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Introduction to Studies in the News

Studies in the News is a current compilation of items significant to the Legislature and Governor's Office. It is created weekly by the State Library's California Research Bureau to supplement the public policy debate in California. To help share the latest information with state policymakers, these reading lists are now being made accessible through the State Library’s website. This week's list of current articles in various public policy areas is presented below. Prior lists can be viewed from the California State Library's Web site at [www.library.ca.gov/sitn](http://www.library.ca.gov/sitn)

- When available, the URL for the full text of each item is provided.
- California State Employees may contact the State Information & Reference Center (916-654-0261; cslinfo@library.ca.gov) with the SITN issue number and the item number [S#].
- All other interested individuals should contact their local library - the items may be available there, or may be borrowed by your local library on your behalf.

The following studies are currently on hand:

ENVIRONMENT & NATURAL RESOURCES

AIR POLLUTION


Full text at: [http://papers.nber.org/papers/W14196](http://papers.nber.org/papers/W14196)

[“We examine the impact of three ‘criteria’ air pollutants on infant health in New Jersey in the 1990s by combining information about mother's residential location from birth certificates with information from air quality monitors. In addition to large sample size, our work offers three important innovations: First, because we know the exact addresses of mothers, we select those mothers closest to air monitors to ensure a more accurate measure of air quality. Second, since we follow mothers over time, we control for unobserved characteristics of mothers using maternal fixed effects. Third, we examine interactions of air pollution with smoking and other predictors of poor infant health outcomes. We find consistently negative effects of exposure to pollution, especially carbon monoxide, both during and after birth.”]

[Request #S08-41-2763]

Full text at: http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=181744

"US environmental regulators published a draft study that linked global warming to higher levels of smog that could harm human health…. The draft report said, 'Climate change has the potential to produce significant increases in near-surface (ozone) concentrations in many areas of the US.'… It said parts of the Mid-Atlantic, Northeast and lower Midwest show some increases in ozone in study simulations, and the seasons in which ozone is a problem could last longer as a result of higher temperatures. Ozone smog endangers the health of people, especially the young, old and those with respiratory problems." Reuters (July 14, 2008) 1.]

[Request #S08-41-2667]


"Tugboats puff out more soot for the amount of fuel used than other commercial vessels, and large cargo ships emit more than twice as much soot as previously estimated, according to the first extensive study of commercial vessel soot emissions…. 'Commercial shipping emissions have been one of the least studied areas of all combustion emissions,' said lead author Daniel Lack. 'The two previous studies of soot emissions examined a total of three ships. We reviewed plumes from 96 different vessels.'…Tugs emit nearly a gram of soot per kilogram of fuel burned -- twice as much as any other vessel type…. Tugboats have a disproportionate impact on air quality because they travel within ports, emitting potentially harmful particles near populous urban areas." Science Daily (July 11, 2008) 1.]

[Request #S08-41-2669]
BEACHES


Full text at: http://www.nrdc.org/water/oceans/ ttw/titinx.asp

["The chronically contaminated Doheny State Beach landed near the top of a list of the state's most polluted beaches, though the study also found that Southern California beaches were among those showing the greatest improvement. The report, based on U.S. Environmental Protection Agency data for 2007, showed that the percentage of ocean water samples in California that violated state standards for bacterial contamination dropped to 7 percent. That was down from 12 percent in 2006 and 10 percent in 2005, although much of the improvement, the group said, can be attributed to lack of rainfall; less rain means fewer contaminants washing downstream into the ocean." Orange County Register (July 30, 2008) 1.]

[Request #S08-41-2741]

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CALIFORNIA


Full text at: http://www.ppic.org/content/pubs/survey/S_708MBS.pdf

["A majority of Californians favor more oil drilling off the coast for the first time since oil prices spiked nearly three decades ago. The support by 51 percent of residents represents a shift caused by renewed Republican advocacy for drilling as well as motorists' reaction to soaring pump prices…. Those surveyed overwhelmingly support state requirements to reduce greenhouse gases by increasing the use of renewable energy from solar and wind sources and requiring carmakers, refineries and utilities to initiate tougher controls on emissions. Californians once again pick air pollution as the most important environmental problem. And more Latinos and blacks view it as a 'very serious' threat." San Francisco Chronicle (July 31, 2008) 1.]

