LA County gets C+ from UCLA on environmental issues

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UCLA today issued the first comprehensive environmental report card for Los Angeles County. The county's overall performance marks it as an unimpressive C+ student.

The study, produced by UCLA's Institute of the Environment and Sustainability, is the first thorough analysis of the county's environment and is believed to be the most comprehensive environmental report card for any region in the nation. Researchers looked at 22 indicators to determine grades in six main categories—water, air, ecosystem health, waste, environmental quality of life, and energy and greenhouse gases—and analyzed publicly available data from dozens of agencies and organizations.

"Despite a strong recent history of environmental improvements, the county has a long way to go before joining the honor roll," said Mark Gold, acting director of IoES and the project leader on the report card. "There's tremendous room for improvement in all six environmental areas."

Among the findings:

- Although the region's air quality has improved, it remains among the worst in the nation and regularly fails to meet federal standards for fine-particle pollution.
- Sewage and industrial discharges largely comply with Clean Water Act requirements, but excessive levels of pollutants are

found in storm water, groundwater and virtually all the region's bodies of water.

- Despite significant progress in conserving water, the county still imports 58 percent of its water from more than 200 miles away, and the area's per capita water use is more than twice that of urban regions in Europe and Australia.
- The county has a robust waste-recycling program but lacks data on how much is actually recycled and how much hazardous waste is produced.
- Recent decades have seen significant habitat loss, and thousands of acres of wildlands have experienced increases in the frequency of wildfires.
- Electricity consumption per capita is among the nation's lowest for large metro areas, but much of that energy still comes from coal.
- About 20 percent of residents live in areas ranked among the worst 10 percent in California by state environmental screening scores, exposing them to higher environmental health risks.

The project was headed by Gold, who is also assistant vice chancellor for UCLA's Sustainable LA Grand Challenge, and his Institute of the Environment and Sustainability colleagues Felicia Federico and Stephanie Pincetl, in collaboration with the Goldhirsh Foundation and the LA2050 initiative.

"We were surprised how many indicators of environmental conditions aren't measured at all," said Federico, the program manager for partnerships and translational science at IoES. "As a region we need to decide what environmental measures we want to track and determine how we will do so regularly. We hope this report sparks that conversation."

UCLA's Sustainable LA Grand Challenge efforts and city-level plans,

such as Los Angeles' Sustainability pLAn (scheduled for publication April 8 and developed partially as a response to UCLA's "Vision 2021 LA" draft sustainability plan), are timely efforts that could guide those discussions, develop solutions and improve L.A.'s grade, according to the report.

"Climate change is starting to be felt, so we know that there is no more 'normal' going forward, which is why it's so important to find a baseline now," said Pincetl, a professor and director of the California Center for Sustainable Communities at UCLA. "This will be crucial in figuring out how to mitigate the impacts of those changes."

UCLA's Sustainable LA and the city's plan are aimed at measuring the current state of the region's environment in order to determine where more action is needed.

"UCLA's report card fills a gap in what we know about the county," said Tara Roth, president of the Goldhirsh Foundation. "It gives the public and policymakers evidence of where improvement is needed, as well as a framework to talk about it. Our hope is that it leads to broader decision-making and policies to improve the county as a whole, not just one community at a time."

Twitter users can join a chat with the report's authors at 3 p.m. on Tuesday, April 7, using the hashtag #UCLAgradesLA to ask questions and submit ideas for future report cards.

The grades and key findings for each area include:

Water: C

- Despite major gains in water conservation over the last few decades, per capita water use is more than twice as high as that of

urban regions in Europe and Australia.
- Local recycled water contributes about 4 percent of supply; 58 percent of water is imported from more than 200 miles away.
- Nearly everyone has access to clean drinking water.
- Stormwater and groundwater are severely polluted.
- Virtually all rivers, streams, bays, lakes and estuaries have excessive levels of pollutants.

"On the positive side, when you turn on the faucet, the water's safe to drink, and most of our beaches are safe for swimming during the summer," Gold said. "But nearly all of our streams and rivers are impaired by at least one pollutant. Our groundwater is extensively contaminated. And our substantial progress on water conservation still isn't enough in this drought."

