottle of water--modest compared with the indulgence of driving a Hummer. But when a whole industry grows up around supplying us with something we don't need--when a whole industry is built on the packaging and the presentation--it's worth asking how that happened, and what the impact is. And if you do ask, if you trace both the water and the business back to where they came from, you find a story more complicated, more bemusing, and ultimately more sobering than the bottles we tote everywhere suggest.

In the town of San Pellegrino Terme, Italy, for example, is a spigot that runs all the time, providing San Pellegrino water free to the local citizens--except the free Pellegrino has no bubbles. Pellegrino trucks in the bubbles for the bottling plant. The man who first brought bottled water to the United States famously failed an impromptu taste test involving his own product. In Maine, there is a marble temple to honor our passion for bottled water.

And in Fiji, a state-of-the-art factory spins out more than a million bottles a day of the hippest bottled water on the U.S. market today, while more than half the people in Fiji do not have safe, reliable drinking water. Which means it is easier for the typical American in Beverly Hills or Baltimore to get a drink of safe, pure, refreshing Fiji water than it is for most people in Fiji.

At the Peninsula hotel in Beverly Hills, where the rooms start at $500 a night and the guest next door might well be an Oscar winner, the minibar in all 196 rooms contains six bottles of Fiji Water. Before Fiji Water displaced Evian, Diet Coke was the number-one-selling minibar item. Now, says Christian Boyens, the Peninsula's elegant director of food and beverage, "the 1 liter of Fiji Water is number one. Diet Coke is number two. And the 500-milliliter bottle of Fiji is number three."

Being the water in the Peninsula minibar is so desirable--not just for the money to be made, but for the exposure with the Peninsula's clientele--that Boyens gets a sales call a week from a company trying to dislodge Fiji.

Boyens, who has an MBA from Cornell, used to be indifferent to water. Not anymore. His restaurants and bars carry 20 different waters. "Sometimes a guest will ask for Poland Spring, and you can't get Poland Spring in California," he says. So what does he do? "We'll call the Peninsula in New York and have them FedEx out a case.

"I thought water was water. But our customers know what they want."

The marketing of bottled water is subtle compared with the marketing of, say, soft drinks or beer. The point of Fiji Water in the minibar at the Peninsula, or at the center of the table in a white-tablecloth restaurant, is that guests will try it, love it, and buy it at a store the next time they see it.

Which isn't difficult, because the water aisle in a suburban supermarket typically stocks a dozen brands of water--not including those enhanced with flavors or vitamins or, yes, oxygen. In 1976, the average American drank 1.6 gallons of bottled water a year, according to Beverage Marketing Corp. Last year, we each drank 28.3 gallons of bottled water--18 half-liter bottles a month. We drink more bottled water than milk, or coffee, or beer. Only carbonated soft drinks are more popular than bottled water, at 52.9 gallons annually.

No one has experienced this transformation more profoundly than Kim Jeffery. Jeffery began his career in the water business in the Midwest in 1978, selling Perrier ("People didn't know whether to put it in their lawn mower or drink it," he says). Now he's the CEO of Nestlé Waters North America, in charge of U.S. sales of Perrier, San Pellegrino, Poland Spring, and a portfolio of other regional natural springwaters. Combined, his brands will sell some $4.5 billion worth of water this year (generating roughly $500 million in pretax profit). Jeffery insists that unlike the soda business, which is stoked by imaginative TV and marketing campaigns, the mainstream water business is, quite simply, "a force of nature."

"The entire bottled-water business today is half the size of the carbonated beverage industry," says Jeffery, "but our marketing budget is 15% of what they spend. When you put a bottle of water in that cold box, it's the most thirst-quenching beverage there is. There's nothing in it that's not good for you. People just know that intuitively.

"A lot of people tell me, you guys have done some great marketing to get customers to pay for water," Jeffery says. "But we aren't that smart. We had to have a hell of a lot of help from the consumer."

Still, we needed help learning to drink bottled water. For that, we can thank the French.

Gustave Leven was the chairman of Source Perrier when he approached an American named Bruce Nevins in 1976. Nevins was working for the athletic-wear company Pony. Leven was a major Pony investor. "He wanted me to consider the water business in the U.S.," Nevins says. "I was a bit reluctant." Back then, the American water industry was small and fusty, built on home and office delivery of big bottles and grocery sales of gallon jugs.

> Fiji Water produces more than a million bottles a day, while more than half the people in Fiji do not have reliable drinking water.

