

## Comment 1 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.

First Name: Rick

Last Name: Parsons

Email Address: rickparsons4@hotmail.com

Affiliation: Leonard Rice Engineers, Inc.

Subject: Water Conservation

Comment:

I applaud California's efforts to address resource issues in the State that will hopefully spill over to prompt address of these issues throughout the western United States.

I provide the following comment regarding the Preliminary Recommendations on Water (Section II.B.8, page 28) from the perspective of a water engineer dealing with water scarcity issues throughout the intermountain west:

- The goal of a 20 percent reduction in water use appears to be primarily targeted through efficiency measures. Efficiency does not reduce water use, it only improves the (over)use of this scarce resource.
- Agricultural irrigation constitutes the vast majority of water use in the western United States. Lawn irrigation and outside irrigation in municipal areas represent the majority of water use, outside of water-intensive industries.
- In order to really reduce water use, the most effective measure in your arsenal is to put municipal users on irrigation rotations and to limit their outdoor water use. The combination of 1) allowing residential/municipal irrigation no more frequently than every other day, 2) precluding irrigation between 10 am and 6 pm, and 3) hiring personnel to enforce these restrictions and issues fines for offenders (with escalation of fine amounts for repeat offenders) can and will work. Similar efforts by the Denver Water Board has resulted in 30 percent reduction in outdoor water use within its service area.

Proximity to the ocean combined in some locations in California with a temperate Mediterranean climate may seem to signify an excess of water. The reality, though, is the arid west grows and is alive only because of man's conveyance of irrigation water. The extent to which the actual water use is reduced, with or without efficiency measures, is the true barometer of the future growth and vitality of the economic engine underlying that growth.

I appreciate the opportunity to comment and welcome any comments or questions you may have.

Respectfully yours,  
Rick Parsons  
Associate  
Leonard Rice Engineers, Inc.  
303.455.9589  
1.800.453.9589  
303.455.0115 (fax)  
www.lrcwe.com

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-03 05:08:09

No Duplicates.

## **Comment 2 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Frances

Last Name: Mathews

Email Address: mathewsfran@sbcglobal.net

Affiliation: League of Women Voters

Subject: Governor's Delta Vision Task Force

Comment:

This task force has made an admirable start on water use in the state. It needs to be implemented. We need to make a serious effort to save water in Southern California, and we need to improve the Delta Delivery system.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-07 11:03:23

No Duplicates.

### **Comment 3 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: James

Last Name: Miller

Email Address: jrusmiller@yahoo.com

Affiliation:

Subject: Using Title 22 Water

Comment:

There should be a specified and quantified mechanism for the CO2E offsets from using Title 22 water instead of potable water. This would provide an financial incentive for the use of water which has technical challenges in many applications.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-07 16:49:06

No Duplicates.

## Comment 4 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.

First Name: Harvey  
Last Name: Sherback  
Email Address: harveysherback@yahoo.com  
Affiliation:

Subject: Re: A Solar Solution To California's Water Shortages  
Comment:

California Air Resources Board  
ARB Board of Directors  
Mary D. Nichols  
Chairwoman

July 17, 2008

Dear Chairwoman Nichols, ARB Board of Directors & Staff,

Thanks for your many good works, your strong environmental stand is much appreciated. Here in California, we are told that the snow packs on our mountain tops are shrinking. There's less and less fresh water to share between our growing populations, farmers, ranchers and wildlife. Water is life.

The following article alerted me to the problem concerning the oil fired, natural gas, coal and nuclear power plants. They all use copious amounts of our nation's fresh water resource.

<http://planetsave.com/blog/2008/01/23/water-shortage-could-dry-up-nuclear-power-plants-in-southeast/>

Headline: U.S. WANTS TO CUT POWER PLANT WATER USAGE

Wed, 18 Jul 2007 20:32:16 GMT  
Science Technology News  
Author: Science News Editor

WASHINGTON, U.S. Department of Energy officials said thermoelectric power plants using coal, oil, natural gas and nuclear sources require significant amounts of water for cooling and are a major competitor for water resources. A 2000 study found electric power plants were the second largest U.S. user of fresh water, withdrawing 136 billion gallons of fresh water daily. Only agriculture used more water.

Energy Department officials said the goal is to achieve a "50 percent" reduction in power plant fresh water usage by 2015.

Copyright 2007 by UPI

The full article:

<http://www.earthtimes.org/articles/show/84367.html>

Solar electric roof shingles and solar electric panels use "no" water in the generation of clean renewable electricity. They have no moving parts, make no noise, cause no chemical reaction, require virtually no maintenance and are guaranteed on average for 25 years.

When one factors in the true cost of generating electricity including the use of water as well as the production of greenhouse gases and other toxic emissions, solar electricity leads the field with clean, low cost, renewable energy.

Governor Schwarzenegger has recently told us that due to climate destabilization, forest fires aren't just seasonal anymore, they're year round. This will add new competition for our already strained precious water resources.