[Request #S08-41-2757]

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CLIMATE CHANGE


["This scientific assessment provides the first comprehensive analysis of observed and projected changes in weather and climate extremes in North America and U.S. territories. Among the major findings reported in this assessment are that droughts, heavy downpours, excessive heat, and intense hurricanes are likely to become more commonplace as humans continue to increase the atmospheric concentrations of heat-trapping greenhouse gases. The Intergovernmental Panel on Climate Change previously evaluated extreme weather and climate events on a global basis in this same context. However, there has not been a specific assessment across North America prior to this report." Science Daily (June 20, 2008) 1.]

http://downloads.climatescience.gov/sap/sap3-3/sap3-3-final-all.pdf

Findings and Summary. 2 p.


Full text at:
http://www.plosone.org/article/fetchArticle.action?articleURI=info:doi/10.1371/journal.pone.0002502

["Two-thirds of California's unique plants, some 2,300 species that grow nowhere else in the world, could be wiped out... because of rising temperatures and changing rainfall patterns.... The species that cannot migrate fast enough to higher altitudes or cooler coastal areas could face extinction because of greenhouse gas emissions.... California's flora face a potential collapse.... As the climate changes, many of these plants will have no place to go."]

[Request #S08-41-2646]


"California's cities, counties and public agencies got an early preview of the ways they'll be asked to analyze greenhouse gases in new construction projects under the state's first-in-the-nation emission rules. Although actual regulations won't be adopted until 2010, the technical advisory warns local officials and the development community that the new rules are coming and that they better be ready…. The advisory urged agencies to determine the amount of greenhouse gases generated by proposed projects. The agencies then should decide whether the impact is significant and, if so, how to limit any potential damage…. But without any statewide rules as to what should be considered a significant impact of greenhouse gases, each agency will have to set its own standards, which can be a problem." San Francisco Chronicle (June 20, 2008) 1.

[Request #S08-41-2578]

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Full text at: [http://oaspub.epa.gov/eims/eimscomm.getfile?p_download_id=475107](http://oaspub.epa.gov/eims/eimscomm.getfile?p_download_id=475107)

"Global warming poses real risk to human health and the American way of life. Risks include more heat-related deaths, more heart and lung diseases due to increased ozone and health problems related to hurricanes, extreme precipitation and wildfires… The report found a likely increase in food and water-borne germs as the world warms and habitat ranges expand for some disease-causing organisms. Also, the inequities now found in the US health care system are likely to be exacerbated by global warming: Many of the expected health effects are likely to fall disproportionately on the poor, the elderly, the disabled and the uninsured. Global warming is expected to affect water supplies across the country, with reduced water flow in rivers, lower groundwater levels and more salt creeping into coastal rivers and groundwater." Reuters (July 21, 2008) 1.

[Request #S08-41-2701]

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"Carbon productivity is the amount of GDP produced per unit of carbon equivalents emitted. Increasing carbon productivity is the key to tackling the twin challenges of mitigating climate change and maintaining economic growth….We estimate that to meet commonly discussed abatement paths, carbon productivity must increase from approximately $740 GDP per ton of CO2 today to $7,300 GDP per ton of CO2 by 2050 -- a tenfold increase. This is comparable in magnitude to the labor productivity increases of the Industrial Revolution…. The histories of the industrial and information-technology revolutions show that with the right incentives and institutional structures, dramatic levels of change and innovation in the economy can occur, driving growth, raising living standards, and creating opportunities. Our research shows that most of the technologies required for a carbon revolution already exist."

[Request #S08-41-2665]

ENDANGERED SPECIES


"The court gave new protection to the state's endangered species, ruling unanimously that developers, loggers and other commercial interests may be required to compensate for unforeseen wildlife losses…. The court said the Department of Forestry had approved an 'unidentifiable' plan that was still a work in progress and then delegated its completion to the logging company… It said permits allowing companies to kill endangered and threatened species during the course of development should not make the industry immune from having to take future measures to compensate for unexpected wildlife losses…. The ruling means the state Department of Fish and Game can't tie its own hands and prevent itself from imposing mitigation in future years if circumstances change and require those measures to protect species." Los Angeles Times (July 18, 2008) 1.

[Request #S08-41-2697]
FORESTRY


"The forests of the future may need to be managed as much for a sustainable supply of clean water as any other goal -- but even so, forest resources will offer no 'quick fix' to the insatiable, often conflicting demands for this precious resource.… As both urban and agricultural demands for water continue to increase, the role of clean water from forests becomes better understood as an 'ecosystem service' of great value. Many factors -- changing climate, wildfires, insect outbreaks, timber harvest, roads, and even urban sprawl -- are influencing water supplies from forests. Preserving and managing forests may help sustain water supplies and water quality from the nation's headwaters in the future, but forest management is unlikely to increase water supplies." Science Daily (July 21, 2008) 1.