Nevins looked out across 1970s America, though, and had an epiphany: Perrier wasn't just water. It was a beverage. The opportunity was in persuading people to drink Perrier when they would otherwise have had a cocktail or a Coke. Americans were already drinking 30 gallons of soft drinks each a year, and the three-martini lunch was increasingly viewed as a problem. Nevins saw a niche.

From the start, Nevins pioneered a three-part strategy. First, he connected bottled water to exclusivity: In 1977, just before Perrier's U.S. launch, he flew 60 journalists to France to visit "the source" where Perrier bubbled out of the ground. He connected Perrier to health, sponsoring the New York City Marathon, just as long-distance running was exploding as a fad across America. And he associated Perrier with celebrity, launching with $4 million in TV commercials featuring Orson Welles. It worked. In 1978, its first full year in the United States, Perrier sold $20 million of water. The next year, sales tripled to $60 million.

What made Perrier distinctive was that it was a sparkling water, served in a signature glass bottle. But that's also what left the door open for Evian, which came to the United States in 1984. Evian's U.S. marketing was built around images of toned young men and women in tight clothes sweating at the gym. Madonna drank Evian--often onstage at concerts. "If you were cool, you were drinking bottled water," says Ed Slade, who became Evian's vice president of marketing in 1990. "It was a status symbol."

Evian was also a still water, which Americans prefer; and it was the first to offer a plastic bottle nationwide. The clear bottle allowed us to see the water--how clean and refreshing it looked on the shelf. Americans have never wanted water in cans, which suggest a tinny aftertaste before you take a sip. The plastic bottle, in fact, did for water what the pop-top can had done for soda: It turned water into an anywhere, anytime beverage, at just the moment when we decided we wanted a beverage, everywhere, all the time.

Perrier and Evian launched the bottled-water business just as it would prove irresistible. Convenience and virtue aligned. Two-career families, overprogrammed children, prepared foods in place of home-cooked meals, the constant urging to eat more healthfully and drink less alcohol--all reinforce the value of bottled water. But those trends also reinforce the mythology.

We buy bottled water because we think it's healthy. Which it is, of course: Every 12-year-old who buys a bottle of water from a vending machine instead of a 16-ounce Coke is

inarguably making a healthier choice. But bottled water isn't healthier, or safer, than tap water. Indeed, while the United States is the single biggest consumer in the world's $50 billion bottled-water market, it is the only one of the top four--the others are Brazil, China, and Mexico--that has universally reliable tap water. Tap water in this country, with rare exceptions, is impressively safe. It is monitored constantly, and the test results made public. Mineral water has a long association with medicinal benefits--and it can provide minerals that people need--but there are no scientific studies establishing that routinely consuming mineral water improves your health. The FDA, in fact, forbids mineral waters in the United States from making any health claims.

> If the water we use at home cost what even cheap bottled water costs, our monthly water bills would run $9,000.

And for this healthy convenience, we're paying what amounts to an unbelievable premium. You can buy a half- liter Evian for $1.35--17 ounces of water imported from France for pocket change. That water seems cheap, but only because we aren't paying attention.

In San Francisco, the municipal water comes from inside Yosemite National Park. It's so good the EPA doesn't require San Francisco to filter it. If you bought and drank a bottle of Evian, you could refill that bottle once a day for 10 years, 5 months, and 21 days with San Francisco tap water before that water would cost $1.35. Put another way, if the water we use at home cost what even cheap bottled water costs, our monthly water bills would run $9,000.

Taste, of course, is highly personal. New Yorkers excepted, Americans love to belittle the quality of their tap water. But in blind taste tests, with waters at equal temperatures, presented in identical glasses, ordinary people can rarely distinguish between tap water, springwater, and luxury waters. At the height of Perrier's popularity, Bruce Nevins was asked on a live network radio show one morning to pick Perrier from a lineup of seven carbonated waters served in paper cups. It took him five tries.

We are actually in the midst of a second love affair with bottled water. In the United States, many of the earliest, still-familiar brands of springwater--Poland Spring, Saratoga Springs, Deer Park, Arrowhead--were originally associated with resort and spa complexes. The water itself, pure at a time when cities struggled to provide safe water, was the source of the enterprise.

In the late 1800s, Poland Spring was already a renowned brand of healthful drinking water that you could get home-delivered in Boston, New York, Philadelphia, or Chicago. It was also a sprawling summer resort complex, with thousands of guests and three Victorian hotels, some of which had bathtubs with spigots that allowed guests to bathe in Poland Spring water. The resort burned in 1976, but at the crest of a hill in Poland Spring, Maine, you can still visit a marble-and-granite temple built in 1906 to house the original spring.