California can improve its flexibility to cope with an uncertain water future by working to seriously reduce demand while practicing environmental stewardship.

Harvey Sherback

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-17 07:01:27

No Duplicates.

## **Comment 5 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Martin

Last Name: Anding

Email Address: m.anding@verizon.net

Affiliation:

Subject: Water "public good charge"

Comment:

No matter what AL Gore says global warming is not happening and not a threat. Sorry Al. This whole exercise is based on a falsehood. But that's not up for discussion is it?

So why tax water? There is no carbon in H<sub>2</sub>O. Food has lots of carbon (carbohydrates?) So why should food escape a "public good charge". How about sodas? They are full of manufactured CO<sub>2</sub>. Let's tax fats, wood, cotton, etc. Hell, tax everything. Let's discourage life in general. Tax babies. Tax pets. Tax, Tax, Tax!

Taxing water doesn't make much sense does it? You should feel stupid proposing such a thing.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-17 18:28:41

No Duplicates.

## **Comment 6 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Richard J

Last Name: Vielbig

Email Address: ricardo\_maria@peoplepc.com

Affiliation: Democrat & "Broadminded"

Subject: Water

Comment:

We who live in the West know that water is the most precious commodity. Definite measures need to be taken to "restrict" use of this valued resource by recreational establishments like golf courses, home owners' lawns and other such wasteful uses of this precious resource. When I was stationed @ Holloman AFB in NM, the practice was: water the golf course with "gray water". Use only desert/arid friendly vegetation, restrict the use of toilet water, clothes washing, etc. to use water "frugally". The CARB needs to adopt and apply such measures to all water users here in CA. Even agriculture can "reuse" water; it's done on some farms in the semiarid agricultural areas of Washington & Oregon. CA needs to adopt and apply these measures, too.

And by all means keep our air "clean" - pristine, if possible. Compel the auto industry and all other industries to reduce pollution to "0"

Richard J. Vielbig

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-28 21:14:05

No Duplicates.



## Comment 7 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.

First Name: Brent

Last Name: Eidson

Email Address: beidson@sandiego.gov

Affiliation: City of San Diego

Subject: Water - Funding assurances

Comment:

1) The document states on page 12 that the State of California is establishing a target of reducing its greenhouse gas emissions by a minimum of 30 % by 2020 below its estimated business-as-usual emissions - approximately a 15% reduction from current levels. At the top of page 13, it notes that water projects will be among the potential state areas targeted for GHG reductions. We assume that the Department of Water Resources (DWR) has been tasked with achieving GHG efficiencies with its operations of the State Water Project (SWP). If so, we request that the financial costs to SWP water associated with this effort be revealed sooner rather than later. As water agencies prepare their 2010 Urban Water Management Plans (UWMPs), it would be very helpful to be able to incorporate the associated cost increases of imported water into local decision-making. Therefore, the information should be released by early 2009 at the latest in order to factor into 2010 UWMPs. This request also applies to the concept of carbon fees or any other new energy fees that would be embedded in the cost of transporting water. Local water agencies need to understand the cost implications of CARB's proposals in order to make sound water supply source decisions.

2) The Scoping Plan does not specifically address anticipated decreases in the renewable power source of hydropower. The DWR's Climate Change report identifies reduced hydropower as an anticipated result of climate change. Is (or should) the decreased future availability of an existing renewable energy source be calculated into the goals for additional renewable energy sources?

3) Pumped storage of water in reservoirs has been an effective tool in meeting peak energy demands. While considered a "green" energy source, the net GHG emissions produced is greater with pumped storage than without. It would be helpful for the CARB to provide early guidance as to viability of pumped water storage in the future.

4) We understand the attraction of a Public Goods Charge as suggested on page 28. However, we are concerned that such a charge is premature and request that CARB collaborate with water industry representatives such as they have done with the CWCCG in the wastewater sector. The City of San Diego recommends collaboration with the California Urban Water Agencies (CUWA) to more thoroughly scope out the design of such a charge if there is to be one. Of primary concern is that local funds will be collected to benefit the efforts of unrelated outside entities. We need assurances that local funds will not be inappropriately redirected.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-30 11:25:20

No Duplicates.

## **Comment 8 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: David

Last Name: Lippman

Email Address: dlippman@lvmwd.com

Affiliation: Las Virgenes Mun. Water District

Subject: Climate Change Draft Scoping Plan Comments

Comment:

Attaching pdf comment letter.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/8-ltr.\\_california\\_air\\_resources\\_board.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/8-ltr._california_air_resources_board.pdf)

Original File Name: Ltr. California Air Resources Board.pdf

Date and Time Comment Was Submitted: 2008-07-31 07:51:08

No Duplicates.