Air: C+

- Air quality has improved dramatically over the last 45 years, but the region still has some of the worst air quality in the nation.
- The region frequently fails to meet federal limits for ozone and fine particulate matter.
- Toxics air contaminants pose a major health risk, especially in low-income communities.
- People living near the ports and freeways are at a higher risk for cancer.

"We no longer have full days when children must stay indoors to play," Gold said. "But lots of areas in the L.A. region have populations exposed to unacceptably high levels of cancer risk due to the air quality, especially in low-income areas, so we have significant environmental equity issues."

Ecosystem health: C-/incomplete

- A first-of-its-kind analysis showed that more than 35,000 acres within the county are burning three times more often than their historical average. This is damaging to habitats, which can grow back with different vegetation that might not support the original ecosystem.
- At the same time, 65,000 acres are burning significantly less frequently, potentially creating dangerous amounts of excess fuel.
- The region has for many years seen the loss of natural habitats due to urbanization, but the last decade has brought the region marine protected areas and land-use protections for thousands of additional acres of terrestrial habitats.
- Urban streams throughout the county are functioning poorly and are biologically stressed.
- The researchers noted that the grade for ecosystem health was incomplete because the county fails to collect enough information in several key areas—including some that were thought to be well-studied—which itself is a problem.
- "There are so few regional targets or countywide monitoring efforts for ecosystem health that it was the most difficult to assess of all six categories," Federico said. "We need regional planning efforts to address these gaps."

Waste: B/incomplete

- Total municipal waste peaked in 2005 and has generally decreased since, but only slightly since 2010.
- All cities in L.A. County are in compliance with California's per capita waste management targets.
- Only a small fraction of the total hazardous waste generated is reported through the EPA's toxic release inventory requirements, and over 50 percent of the waste transferred by TRI reporting facilities was harmful lead or zinc compounds.

- The researchers noted that the grade for waste was incomplete because the county fails to collect enough information in several key areas—including on how much solid waste or recycling is recycled or otherwise diverted from landfills—which itself is a problem.

"Despite the fact that all cities in region comply with state solid waste management laws, we don't have the data to determine how much waste is recycled or diverted from disposal in landfills," Gold said.

Energy and greenhouse gases: B-

- L.A. County has one of the lowest per capita electricity consumption rates among large U.S. metro areas, comparable to San Francisco and New York. However, its greenhouse gas emissions rate is about one-third higher than those cities.
- Buildings emit over 39 percent of the greenhouse gas emissions in the region, while transportation contributes one-third and stationary sources nearly 20 percent of greenhouse gas emissions.
- Utilities serving 98 percent of the county population get more than one-fifth of their energy from renewable sources, but coal is still prevalent. L.A., Glendale, Pasadena, Azusa and Burbank get more than 42 percent of their energy from coal.

"By making our buildings more energy-efficient, making greener transportation choices and getting off of coal as an energy source, the region could become a national leader on both energy efficiency and greenhouse gas emission reductions," Pincetl said.

Quality of life: C+

- The mean travel time to work is 30 minutes; 22.6 percent of commutes exceed 45 minutes.

- The mean time for commuters using public transportation is 75 percent greater than for those who drive alone, and 54.7 percent of mass transit commutes exceed 45 minutes.
- Thanks to an increase in the number of bike lanes over the past five years, Long Beach and L.A. have become more bicycle-friendly communities.
- The region's park scores—which evaluate things like the number of parks per person and their accessibility—are far below those of most cities nationally. Some regions, like South L.A., are park-poor.

"Part of what this report confirmed is that if there's no federal law requiring baselines and improvement, we aren't determining baselines or setting targets for improvement," Pincetl said. "The question is, what kind of an environment do we want? We can have an eroded environment, paved over like the Orange County model, where a great deal of the native habitat has been replaced, or we can develop urban infrastructure that allows humans to live alongside the native environment over a long period of time."

Provided by University of California, Los Angeles

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