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Sustainability Communicator is a quarterly publication about population, consumption, and conservation issues. Its purpose is to promote dialogue and action among League members and others interested in building a sustainable future.

# SUSTAINABILITY COMMUNICATOR

*Izaak Walton League of America Sustainability Education Program News*

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*Inch worm, inch worm, measuring the marigolds.  
Could it be, you'll stop and see how beautiful they are*

—Frank Loesser; from the movie “Hans Christian Anderson”

From the latest numbers on Wall Street, to student test scores to our weight on the bathroom scales, people love measuring things. Like the inchworm, what we choose to measure and how we do it profoundly shapes how we see the world and the choices we make. This issue of Sustainability Communicator focuses on measuring what we truly want to become.

## Eating Up the Earth: Measuring our Ecological Debt

On October 9th, 2006, the world passed a milestone: Human beings had used up 100 percent of what the Earth is able to produce in a year. Since then, we have been eating away at our “ecological capital.” This startling claim was made in a report by the U.S.-based Global Footprint Network and two British organizations, the New Economics Foundation and Best Foot Forward. The announcement of this year’s “Ecological Debt Day” did not make a big media splash, but the organizations are hopeful that these new measurements will eventually get people’s attention.

To measure our ecological debt, you first need to know our ecological footprint. This concept was first introduced in 1994 by two scientists, Mathis Wackernagel and William Reese, who set out to measure the Earth’s ability to replace the resources used by people and absorb the wastes they leave behind. They started by looking at the Earth’s biocapacity. This includes base resources that build up over a long period of time—soil, mature ecosystems like forests or prairies, and productive relationships as between flowers and pollinators—as well as new resources that the Earth produces each year, such as plants and wildlife. Think of it like a bank account—the base resources are the

principal, and the new resources are the interest gained. Combined, they are your total capital.

Wackernagel and Reese estimated the Earth’s ecological capital—its biocapacity—at about 32 billion acres of productive land. They then calculated how many acres humans use up on energy in homes, offices and industries, growing food, driving cars, etc. The New Economics Foundation translated this data into a calendar year. If the Earth can produce so many acres of ecological capital per year, and humans consume it at so many acres per day, the resulting difference would show whether we are using up more or less capital than is available.

According to the research, before 1987 people didn’t use up all of the Earth’s ecological capital in a year—we still had a balance left over. But that year, we took out our first overdraft. That was on December 19th. Each year since then, our population and economic growth have pushed the date earlier and earlier. This year, it took just 292 days to use up the Earth’s yearly bounty. Now, we are eating into the principal.

Wackernagel, who is today the executive director of the Global Footprint Network, says, “Humanity is living off its ecological credit card

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# Eating Up the Earth

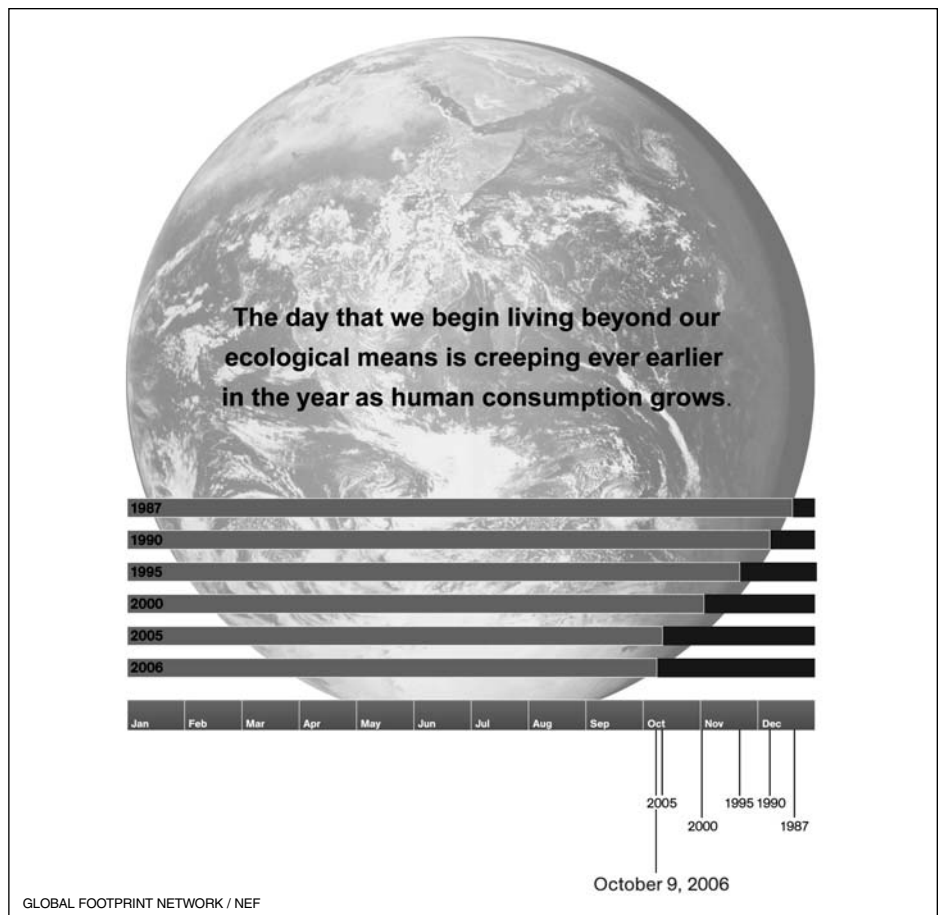
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and can only do this by liquidating the planet's natural resources. While this can be done for a short while, overshoot ultimately leads to the depletion of resources, such as the forests, oceans, and agricultural land upon which our economy depends."