## **Comment 9 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Cory

Last Name: Brennan

Email Address: cory8570@yahoo.com

Affiliation: Green Leadership Consortium

Subject: Water

Comment:

Los Angeles has enough rainwater coming into the basin to provide the water needs for its current population IF:

1. Water catchment laws are implemented and regulation that chills water catchment is revised or removed.
2. Government and private sector money, energy and time going into pie in the sky solutions like ocean desalinization and cloud seeding needs to go into creating water catchment and many areas in LA that allow the water to soak into the aquifer. This can be done with permeable pavement in canals and other areas, swales in park systems and other areas, water catchment on building roofs, etc, etc.
3. Laws regarding irrigation need to be tightened up. Water waste especially needs to be outlawed and fines implemented for people who carelessly let water run down the street instead of going into their green areas. Water restrictions on irrigation will encourage water saving irrigation approaches which are broadly available and just need to be used.
4. An aggressive marketing campaign needs to be done on the advantages of reducing water needs, reusing water, and catching rainwater.
5. Irrigation laws need to be passed for agriculture as well. There are huge amounts of water being wasted - I drive by fields that have huge water leaks coming from their pipes, veritable streams running down roads from these leaks. They are also irrigating in the middle of the day and other water wasteful practices. Laws should be implemented requiring swales and other water catchment in fields to prevent runoff, which will also handle soil depletion and pollution issues.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-07-31 08:21:21

No Duplicates.

## **Comment 10 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Elaine

Last Name: Archibald

Email Address: cuwaexec@sbcglobal.net

Affiliation: California Urban Water Agencies

Subject: Comments on Climate Change Draft Scoping Plan

Comment:

Please see attached comments from the California Urban Water Agencies.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/10-073108\\_cuwa\\_comments\\_on\\_arb\\_scoping\\_plan.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/10-073108_cuwa_comments_on_arb_scoping_plan.pdf)

Original File Name: 073108 CUWA Comments on ARB Scoping Plan.pdf

Date and Time Comment Was Submitted: 2008-07-31 15:59:05

No Duplicates.

## **Comment 11 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Linda  
Last Name: Villatore  
Email Address: villatore@comcast.net  
Affiliation:

Subject: Water conservation should be increased  
Comment:

We are still using water wastefully. According to a recent survey, Sacramento is one of the worst cities in the country in terms of overuse of its available water. A public awareness campaign should encourage:

Grey water reclamation methods used and incentives to be installed  
Don't run water while brushing teeth  
Take Short showers  
Monitor and limit time and amount of plant watering commercially and residentially  
Grow native plants and low water use plants.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-01 08:47:16

No Duplicates.

## **Comment 12 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Michael

Last Name: Wallis

Email Address: wallis@ebmud.com

Affiliation: East Bay Municipal Utility District

Subject: Comments on AB 32 Draft Scoping Plan

Comment:

Please find attached a pdf with EBMUD's comments on the AB 32 Draft Scoping Plan.

Please call Doug Wallace at (510) 287-1370 if the attachment was not received or if you have any questions.

Thank you.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/12-comments\\_on\\_ab\\_32\\_draft\\_scoping\\_plan0001.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/12-comments_on_ab_32_draft_scoping_plan0001.pdf)

Original File Name: Comments on AB 32 Draft Scoping Plan0001.pdf

Date and Time Comment Was Submitted: 2008-08-01 11:38:13

No Duplicates.

## **Comment 13 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Yvette

Last Name: Rincon

Email Address: yrincon@cityofsacramento.org

Affiliation: City of Sacramento

Subject: City of Sacramento

Comment:

City of Sacramento Comments on Water

The City of Sacramento currently has various water conservation programs in place including education of the public and businesses on landscaping and community design of residential and commercial developments to reduce water waste.

1. Public Goods Charge on Water. In general, we question the cost-effectiveness of the proposed public goods charge. However, if this is the direction ARB is going, we would strongly support local control over the amount of the charge and local control over how the funds are used. Cities across the State are different and have unique challenges and opportunities, therefore, we would strongly oppose a one size fits all approach to the public goods charge on water.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-01 11:59:37

No Duplicates.



## **Comment 14 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Ronnie

Last Name: Cohen

Email Address: rcohen@nrdc.org

Affiliation: NRDC

Subject: NRDC Comments on Water in Draft Scoping Plan and Appendices

Comment:

NRDC respectfully submits these comments on water in the Draft Scoping Plan and Appendices.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/14-nrdc\\_comments\\_on\\_water\\_in\\_draft\\_scoping\\_plan\\_plus\\_appendices.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/14-nrdc_comments_on_water_in_draft_scoping_plan_plus_appendices.pdf)

Original File Name: NRDC Comments on Water in Draft Scoping Plan plus Appendices.pdf

Date and Time Comment Was Submitted: 2008-08-01 13:53:23

No Duplicates.

## **Comment 15 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Stephanie

Last Name: Cheng

Email Address: scheng@ebmud.com

Affiliation:

Subject: Draft AB 32 Scoping Plan - Water Sector

Comment:

Attached are comments from the California Wastewater Climate Change Group.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/15-1-aug-2008\\_cwccg\\_scoping\\_plan\\_comment\\_letter\\_\\_final\\_.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/15-1-aug-2008_cwccg_scoping_plan_comment_letter__final_.pdf)

Original File Name: 1-Aug-2008 CWCCG Scoping Plan Comment Letter \_final\_.pdf

Date and Time Comment Was Submitted: 2008-08-01 15:12:38

No Duplicates.