[Request #S08-41-2708]

Book. 194 p.
http://www.nap.edu/catalog.php?record_id=12223

Executive Summary. 24 p.
http://www.nap.edu/nap-cgi/report.cgi?record_id=12223&type=pdfxsum

GREEN HOUSE GASES


Full text at: http://www.pnas.org/content/105/29/9920.full.pdf

"Researchers propose injecting CO2 into deep-sea basalt formations, specifically a huge expanse of the rock under 8,000 feet of ocean on the Juan de Fuca plate in the Pacific Northwest.… Minerals in the rock would react with the CO2, forming stable carbonates. The deposits are blanketed by 1,000 feet of sediments that could block leaks. And the area is near the coast, so CO2 could be piped directly from power plants to injection sites. They estimate there is enough basalt to hold more than 120 years’ worth of industrial and power-plant emissions by the United States." New York Times (July 15, 2008) 1.

[Request #S08-41-2724]

"Officials from California, six other Western states and four Canadian provinces released the draft of a plan to set up a vast market for greenhouse-gas emissions that aims to ease the burden of the war on global warming. Starting in 2012, the members of the Western Climate Initiative would issue annual permits to firms that emit carbon dioxide and other greenhouse gases. The total supply of permits would ratchet down over time, giving companies two options: cut their own emissions or buy permits from other firms…. California officials are counting on that market magic to shrink the state's carbon footprint by 35 million metric tons by 2020. That's a fifth of the total reductions mandated under AB 32, the omnibus global-warming law passed in 2006." Sacramento Bee (July 24, 2008) 1.

Regional Cap-and-Trade Program. 10 p
http://www.westernclimateinitiative.org/ewebeditpro/items/O104F18808.PDF

Essential Requirements of Mandatory Report. 29 p.
http://www.westernclimateinitiative.org/ewebeditpro/items/O104F18825.PDF

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OCEAN RESOURCES


"West Coast governors urged the federal government to keep new oil drilling rigs out of their waters and to spend more money on programs to restore the health of the Pacific Ocean…. The document outlines ambitious goals for cleaning up coastal waters and beaches, restoring fisheries, preparing for rising sea levels and developing projects that harness energy from waves and tides, among other topics…. The governors' plan, nearly two years in the making, was born of frustration with the federal government's failure to follow the advice of two national commissions that detailed how to address such threats as over-fishing, coastal development and polluted runoff." Los Angeles Times (July 30, 2008) 1.

[Request #S08-41-2748]  

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WATER QUALITY


"The federal government's plans to clean up acres of polluted croplands where thousands of birds died in the 1980s could, if poorly managed, put shore birds at risk again. That plan would give a group of wealthy farmers a perpetual contract for irrigation water if they took on the cost of the clean up, which is estimated at more than $2.6 billion…. Westlands said that the agency was prepared to spend the $700 million estimated it would cost the private sector to fix the vexing problem, and would keep a close watch to ensure wildlife was protected. Farmers and the federal government have been fighting over the drainage mess since the 1980s, when thousands of birds died and were born without limbs after nesting in ponds of contaminated irrigation water." Associated Press (June 12, 2008) 1.

[Request #S08-41-2529]

WATER RESOURCES


Full text at: http://www.courtinfo.ca.gov/opinions/documents/S138974.PDF

"The state and federal governments can form a long-range plan for managing water shipments through the bay and delta region without examining the option of reducing exports to Central and Southern California, the court ruled.….. Although the justices cleared the way for a planning process for dams, reservoirs and other projects contemplated in the 30-year program, the ruling may not have much impact. CalFed, a group of 18 federal and state agencies formed in 1994 to work on long-term solutions to delta water problems, has made little headway and is being bypassed by combatants in the water wars." San Francisco Chronicle (June 6, 2008) 1.

[Request #S08-41-2398]

"Global warming could lead to larger changes in snowmelt in the western United States than was previously thought, possibly increasing wildfire risk and creating new water management challenges for agriculture, ecosystems and urban populations.Researchers discovered that a critical surface temperature feedback is twice as strong as what had been projected by earlier studies…. The heat trapping from elevated greenhouse gases triggers the warming, but the additional warming caused by the loss of snow is what really creates the big changes in surface runoff. Scientists have known about this general effect for years. The big surprise here is how much the complex topography plays a role, essentially doubling the threat to water resources in the West." Science Daily (July 16, 2008) 1.