By adding the element of time, the Ecological Debt Day puts the measurements into a stark perspective. As Craig Simmons, director to Best Foot Forward has said, "Calculating our global and personal resource depletion day is a resonant way of making planetary limits more transparent."

The Earth's biocapacity is beyond our control, but our ecological footprint is not. Many individuals, school groups, communities, and even some nations have begun calculating their footprint and taking actions to reduce it.

For more information on the ecological footprint and Ecological Debt Day, visit the Global Footprint Network's Web site at [www.footprintnetwork.org/](http://www.footprintnetwork.org/) or by calling 510-839-8879.



## Local Measures (adapted from Indicators of Sustainable Development by Alan Atkinson, Sustainable Pittsburgh)

In the last 15-20 years, hundreds of sustainability indicator initiatives have blossomed in cities, counties, states and nations worldwide. Below we offer a snapshot description of sustainability indicators and three examples of communities measuring what they find important.

Indicators of sustainability are clear and compelling measures of key trends in the economy, environment, social systems, and human well-being. They are tools for education, accountability, and strategic planning. They provide feedback to decision-makers and the public about past trends that are shaping the future using strong graphic presentations. Bringing many different trends together in one broad picture often reveals system linkages that may have been overlooked. They sound alarms and reflect success. They make better and smarter decisions possible.

Because they need to cover many sectors and disciplines, relatively large teams of people, coordinated by a smaller group, come together to produce the indicators. Most often, the public is involved in the process through meetings, surveys, listen-

ing sessions and the like.

Successful indicator projects generally get started by:

(1) A civic coalition, outside of government but usually including government representatives, brings people together to start the process and carry it through to the publication of a first report. After that, a trusted civic institution or local government agency may adopt the project.

(2) A forward-thinking government leader or agency initiates the project, but includes a highly participatory civic involvement process as part of the design. This ensures that the final product is more than just a government report.

**Jacksonville, Florida Quality of Life Progress Report** —The longest standing U.S. community indicators effort, evolved from a 1974 conference sponsored by the Chamber of Commerce. Business, community and government leaders came together to discuss innovative approaches to the region's challenges. The non-profit Jacksonville Community Council Inc. formed as a result. JCCI collaborated with the Chamber to select 119 indicators cov-

ering education, economy, natural and social environment, arts and culture, government, transportation, and public safety. Citizen's committees review the annual progress report. They identify areas of progress and concern, and select two issues for special focus. Actions taken over the years include investments in literacy programs, term limits for elected officials, and water quality improvements, training community leaders, and a recent climate change initiative. <http://www.jcci.org/default.aspx>

**The Cascadia Scorecard Project** — Launched in 2004, the Scorecard is a sustainability index for the Pacific Northwest (Washington, Oregon, Idaho and British Columbia). It tracks the region's performance on seven key trends: sprawl, energy, pollution, economy, forests, population, and health. Progress is measured by how many years the region is from reaching an attainable existing target for each indicator (e.g., Japan for lifespan, Germany for energy). Its impressive website offers graphics maps publications and resources.

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# Measuring our Common Wealth: The GDP and its Alternatives

The drastic turnaround from the Roaring Twenties to the Great Depression caught the U.S. government off guard. To try and avoid such catastrophes in the future, Congress wanted a reliable means of judging the “health” of the economy. Its answer was a composite of economic data called the Gross National Product (now referred to as the Gross Domestic Product). This index captures “the monetary value of all the finished goods and services produced within a country’s borders in a specific time period.” It includes everything that people buy, all government spending, investments made in plants and facilities, and exports minus imports.

Though accurate and useful for its intended purpose, describing the size and growth of the economy, the GDP was never designed to measure social welfare. Addressing Congress in 1934, Simon Kuznets, the economist who invented the GDP, warned that “the welfare of a nation” can “scarcely be inferred from a measurement of national income.” He also argued that, as economies grow, the requirements for economic growth change as well. “Goals for more growth should specify more growth of what and for what,” he said.

Despite this advice, business leaders, politicians, the media, and eventually the public, began equating GDP with progress and well-being. Ultimately, conventional wisdom became fixed: declining GDP is bad for us, a rising one is good, plain and simple.

But some took exception to this view. On the presidential campaign trail in 1968, Bobby Kennedy delivered his now famous speech about the Gross National Product, (see Box). His remarks voiced a deep concern about measuring the welfare of the nation and its people.