## **Comment 16 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Carol

Last Name: Misseldine

Email Address: cmisseldine@comcast.net

Affiliation: Green Cities California

Subject: Comments on Water Sector

Comment:

Green Cities California comments on the Water sector of the AB 32  
Draft Scoping Plan, attached.

Carol Misseldine  
Coordinator

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/16-gcc\\_water\\_sector\\_comments.ab\\_32\\_draft\\_scoping\\_plan.doc](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/16-gcc_water_sector_comments.ab_32_draft_scoping_plan.doc)

Original File Name: GCC Water Sector Comments.AB 32 Draft Scoping Plan.doc

Date and Time Comment Was Submitted: 2008-08-01 15:22:52

No Duplicates.

## **Comment 17 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Robert

Last Name: Wilkinson

Email Address: wilkinson@es.ucsb.edu

Affiliation:

Subject: Comments on AB 32 Draft Scoping Plan and Appendices

Comment:

Submitted by NRDC on behalf of commenter.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/17-letter\\_from\\_bob\\_wilkinson\\_-\\_final.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/17-letter_from_bob_wilkinson_-_final.pdf)

Original File Name: Letter from Bob Wilkinson - final.pdf

Date and Time Comment Was Submitted: 2008-08-01 16:15:15

No Duplicates.

## **Comment 18 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Richard

Last Name: Horner

Email Address: rhorner@msn.com

Affiliation:

Subject: Comments on AB 32 Draft Scoping Plan and Appendices

Comment:

Submitted by NRDC on behalf of commenter.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/18-rich\\_horner\\_ventura\\_report.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/18-rich_horner_ventura_report.pdf)

Original File Name: Rich Horner Ventura report.pdf

Date and Time Comment Was Submitted: 2008-08-01 16:17:02

No Duplicates.

## **Comment 19 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Robert

Last Name: Wilkinson

Email Address: wilkinson@es.ucsb.edu

Affiliation:

Subject: Comments on AB 32 Draft Scoping Plan and Appendices

Comment:

Submitted by NRDC on behalf of commenter.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/19-letter\\_from\\_bob\\_wilkinson\\_-\\_final.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/19-letter_from_bob_wilkinson_-_final.pdf)

Original File Name: Letter from Bob Wilkinson - final.pdf

Date and Time Comment Was Submitted: 2008-08-01 16:22:11

No Duplicates.

## **Comment 20 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: David  
Last Name: Bolland  
Email Address: daveb@acwa.com  
Affiliation: Association of California Water Agencies

Subject: Comments on Scoping Plan  
Comment:

Comments from the Association of California Water Agencies

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/20-arb\\_climate\\_change\\_scoping\\_deb.doc](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/20-arb_climate_change_scoping_deb.doc)

Original File Name: ARB\_Climate\_Change\_scoping\_deb.doc

Date and Time Comment Was Submitted: 2008-08-01 16:37:09

No Duplicates.

## **Comment 21 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Keith

Last Name: Roberts

Email Address: kroberts@cityofsacramento.org

Affiliation:

Subject: Water comments

Comment:

Water

1. Page 28, Public Goods Charge on Water: The PGC should be a flat rate that applies equally throughout the State. Alternatively, for residential customers, consider a tiered rate that increases with increased usage. Also, since PGC's would be new to water utilities, consider ramping up over time, starting with the largest water purveyors that have end-use customers.

2. Page 28, Public Goods Charge on Water: Please take into consideration that water rates within the state are tremendously diverse; some areas being 20 times greater than other areas and that projects that are cost effective in one region of the State are not necessarily cost effective in another region; yet on the whole, California is an arid state. To address this problem:

- without affecting any local jurisdictions water rates to a great extent
- to foster creativity which should save water better than mandatory reduction targets

recommend that approximately [75%] of the PGC that is collected by a jurisdiction is used by the same jurisdiction to improve water efficiency within its service territory. The remaining [25%] should be deposited into an account that is used to competitively fund water conservation projects anywhere in the state; competitiveness should be based primarily on gallons of water saved per dollar invested; other secondary considerations might include

- Energy intensity of water being saved
- Quality of water being saved.
- Ability to defer or eliminate major Statewide water infrastructure projects
- Other life cycle issues

3. Page 28, Public Goods Charge on Water: recommend that the proposed PGC would include Federal water because:

- Federal climate legislation is in the works
- Federally subsidized water provided by Bureau of Land Management (and power provided by Western Area Power Administration) undercuts the need to reduce CO2 by artificially making projects that are cost effective everywhere else not cost effective where subsidized water and power are provided.
- PGC on Federal water (and power) should only be applied if the Federal water customer is an end-user. If Federal water is provided to a water purveyor, that purveyor will have a PGC of their own.