> 24% of the bottled water we buy is tap water repackaged by Coke and Pepsi.

The car, the Depression, World War II, and perhaps most important, clean, safe municipal water, unwound the resorts and the first wave of water as business. We had to wait two

generations for the second, which would turn out to be much different--and much larger.

Today, for all the apparent variety on the shelf, bottled water is dominated in the United States and worldwide by four huge companies. Pepsi has the nation's number-one-selling bottled water, Aquafina, with 13% of the market. Coke's Dasani is number two, with 11% of the market. Both are simply purified municipal water--so 24% of the bottled water we buy is tap water repackaged by Coke and Pepsi for our convenience. Evian is owned by Danone, the French food giant, and distributed in the United States by Coke.

The really big water company in the United States is Nestlé, which gradually bought up the nation's heritage brands, and expanded them. The waters are slightly different--springwater must come from actual springs, identified specifically on the label--but together, they add up to 26% of the market, according to Beverage Marketing, surpassing Coke and Pepsi's brands combined.

Since most water brands are owned by larger companies, it's hard to get directly at the economics. But according to those inside the business, half the price of a typical $1.29 bottle goes to the retailer. As much as a third goes to the distributor and transport. Another 12 to 15 cents is the cost of the water itself, the bottle and the cap. That leaves roughly a dime of profit. On multipacks, that profit is more like 2 cents a bottle.

As the abundance in the supermarket water aisle shows, that business is now trying to help us find new waters to drink and new occasions for drinking them--trying to get more mouth share, as it were. Aquafina marketing vice president Ahad Afridi says his team has done the research to understand what kind of water drinkers we are. They've found six types, including the "water pure-fectionist"; the "water explorer"; the "image seeker"; and the "struggler" ("they don't really like water that much...these are the people who have a cheeseburger with a diet soda").

It's a startling level of thought and analysis--until you realize that within a decade, our consumption of bottled water is expected to surpass soda. That kind of market can't be left to chance. Aquafina's fine segmentation is all about the newest explosion of waters that aren't really water--flavored waters, enhanced waters, colored waters, water drinks branded after everything from Special K breakfast cereal to Tropicana juice.

Afridi is a true believer. He talks about water as if it were more than a drink, more than a product--as if it were a character all its own, a superhero ready to take the pure-fectionist, the water explorer, and the struggler by the hand and carry them to new water adventures. "Water as a beverage has more right to extend and enter into more territories than any other beverage," Afridi says. "Water has a right to travel where others can't."

Uh, meaning what?

"Water that's got vitamins in it. Water that's got some immunity-type benefit to it. Water that helps keep skin younger. Water that gives you energy."

Water: It's pure, it's healthy, it's perfect--and we've made it better. The future of water sounds distinctly unlike water.

The label on a bottle of Fiji Water says "from the islands of Fiji." Journey to the source of that water, and you realize just how extraordinary that promise is. From New York, for instance, it is an 18-hour plane ride west and south (via Los Angeles) almost to Australia, and then a four-hour drive along Fiji's two-lane King's Highway.

Every bottle of Fiji Water goes on its own version of this trip, in reverse, although by truck and ship. In fact, since the plastic for the bottles is shipped to Fiji first, the bottles' journey is even longer. Half the wholesale cost of Fiji Water is transportation--which is to say, it costs as much to ship Fiji Water across the oceans and truck it to warehouses in the United States than it does to extract the water and bottle it.

> The bubbles in San Pellegrino are extracted from volcanic springs in Tuscany, then trucked north and injected into the water from the source.

That is not the only environmental cost embedded in each bottle of Fiji Water. The Fiji Water plant is a state-of-the-art facility that runs 24 hours a day. That means it requires an uninterrupted supply of electricity--something the local utility structure cannot support. So the factory supplies its own electricity, with three big generators running on diesel fuel. The water may come from "one of the last pristine ecosystems on earth," as some of the labels say, but out back of the bottling plant is a less pristine ecosystem veiled with a diesel haze.

Each water bottler has its own version of this oxymoron: that something as pure and clean as water leaves a contrail.