The GDP has serious gaps. It makes no distinction between good purchases and bad ones. It leaves out important things such as the value of unpaid labor, (like parenting or volunteering), and bartering between neighbors or businesses. Income

gaps are not measured. The GDP also excludes the intrinsic value of natural resources. Trees, water, fish, and air are only counted when sold. But the costs of replacement or of services like making oxygen, holding flood waters, and absorbing carbon are nowhere to be found. Since all of these things are part of our welfare, a measure that leaves them out is not showing the whole picture.

Serious attempts to address GDP deficiencies include the Measure of Economic Welfare (Yale economists Bill Nordhaus and James Tobin), the Index of Sustainable Economic Welfare (theologian John B. Cobb and economist Herman Daley), and most recently the Genuine Progress Indicator (Redefining Progress). Each succeeding effort has sought to include only items of consumption and investment that contribute to economic well being, and exclude those that do not. They deducted pollution and the loss of natural capital directly, and subtracted money spent to fix or offset social and environmental problems. They included unpaid labor and investments in infrastructure (bridges, roads, and parks), and addressed income distribution. New, more sophisticated measures can now count the value of ecosystem services and a country’s ability to maintain production in future years (i.e., using renewable resources for energy or water versus non-renewable ones.)

Studies of data between 1950-1975 do show an initial link between growth and well-being. But then, the relationship changes. While GDP continues to climb, welfare indices start to falter. At a certain point, continued economic growth may actually be responsible for the declines. Think of traffic as an example. For a time, more businesses bringing more jobs and more people with more cars can feel like a good thing. At some point, however, there is no room for more traffic. People lose time with families, waste productive time and have air-related health problems. Yet still, we assume that the growth should continue.

The GDP is just a number. It tells us how much stuff is produced, bought and

sold. But in using it, we began to equate bigger with better. Perceptive people like Bobby Kennedy and economists working on alternative measures help to remind us that the two are not the same. While there may never be a perfect measure of human happiness, refining how we calculate our progress is an important part of choosing what we want the future to be.

“Too much and too long, we seem to have surrendered community excellence and community values in the mere accumulation of material things. Our gross national product—if we should judge America by that—counts air pollution and cigarette advertising, and ambulances to clear our highways of carnage. It counts special locks for our doors and the jails for those who break them. It counts the destruction of our redwoods and the loss of our natural wonder in chaotic sprawl. It counts napalm and the cost of a nuclear warhead, and armored cars for police who fight riots in our streets. It counts Whitman’s rifle and Speck’s knife, and the television programs which glorify violence in order to sell toys to our children.

“Yet the gross national product does not allow for the health of our children, the quality of their education, or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages; the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage; neither our wisdom nor our learning; neither our compassion nor our devotion to our country; it measures everything, in short, except that which makes life worthwhile. And it tells us everything about America except why we are proud that we are Americans.”

—Robert F. Kennedy at the University of Kansas, March 18, 1968

## E-Communicator

**SC reader Jeff Devries on E-Communicating:** I just got the latest "Sustainability Communicator". My issue was not printed on recycled paper with soy based ink... it was printed with 100% re-cycled electrons. Isn't that even more environmentally friendly than the recycled paper? Keep up the good work. —Jeff

If you would like to receive your Communicator on re-cycled electrons, contact us at [sustain@iwla.org](mailto:sustain@iwla.org) or call 800-453-5463.

# Local Measures

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[http://www.sightline.org/research/cascadia\\_scorecard/cascadia-scorecard](http://www.sightline.org/research/cascadia_scorecard/cascadia-scorecard)

**Minneapolis Sustainability Plan** — Adopted by the City Council in 2003, the plan is based on direct engagement with neighborhood residents, rather than relying on selected government or community leaders. It calls for sustainability principles to guide city decision-making and budgeting. Twenty-four indicators, with numerical targets and timelines, must be incorporated into the five-year business plans of each city department with annual reports to the mayor and council.

<http://www.ci.minneapolis.mn.us/environment/Sustainability-Initiatives.asp>

**New Jersey Future** — With the strong endorsement of Gov. Christine Todd Whitman, this non-governmental but high-profile group produced a “Sustainable State” indicator report that quickly became a guiding document for the

state’s planning efforts and the government’s internal performance evaluation.

<http://www.njfuture.org/>

## Resources

The International Institute for Sustainable Development Compendium has a searchable database of indicator initiatives at local to national levels:

<http://www.iisd.org/measure/compendium/about.asp>. 204-958-7715.

Sustainable Measures offers a hands-on guide, training materials, and a database of indicators. <http://www.sustainablemeasures.com/> or (860) 808-7487.

Obtain The Izaak Walton League’s “Monitoring Community Sustainability” guide via e-mail at [sustain@iwla.org](mailto:sustain@iwla.org) or by calling (301) 548-0150.

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*Founded in 1922, the Izaak Walton League of America is dedicated to common sense conservation that protects America's hunting, fishing, and outdoor heritage relying on solution-oriented conservation, education, and the promotion of outdoor recreation for the benefit of our citizens. The League has more than 40,000 members and supporters in 21 state divisions and more than 300 local chapters in 32 states.*



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