Attachment:



Original File Name:

Date and Time Comment Was Submitted: 2008-08-01 16:56:46

No Duplicates.

## **Comment 22 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Lisa

Last Name: Novotny

Email Address: lnovotny@lakewoodcity.org

Affiliation: City of Lakewood, CA

Subject: City of Lakewood comments on Water section of draft scoping plan

Comment:

Here are the city of Lakewood's comments on the water section of the draft scoping plan:

The state's Climate Change Draft Scoping Plan contains an element related to water. The Plan calls for 6 initiatives to reduce greenhouse gas emissions:

1. Water Use Efficiency: a reduction in water use of 20 percent per capita by 2020. The plan expects that a 20 percent reduction will reduce water use by 1.75 million acre feet, which would result in a reduction of energy use to produce and deliver water to customers by 1.4 MMTCO<sub>2</sub>E (Million Metric Tons of CO<sub>2</sub> Emitted).

- The water portion of the plan only addresses the urban water use; agricultural reductions are not adequately addressed in the Agriculture section of the appendices. The agricultural community consumes 80% of the water used in California. The initial scoping plan does not require any required efficiencies related to the enormous amount of energy for crop irrigation, or irrigation pumping. This huge statewide drain on water and energy is given a pass.

- Water conservation efforts carried southern California through the drought in the early 1990s. Many residents replaced water guzzling devices, planted drought tolerant landscape and changed water habits during this time. The push to reduce water use an additional 20 percent per capita, would require draconian measures and lead to unkempt landscape. A typical Lakewood family uses 12,000 gallons in a month. A 20 percent per capita reduction would require an individual to save 600 to 1,000 gallons a month. This type of conservation, in a non-drought situation, would impact the quality of life for our residents.

- A 20 percent per capita reduction would force water utilities into the enforcement mode. Staff would be required to monitor water use, conduct mandatory water audits and serve as the water police.

- The city of Lakewood is essentially built out. Changes in landscape, and water using devices, with or without a subsidy, will cost the typical homeowner thousands of dollars. To retrofit these homes with solar water heaters, water efficient washing machines and expensive irrigation timers would save water, but the costs would outweigh the benefits.

- Some of the water efficiency elements are targeted toward water runoff and wastewater reuse. These elements need to be separate from those that are related to water supply/demand.

2. Water Recycling: increase in use of recycled water from 10 to 23 percent by 2030.

- Lakewood's recycled water system was initiated in 1989. It saves enough potable water savings to serve approximately 880 Lakewood families. This initiative does not give credit for the efforts already accomplished by water agencies that have already spend millions of dollars to implement a recycled water system.

- Approximately 70% percent of the potential recycled water uses have been connected to the existing system. Expanding the recycled water system to reach the small number of potential schools, parks and parkways is currently not cost effective without grant money or rebates for recycled water use. Expansion of the city's recycled water system would cost an estimated \$2.5-3.5 million, and would result in an additional 60 to 100 acre feet of recycled water used annually.

- The recycled water customer base is limited by regulation to supply to non-residential landscape and other commercial uses. Expansion of use of the existing distribution system would require regulation changes by the California Department of Public Health and the LA County Health Department, such as expansion of the use of dual piping in commercial buildings and irrigation use in residential areas beyond irrigation of professionally managed common areas. The increase in the ratio of recycled water used for groundwater recharge would also require a philosophical change by the state's Department of Public Health.

- The state has not placed a dollar value on this initiative, which makes it difficult to make constructive comments. Are we to assume unlimited funding?

3. Water System Energy Efficiency: The proposed scoping plan set a target of a 20 percent reduction in energy use from the 2006 level for water related production, including water waste treatment. The state expects utilities to increase pumping efficiency by evaluating the energy use to determine feasibility of efficiency programs and better manage the energy demand associated with operating the water system.

- Water utilities are experts at monitoring and altering pump efficiency as a method to save money. This is an on going function of the department in an effort to keep water rates low and water reliability high. The market should be the driver for utilities to implement energy efficiencies in the water system. The city of Lakewood water utility routinely performs wire-to-water efficiency tests of its water production facilities. Production facilities not meeting the required level of efficiency are either replaced or rehabilitated. The water utility staff works with Southern California Edison to operate the most energy efficient facilities during peak energy periods and the remaining at off peak hours. Lakewood is always looking for energy alternatives to reduce dependence on the electrical grid. The water utility is installing a solar array to operate a water storage facility during daylight hours.

4. Reuse Urban Runoff: the capture and distribution of stormwater runoff. In addition or vegetated channels to allow for the infiltration of stormwater into the groundwater table, the scoping plan calls for the development of regional and neighborhood infiltration facilities.

- The quality of urban runoff is not adequate for groundwater recharge or immediate reuse. This would require the construction of water treatment facilities at an unknown cost to the community.

- The 0.2 MMTCO<sub>2</sub>E saved by this initiative does not have a cost associated with it, which makes it difficult to provide constructive comments.