San Pellegrino's 1-liter glass bottles--so much a part of the mystique of the water itself--weigh five times what plastic bottles weigh, dramatically adding to freight costs and energy consumption. The bottles are washed and rinsed, with mineral water, before being filled with sparkling Pellegrino--it uses up 2 liters of water to prepare the bottle for the liter we buy. The bubbles in San Pellegrino come naturally from the ground, as the label says, but not at the San Pellegrino source. Pellegrino chooses its CO_2 carefully--it is extracted from supercarbonated volcanic springwaters in Tuscany, then trucked north and bubbled into Pellegrino.

Poland Spring may not have any oceans to traverse, but it still must be trucked hundreds of miles from Maine to markets and convenience stores across its territory in the northeast--it is 312 miles from the Hollis plant to midtown Manhattan. Our desire for Poland Spring has outgrown the springs at Poland Spring's two Maine plants; the company runs a fleet of 80 silver tanker trucks that continuously crisscross the state of Maine, delivering water from other springs to keep its bottling plants humming.

> We pitch into landfills 38 billion water bottles a year--in excess of $1 billion worth of plastic.

In transportation terms, perhaps the waters with the least environmental impact are Pepsi's Aquafina and Coke's Dasani. Both start with municipal water. That allows the companies to use dozens of bottling plants across the nation, reducing how far bottles must be shipped.

Yet Coke and Pepsi add in a new step. They put the local water through an energy-intensive reverse-osmosis filtration process more potent than that used to turn seawater into drinking water. The water they are purifying is ready to drink--they are recleaning perfectly clean tap water. They do it so marketing can brag about the purity, and to provide consistency: So a bottle of Aquafina in Austin and a bottle in Seattle taste the same, regardless of the municipal source.

There is one more item in bottled water's environmental ledger: the bottles themselves. The big springwater companies tend to make their own bottles in their plants, just moments before they are filled with water--12, 19, 30 grams of molded plastic each. Americans went through about 50 billion plastic water bottles last year, 167 for each person. Durable, lightweight containers manufactured just to be discarded. Water bottles are made of totally recyclable polyethylene terephthalate (PET) plastic, so we share responsibility for their impact: Our recycling rate for PET is only 23%, which means we pitch into landfills 38 billion water bottles a year--more than $1 billion worth of plastic.

Some of the water companies are acutely aware that every business, every product, every activity is under environmental scrutiny like never before. Nestlé Waters has just redesigned its half-liter bottle, the most popular size among the 18 billion bottles the company will mold this year, to use less plastic. The lighter bottle and cap require 15 grams of plastic instead of 19 grams, a reduction of 20%. The bottle feels flimsy--it uses half the plastic of Fiji Water's half-liter bottle--and CEO Jeffery says that crushable feeling should be the new standard for bottled-water cachet.

"As we've rolled out the lightweight bottle, people have said, 'Well, that feels cheap,'" says Jeffery. "And that's good. If it feels solid like a Gatorade bottle or a Fiji bottle, that's not so good." Of course, lighter bottles are also cheaper for Nestlé to produce and ship. Good environmentalism equals good business.

John Mackey is the CEO and cofounder of Whole Foods Market, the national organic-and-natural grocery chain. No one thinks about the environmental and social impacts and the larger context of food more incisively than Mackey--so he's a good person to help frame the ethical questions around bottled water.

Mackey and his wife have a water filter at home, and don't typically drink bottled water there. "If I go to a movie," he says, "I'll smuggle in a bottle of filtered water from home. I don't want to buy a Coke there, and why buy another bottle of water--$3 for 16 ounces?" But he does drink bottled water at work: Whole Foods' house brand, 365 Water.

"You can compare bottled water to tap water and reach one set of conclusions," says Mackey, referring both to environmental and social ramifications. "But if you compare it with other packaged beverages, you reach another set of conclusions.

"It's unfair to say bottled water is causing extra plastic in landfills, and it's using energy transporting it," he says. "There's a substitution effect--it's substituting for juices and Coke and Pepsi." Indeed, we still drink almost twice the amount of soda as water--which is, in fact, 90% water and also in containers made to be discarded. If bottled water raises environmental and social issues, don't soft drinks raise all those issues, plus obesity

concerns?

What's different about water, of course, is that it runs from taps in our homes, or from fountains in public spaces. Soda does not.

As for the energy used to transport water from overseas, Mackey says it is no more or less wasteful than the energy used to bring merlot from France or coffee from Ethiopia, raspberries from Chile or iPods from China. "Have we now decided that the use of any fossil fuel is somehow unethical?" Mackey asks. "I don't think water should be picked on. Why is the iPod okay and the water is not?"