WEATHER


"As the 21st century progresses, major cities in heavily air-conditioned California can expect more frequent extreme-heat events because of climate change…. When projected future changes in extreme heat and observed relationships between high temperature and electricity demand for California are mapped onto current availability, the researchers discovered a potential for electricity deficits as high as 17 percent during peak electricity demand periods…. Increases range from approximately twice the present-day number of extreme heat days for inland California cities such as Sacramento and Fresno, to up to four times the number of extreme heat days for previously temperate coastal cities such as Los Angeles and San Diego before the end of the century." Science Daily (July 14, 2008) 1.

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TRANSPORTATION

AVIATION


["Unmanned Aircraft Systems (UASs) are currently being used by federal agencies for border security, science research, and other purposes. Local governments see potential uses in law enforcement or firefighting and the private sector sees potential uses, such as real estate photography. UASs cannot meet aviation safety requirements, such as seeing and avoiding other aircraft. UASs lack security protection -- a potential challenge if UASs proliferate as expected after obtaining routine airspace access. FAA estimates that completing UAS safety regulations will take 10 or more years, but has not yet issued its program plan to communicate the steps and time frames required for providing routine UAS access."]

[Request #S08-41-2353]

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DRIVERS


["Hundreds of thousands of tractor-trailer and bus drivers in the U.S. carry commercial driver's licenses despite also qualifying for full federal disability payments, and some of those drivers have suffered seizures, heart attacks or unconscious spells. The problems threatening highway travelers persist despite years of government warnings and hundreds of deaths and injuries blamed on commercial truck and bus drivers who blacked out, collapsed or suffered major health problems behind the wheels of vehicles that can weigh 40 tons or more. The U.S. agency responsible for cracking down on unfit truckers, the Federal Motor Carrier Safety Administration, acknowledges it hasn't completed any of eight recommendations that U.S. safety regulators have proposed since 2001."]

[Request #S08-41-2702]

Report. 30 p.

Highlights. 1 p.

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FEDERAL FUNDING


Full text at: http://ncseonline.org/NLE/CRSreports/08Apr/RS22268.pdf

["This report describes FHWA assistance for the repair and reconstruction of disaster damaged highways and bridges or catastrophic failures (such as a bridge collapse). It begins with a brief discussion of the legislative origins of federal assistance and describes the Emergency Relief (ER) Program in its current form. The report then discusses eligibility issues and program operation. Finally, the report briefly describes the major findings of a recent Government Accountability Office report on ER."]

[Request #S08-41-2677]

SURFACE TRANSPORTATION


Full text at: http://www.wsdot.wa.gov/NR/rdonlyres/5A019EA4-50EF-4286-96F9-05398B52608A/0/_DR1_WCCC_TradeandTransportationStudy_COMPLETEweb.pdf

["The report explores freight-related needs and deficiencies in the seaports, airports, border crossings, and highways and rail corridors along the west coast of the United States…. This vital transportation network is being stressed by continued growth in freight volumes, driven by rapidly increasing Pacific Rim trade and the growing populations and economies of the Western region. Although individual states, metropolitan planning organizations, ports, and rail-roads within the West Coast region have examined these issues -- and have in many cases identified statewide, metropolitan, or facility-specific solutions -- there has been no systemwide examination of the freight-related needs and deficiencies in the West Coast transportation system as an integrated whole."]

[Request #S08-41-2680]
Dual-Mode Vehicle and Infrastructure Alternatives Analysis. By Christine Ehlig-Economides and Jim Longbottom, Texas Transportation Institute, Texas A&M University. (The Institute, College Station, Texas) April 2008. 136 p.


"The United States has a transportation challenge that requires addressing four issues simultaneously: traffic congestion, environmental pollution, safety, and energy security. A potential solution to these transportation challenges is the concept of an electrified guideway infrastructure providing energy in real time to automated vehicles. This project surveyed existing electrified advanced transportation concepts and selected five systems for evaluation of their technology readiness. None of the systems evaluated were judged ready for commercialization, but potential benefits of the technology warrant further development."

[Request #S08-41-2558]

TRUCKING INDUSTRY


"The American Trucking Associations said it plans to file a federal law suit against the ports of Los Angeles and Long Beach to stop new rules for truckers designed to decrease diesel fuel pollution…. The Port of Los Angeles' plan, coming into effect in October, would ban independent truckers from entering the port. The ATA argues it is an attempt to squeeze out independent motor carriers in favor of larger trucking companies…. The association will argue that the measures amount to interfering with how trucking companies operate and violates a 1995 federal law on interstate commerce." Reuters (July 28, 2008) 1.

[Request #S08-41-2737]

Complaint. 22 p.

Press Release. 1 p.