5. Increase Renewable Energy Production from Water: This initiative requires the capture and use of gases from wastewater treatment to be used to for energy generation.

- The city is not in the wastewater business, and will not comment on this initiative.

6. Public Goods Charge for Water: Water utilities would collect a flat fee, between \$10-50 annually, from water customers to be used to pay for programs to reduce water-related GHG emissions. The flat fee would not be charged to low-income residents, defined as customers on lifeline billing. The utility would collect the fee, but the plan seems to indicate that the revenue would be forwarded to the state for local, regional and statewide programs.

- If the state wants to tax the citizenry to pay for the implementation of water efficiency measures then the state should be the collectors of these funds. This initiative places the burden of collection on an organization that might not obtain any benefit from the fee. If low-income residents are not going to be required to pay the fee the "more effluent" ratepayers will bear the entire cost.

- The utilities must respond to the ratepayers' negative response to the increase in water rates. Utilities are already struggling with the balance between the cost of operation and infrastructure needs related to aging systems and capital requirements to meet new water quality regulations. Collecting an additional fee will appear like the utility is gaining revenue, but those funds will not be available to the utility for direct benefit to its customers.

- The initiative calls for non-payment of the public goods charge on water for those individuals that are "lifeline" customers. Most water utilities don't have lifeline customers. In fact most municipal water utilities no longer have a "free" quantity of water associated with the basic charge for service fee, which allows every residential customer a water allowance without payment of a quantity charge.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-07 17:07:54

No Duplicates.

## **Comment 23 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Elaine

Last Name: Archibald

Email Address: cuwaexec@sbcglobal.net

Affiliation: California Urban Water Agencies

Subject: CUWA Comment Letter on AB-32 Scoping Plan Appendices

Comment:

Please find attached the comment letter from California Urban Water Agencies on the AB-32 Scoping Plan Appendices.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/23-cuwa\\_comment\\_letter\\_on\\_scoping\\_plan\\_appendices\\_080808.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/23-cuwa_comment_letter_on_scoping_plan_appendices_080808.pdf)

Original File Name: CUWA Comment Letter on Scoping Plan Appendices 080808.pdf

Date and Time Comment Was Submitted: 2008-08-08 13:40:36

No Duplicates.

## **Comment 24 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: R.M. Cook

Last Name: Barela

Email Address: cseghers@arb.ca.gov

Affiliation: Jurupa Community Services District

Subject: California Global Warming Solutions Act 'Draft" Scoping Plan  
Comment:

Please See Attached letter

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/24-7\\_15\\_08\\_jurupa.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/24-7_15_08_jurupa.pdf)

Original File Name: 7\_15\_08\_jurupa.pdf

Date and Time Comment Was Submitted: 2008-08-11 14:25:38

No Duplicates.

## **Comment 25 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Patrick

Last Name: Griffith

Email Address: pgriffith@lacsds.org

Affiliation: Los Angeles County Sanitation Districts

Subject: LACSD Comments on the ARB Draft Scoping Plan: Water Strategies  
Comment:

LACSD offers the following comments on the discussion concerning Water Strategies in the Draft Scoping Plan:

1. Page C-81: We believe it is necessary for CARB to review the actions taken by other state agencies under the umbrella of climate change to make sure that they are consistent with the goals of the Scoping Plan. We truly wonder if the WATER section accomplishes the goal stated in the Overview (to develop additional [water] supply reliability), and would like to see more discussion of this in the Scoping Plan.

2. Page C-82: The wastewater treatment renewable energy resources estimate of 2,100 GWh/yr. is very optimistic given that continuous duty reciprocating engine drivers, the primary choice of wastewater treatment plant operators, are very difficult to install under today's AQMPs and distributed generation regulations.

3. Page C-83: Section W-2 of the Draft Scoping Plan contains recommendations for reduction of GHG emissions from increased usage of recycled water. We fully agree that increased implementation of recycled water is an important strategy for reducing GHG emissions, due to the much lower energy demand to supply recycled water versus imported water in many parts of the state.

However, the Scoping Plan proposes that increased usage of recycled water should be accomplished by amending National Pollution Discharge Elimination System (NPDES) permits to require preparation and implementation of water recycling plans at wastewater treatment plants. Communities that rely on imported water and where water recycling would otherwise require less energy than current supplies would be targeted. We disagree with this proposal because it is overly focused on forcing change through regulation of recycled water producers. It is overly simplistic to impose mandates on wastewater treatment plants and expect these mandates to lead to increased water recycling. Use of such a strategy presumes that the major reason that greater water recycling is not occurring in these areas is because the wastewater agencies have failed to plan for it or are somehow recalcitrant. We submit that this is generally not the case. For the majority of agencies, preparation of a water recycling plan would not serve as a useful tool to increase recycled water usage.

The only case where it might do so is when agencies face significant obstacles to expansion of recycled water usage that are of a political nature, and that is rarely the case.