Mackey's is a merchant's approach to the issue of bottled water--it's a choice for people to make in the market. Princeton University philosopher Peter Singer takes an ethicist's approach. Singer has coauthored two books that grapple specifically with the question of what it means to eat ethically--how responsible are we for the negative impact, even unknowing, of our food choices on the world?

"Where the drinking water is safe, bottled water is simply a superfluous luxury that we should do without," he says. "How is it different than French merlot? One difference is the value of the product, in comparison to the value of transporting and packaging it. It's far lower in the bottled water than in the wine.

"And buying the merlot may help sustain a tradition in the French countryside that we value--a community, a way of life, a set of values that would disappear if we stopped buying French wines. I doubt if you travel to Fiji you would find a tradition of cultivation of Fiji water.

"We're completely thoughtless about handing out $1 for this bottle of water, when there are virtually identical alternatives for free. It's a level of affluence that we just take for granted. What could you do? Put that dollar in a jar on the counter instead, carry a water bottle, and at the end of the month, send all the money to Oxfam or CARE and help someone who has real needs. And you're no worse off."

Beyond culture and the product's value, Singer makes one exception. "You know, they do import Kenyan vegetables by air into London. Fresh peas from Kenya, sent by airplane to London. That provides employment for people who have few opportunities to get themselves out of poverty. So despite the fuel consumption, we're supporting a developing country, we're working against poverty, we're working for global equity.

"Those issues are relevant. Presumably, for instance, bottling water in Fiji is fairly automated. But if there were 10,000 Fijians carefully filtering the water through coconut fiber--well, that would be a better argument for drinking it."

Marika, an elder from the Fijian village of Drauniivi, is sitting cross-legged on a hand-woven mat before a wooden bowl, where his weathered hands are filtering Fiji Water through a long bag of ground kava root. Marika is making a bowl of grog, a lightly narcotic beverage that is an anchor of traditional Fiji society. People with business to conduct sit wearing the traditional Fijian skirt, and drink round after round of grog, served in half a

coconut shell, as they discuss the matters at hand.

Marika is using Fiji Water--the same Fiji Water in the minibars of the Peninsula Hotel--because Drauniivi is one of the five rural villages near the Fiji Water bottling plant where the plant's workers live. Drauniivi and Beverly Hills are part of the same bottled-water supply chain.

Jim Siplon, an American who manages Fiji Water's 10-year-old bottling plant in Fiji, has arranged the grog ceremony. "This is the soul of Fiji Water," he says. The ceremony lasts 45 minutes and goes through four rounds of grog, which tastes a little furry. Marika is interrupted twice by his cell phone, which he pulls from a pocket in his skirt. It is shift change at the plant, and Marika coordinates the minibus network that transports villagers to and from work.

Fiji Water is the product of these villages, a South Pacific aquifer, and a state-of-the-art bottling plant in a part of Fiji even the locals consider remote. The plant, on the northeast coast of Fiji's main island of Viti Levu, is a white two-story building that looks like a 1970s-era junior high school. The entrance faces the interior of Viti Levu and a cloud-shrouded ridge of volcanic mountains.

Inside, the plant is in almost every way indistinguishable from Pellegrino's plant in Italy, or Poland Spring's in Hollis, filled with computer-controlled bottle-making and bottle-filling equipment. Line number two can spin out 1 million bottles of Fiji Water a day, enough to load 40 20-foot shipping containers; the factory has three lines.

The plant employs 200 islanders--set to increase to 250 this year--most with just a sixth- or eighth-grade education. Even the entry-level jobs pay twice the informal minimum wage. But these are more than simply jobs--they are jobs in a modern factory, in a place where there aren't jobs of any sort beyond the villages. And the jobs are just part of an ecosystem emerging around the plant--water-based trickle-down economics, as it were.

Siplon, a veteran telecom manager from MCI, wants Fiji Water to feel like a local company in Fiji. (It was purchased in 2004 by privately owned Roll International, which also owns POM Wonderful and is one of the largest producers of nuts in the United States.) He uses a nearby company to print the carrying handles for Fiji Water six-packs and buys engineering services and cardboard boxes on the island. By long-standing arrangement, the plant has seeded a small business in the villages that contracts with the plant to provide landscaping and security, and runs the bus system that Marika helps manage.

