ENVIRONMENTAL DEFENSE FUND
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August 11, 2008

Mary D. Nichols, Chairman
California Air Resources Board
1001 I Street
Sacramento, CA 95812
(916) 445-5025 (Fax)

RE: Draft Scoping Plan Comments – Water

Dear Chairman Nichols,

Environmental Defense Fund (EDF) applauds the California Air Resources Board (CARB) on the release of the *Climate Change Draft Scoping Plan: A Framework for Change*. The draft Scoping Plan represents an important milestone in California's implementation of the landmark Global Warming Solutions Act of 2006 (AB 32), the first state-level cap on the greenhouse gas pollution that causes global warming.

EDF respectfully submits the following comments in response to the draft Scoping Plan, and looks forward to collaborating with CARB and other stakeholders in the coming months as further materials, including the evaluation supplements, are made available.

Sincerely,

Derek Walker
Director, California Climate Initiative
Environmental Defense Fund

Water Sector

Reducing greenhouse gas emissions associated with California's water sector is both a critical challenge and an exceptional opportunity. Several promising strategies emerged from the Climate Action Team WET-CAT process which should be included in the next version of the plan.

Water accounts for roughly 20% of energy use in California. The State Water Project (SWP) and the Central Valley Project (CVP), the largest water projects in California, convey water significant distances and require considerable energy to do so. In fact, the SWP is the single largest user of energy in California, consuming an average of 5 billion kWh/yr (about 2-3 % of all electricity consumed in California). Pumping one acre-foot of SWP water to Southern California requires, on average, approximately 3,000 kWh.[1] Opportunities to reduce these emissions through more efficient urban and agricultural water use and improvements in technology exist and must be pursued.

Environmental Defense Fund strongly recommends the following measures associated with the water sector be adopted in the Scoping Plan.

Improvements in statewide urban water use efficiency

Significant emissions reductions can be achieved through improved urban water conservation, but that will require more widespread implementation of existing water use efficiency Best Management Practices (BMPs). The State Water Resources Control Board must review, update and improve the BMPs of the California Urban Water Conservation Council (CUWCC) including the construction of a valuation protocol and verification process to ensure aggressive implementation of water conservation. Without both a valuation protocol and a rigorous verification process, California will remain unable to accurately track its progress towards achieving water use efficiency and will therefore be unable to determine its contribution to AB 32's greenhouse gas emission reduction mandate.

Verification of BMP implementation should be a minimum criterion to receive grant funds from Proposition 84 and other funding sources. We recommend that funding for those projects be prioritized based on potential for decreased water and energy demand, increased water and energy efficiency, and reduced GHG emissions. The Scoping Plan should explicitly recommend, at a minimum, the widespread implementation of the CUWCC's BMPs by all urban water agencies.

Furthermore, all water management and groundwater replenishment agencies and water, wastewater, and recycled water treatment agencies should assess their system's water and energy balance and submit these assessments to DWR/SWRCB as a component of BMP compliance.

[1] Anderson, C. 1999. Energy Use in the Supply, Use, and Disposal of Water in California. California Energy Commission, Sacramento, CA.

Finally, the Plan should explore whether carbon offsets could be available for water conservation projects linked to their greenhouse gas emissions savings, which would assist localities in implementing BMPs.

Establish and implement statewide agricultural water use efficiency objectives to reduce GHG emissions

While increasing urban water use efficiency is critical in reducing greenhouse emissions associated with the water sector, more must be done to improve agricultural water conservation, the greatest consumer of water in the state. Agriculture uses approximately 80 percent of the developed water supply in California, and groundwater pumping and irrigation techniques are huge energy consumers.[2] Significant energy savings can be achieved by reducing agriculture water use—particularly south of the Delta—since significant energy is used to convey water.

The Plan should make more specific recommendations to improve agricultural water use efficiency through the development of implementable and enforceable targets. Specifically, efficiency of irrigation systems through improved water measurement and irrigation scheduling, installation of micro-irrigation systems, shifting to lower-water use crops and other measures can translate into significant water savings and hence reductions in greenhouse gas emissions. While some BMPs have been developed by the Agriculture Water Management Council, their use is entirely voluntary. The Department of Water Resources oversees implementation of the CALFED Agriculture Water-Use Efficiency Program, but little has been done and nothing is enforced. The Scoping Plan should more explicitly state the importance improving agricultural water use efficiency in helping to meet the greenhouse gas emission reduction goals of the state.

Encourage integration of climate change into California water planning to reduce greenhouse gas emissions

All major water planning documents in California, including the California Water Plan Update, State Water Project Delivery Reliability Report, Urban Water Management Plans, and Integrated Regional Water Management Plans, as well as all FERC re-licensing, flood plans and Environmental Impact Reports, should include climate change projections and approaches to reduce greenhouse gas emissions. In particular, the Department of Water Resources should aggressively pursue and include a carbon-neutral energy portfolio which is tied to divestment and decommissioning of high GHG emitting power supplies.

[2] Department of Water Resources, California Water Plan Update: Bulletin 160-98