There are many factors that influence the ability to reuse water, including the level of treatment of the water, proximity to customers and use areas, and permitting requirements imposed by the Regional Water Quality Control Boards and the California Department of Public Health. Wastewater agencies alone cannot determine how and where their recycled water is used. There are a

number of statutory provisions that limit a wastewater agency's ability to unilaterally maximize recycled water (e.g., Public Utilities Code Section 1501 and Water Code Sections 13579-13583). Water recycling involves a number of agencies to make a successful project. A wastewater agency produces the recycled water, a water wholesaler transports it, a water retailer sells it, and an end user buys and uses it. Local, state, and federal entities participate in funding. Regulators permit the use of the recycled water and assure the protection of public health and water quality.

If any one of these partners does not participate fully, it is unlikely that a recycled water project will be successful. Finally, it is important to recognize that the cost of obtaining and serving recycled water in relation to the costs of alternatives, including local groundwater, conservation, and other supplies, is one of the most important drivers that determines how much water recycling occurs.

In lieu of proposing to increase recycled water usage by putting the entire burden on wastewater agencies, we believe that the approach to increasing recycled water usage should align with the approach to increasing water use efficiency proposed in Appendix C Section W-1. That is, the DWR should coordinate with the appropriate parties, such as the water boards, the California Department of Public Health, and affected stakeholders, to develop a Recycled Water Action Plan. This Plan should utilize a range of tools, including funding and other incentives, technical assistance, public education and outreach, permitting flexibility, and regulatory approaches to increase recycled water usage. For wastewater treatment plants located in areas using energy intensive water supplies, development of a water recycling plan could be required when significant institutional obstacles to otherwise feasible recycled projects or expanded recycling projects are identified.

4. Pages C-83, C-84: As water quality regulations overall become increasingly stringent and with increased pressures for water recycling, treatment plants are driven towards more advanced treatment standards, often beyond the tertiary treatment considered "advanced" not too many years ago. The extra effort required to reach these water quality targets greatly increases plant energy usage with subsequent increases in GHG emissions. When assessing the advantages of local use of reclaimed water vs. imported water, the actual greenhouse gas reductions may fall short of initial expectations unless the extra energy needed for advanced treatment is taken into consideration. The ARB and WET-CAT should not neglect the extra energy requirement needed for advanced treatment in their estimates of the greenhouse gas benefits of reclaimed water over imported water.

5. Page C-84: Should the Scoping Plan ultimately approach water system energy efficiency using an energy intensity basis much like the LCFS, the options to comply with water cycle energy intensity targets should be no less creative than what exists for the LCFS including averaging of supplies and use of credits in addition to the tools (shifting loads offpeak, intermittent renewable generation, etc.) mentioned on this page.

6. Page C-86: Section W-5 of the Scoping Plan addresses increased renewable energy production from water. We fully agree that production of available renewable energy from the water sector should be maximized. In particular, gases generated during treatment of solids at wastewater treatment plants should be used for energy production to the maximum extent possible. However, state and local air quality rules governing distributed generation of energy hamper efforts to maximum this renewable source of energy. In particular, these rules limit usage of reciprocating engines to harness the energy due to stringent emission standards on this equipment. The Scoping Plan should include an effort to review such rules and determine whether they can be amended to better encourage usage of this energy source. Further, for



clarity, references in the Scoping Plan to "gases emitted from decomposing organic wastes" should be changed to "gases emitted during treatment of solids at wastewater treatment plants." The term "gases emitted from decomposing organic wastes" is overly broad and could be interpreted to include, say, gases produced at landfills during waste composition.

7. Page C-86: Section W-5: The text mentions the CEC's PIER program estimates statewide generation potential from undeveloped in-conduit hydroelectric and wastewater treatment renewable energy resources at a total of 2,100 GWh per year. The water/wastewater renewable potential components should be kept separate to better focus the strategies being considered.

8. Page C-86: Energy recovery from decomposing organic wastes in wastewater systems typically face a lot of community opposition. CARB's inserting themselves into the permitting and public review process as a resource to the project proponent would assure a higher percentage of renewable resource projects actually get built.

9. Page C-87: Section W-6 proposes a public goods charge for water to raise funds for reducing GHG emissions resulting from capturing, storing, conveying, treating, and disposing of water. We would like to note that the proposed funding of such a charge would provide \$100 million to \$500 million per year and is only a very small fraction of the funds that would be necessary to accomplish the actions proposed for reducing the water sector's GHG emissions. If agencies are to be encouraged to generate more tertiary treated effluent as part of the Scoping Plan, some of the monies should go to support those efforts.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-08-11 14:30:46

No Duplicates.

## **Comment 26 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Noah

Last Name: Garrison

Email Address: ngarrison@nrdc.org

Affiliation: NRDC

Subject: Comments on Water Sector Appendices

Comment:

Attached analysis of Low Impact Development under Urban Water Reuse  
Classification

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/26-nrdc\\_lid\\_comments\\_ab32\\_8-11\\_final.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/26-nrdc_lid_comments_ab32_8-11_final.pdf)

Original File Name: NRDC LID Comments AB32 8-11 Final.pdf

Date and Time Comment Was Submitted: 2008-08-11 16:47:43

No Duplicates.