In 2007, Fiji Water will mark a milestone. "Even though you can drive for hours and hours on this island past cane fields," says Siplon, "sometime this year, Fiji Water will eclipse sugarcane as the number-one export." That is, the amount of sugar harvested and processed for export by some 40,000 seasonal sugar workers will equal in dollar value the amount of water bottled and shipped by 200 water bottlers.

However we regard Fiji Water in the United States--essential accessory, harmless treat, or frivolous excess--the closer you get to the source of its water, the more significant the enterprise looks.

No, no coconut-fiber filtering, but rather, a toehold in the global economy. Are 10,000 Fijians benefiting? Not directly. Perhaps 2,000. But Fiji Water is providing something else to a tiny nation of 850,000 people, which has been buffeted by two coups in seven years, and the collapse of its gold-mining and textiles industries: inspiration, a vision of what the country might have to offer the rest of the world. Developed countries are keen for myriad variations on just what Fiji Water is--a pure, unadulterated, organic, and natural product. Fiji has whole vistas of untouched, organic-ready farmland. Indeed, the hottest topic this spring (beyond politics) was how to jump-start an organic-sugar industry.

Of course, the irony of shipping a precious product from a country without reliable water service is hard to avoid. This spring, typhoid from contaminated drinking water swept one of Fiji's islands, sickening dozens of villagers and killing at least one. Fiji Water often quietly supplies emergency drinking water in such cases. The reality is, if Fiji Water weren't tapping its aquifer, the underground water would slide into the Pacific Ocean, somewhere just off the coast. But the corresponding reality is, someone else--the Fijian government, an NGO--could be tapping that supply and sending it through a pipe to villagers who need it. Fiji Water has, in fact, done just that, to some degree--20 water projects in the five nearby villages. Indeed, Roll has reinvested every dollar of profit since 2004 back into the business and the island.

Siplon acknowledges the risk of slipping into capitalistic neo-colonialism. "Does the world need Fiji Water?" he asks. "I'm not sure I agree with the critics on that. This company has the potential of delivering great value--or the results a cynic might have expected."

Water is, in fact, often the perfect beverage--healthy, refreshing, and satisfying in a way soda or juice aren't. A good choice.

> Worldwide, 1 billion people have no reliable source of drinking water; 3,000 children a day die from diseases caught from tainted water.

Nestlé Waters' Kim Jeffery may be defending his industry when he calls bottled water "a force of nature," but he's also not wrong. Our consumption of bottled water has outstripped any marketer's dreams or talent: If you break out the single-serve plastic bottle as its own category, our consumption of bottled water grew a thousandfold between 1984 and 2005.

In the array of styles, choices, moods, and messages available today, water has come to signify how we think of ourselves. We want to brand ourselves--as Madonna did--even with something as ordinary as a drink of water. We imagine there is a difference between showing up at the weekly staff meeting with Aquafina, or Fiji, or a small glass bottle of Pellegrino. Which is, of course, a little silly.

Bottled water is not a sin. But it is a choice.

Packing bottled water in lunch boxes, grabbing a half-liter from the fridge as we dash out the door, piling up half-finished bottles in the car cup holders--that happens because of a fundamental thoughtlessness. It's only marginally more trouble to have reusable water bottles, cleaned and filled and tucked in the lunch box or the fridge. We just can't be

bothered. And in a world in which 1 billion people have no reliable source of drinking water, and 3,000 children a day die from diseases caught from tainted water, that conspicuous consumption of bottled water that we don't need seems wasteful, and perhaps cavalier.

That is the sense in which Mackey, the CEO of Whole Foods, and Singer, the Princeton philosopher, are both right. Mackey is right that buying bottled water is a choice, and Singer is right that given the impact it has, the easy substitutes, and the thoughtless spending involved, it's fair to ask whether it's always a good choice.

The most common question the U.S. employees of Fiji Water still get is, "Does it really come from Fiji?" We're choosing Fiji Water because of the hibiscus blossom on the beautiful square bottle, we're choosing it because of the silky taste. We're seduced by the *idea* of a bottle of water from Fiji. We just don't believe it really comes from Fiji. What kind of a choice is that?

Once you understand the resources mustered to deliver the bottle of water, it's reasonable to ask as you reach for the next bottle, not just "Does the value to me equal the 99 cents I'm about to spend?" but "Does the value equal the impact I'm about to leave behind?"

Simply asking the question takes the carelessness out of the transaction. And once you understand where the water comes from, and how it got here, it's hard to look at that bottle in the same way again.

Correction: The photography credits for "Water" were incomplete. The photo stylist was Olivia Sammons.