## **Comment 27 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Robb

Last Name: Whitaker

Email Address: rwhitaker@wrld.org

Affiliation: Water Replenishment District of Southern

Subject: Low - Impact Development (LID)

Comment:

WRD met with the Natural Resources Defense Council and received a presentation of their Low-Impact Development (LID) program. The LID program can provide increase capture and infiltration of stormwater. In the WRD service area in the Los Angeles Coastal groundwater basin, this can reduce the need to import water through the California State Water Project Aqueduct and the Colorado River Aqueduct watershed to replenish groundwater supplies. This increases local reliability of groundwater supplies. Reducing demand for water pumped through these aqueducts can also reduce greenhouse gas (GHG) emissions associated with the use of those facilities. WRD believes that there is a significant potential benefit through the LID program that warrants further analysis by CARB.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/27-lid\\_letter\\_to\\_carb.doc](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/27-lid_letter_to_carb.doc)

Original File Name: LID Letter to CARB.doc

Date and Time Comment Was Submitted: 2008-08-12 08:36:40

No Duplicates.

## **Comment 28 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Derek  
Last Name: Walker  
Email Address: dbwalker@edf.org  
Affiliation: Environmental Defense Fund

Subject: EDF - Water comments  
Comment:

Please accept the attached water comments from Environmental Defense Fund on the AB 32 draft Scoping Plan.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/28-edf\\_-\\_water\\_comments.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/28-edf_-_water_comments.pdf)

Original File Name: EDF - Water comments.pdf

Date and Time Comment Was Submitted: 2008-08-12 15:18:31

No Duplicates.

**Comment 29 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Randle  
Last Name: Kanouse  
Email Address: cseghers@arb.ca.gov  
Affiliation: East Bay Municipal Utility District

Subject: AB 32  
Comment:

please see attached letter

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/29-7\\_15\\_08\\_ebmud.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/29-7_15_08_ebmud.pdf)

Original File Name: 7\_15\_08\_ebmud.pdf

Date and Time Comment Was Submitted: 2008-08-14 10:27:37

No Duplicates.

**Comment 30 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Susan  
Last Name: Lorenz  
Email Address: susan.lorenz@westonsolutions.com  
Affiliation:

Subject: General Water Comments  
Comment:

Please see the attached document for comments.

Attachment: [https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/31-ab\\_32\\_comments-water.pdf](https://ww2.arb.ca.gov/sites/default/files/BARCU/barcu-attach-old/sp-water-ws/31-ab_32_comments-water.pdf)

Original File Name: AB 32 Comments-Water.pdf

Date and Time Comment Was Submitted: 2008-09-29 13:53:49

No Duplicates.

## **Comment 31 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Susan  
Last Name: Barney  
Email Address: susangbarney@yahoo.com  
Affiliation:

Subject: Water Efficiency through reduced meat consumption  
Comment:

Thank you for taking a leadership role in addressing climate change. One aspect I do not see addressed here is the significant water savings that can be had by recommending Californians eat a vegan diet, which is the quickest and most efficient means of reducing water consumption.

1. "Sustainably raised cows" use more water than legally allowed. Allow me to start by saying I am a rancher's daughter. My family own and operate 130 square miles of ranch on the Green River in Wyoming, which feeds into the Colorado River, Lake Powell and Lake Mead, both of which are forecast by Scripps Institute ( <http://scrippsnews.ucsd.edu/Releases/?releaseID=876> ) as having a 50 % chance of being dry by 2021. My brother, who is both the ranch manager and is on the local water board in Sublette County informs me that -- in spite of the fact that the ranch has what is viewed as excellent water rights, it takes up to 12 times their allotted water rights to grow the hay for their "sustainably-raised" grass fed beef.

2. More water used in agriculture than urban usage. Your report mentions reducing water usage by 20 % in urban areas and having a public use charge on a per hook up basis. According to "Saving Water From Field to Fork," a report presented to the UN and written by the Stockholm International Water Institute et al, although most water conservation efforts are in the home, (ie urban areas), only 10 percent of water is acutally used in the residences. Another 20 percent is used by industry. A full 70 percent on a global basis is used by agriculture. They also state that vegetarian diets are far more efficient than meat centered diets, citing that one kg of beef takes 5,000 to 20,000 liters to produce vs. one kg of wheat which takes 500 to 2,000 liters. (sources: Saving Water from Field to Fork, Stockholm International Water Institute, International Water Management Institute, Chalmers, and Stockholm Environment Institute. May 2008, <http://www.siwi.org/sa/node.asp?node=305>  
Press Conference on "Saving Water from Field to Fork," United Nations, Department of Public Information, New York, May 14, 2008, [http://www.un.org/News/briefings/docs/2008/080514\\_Water.doc.htm](http://www.un.org/News/briefings/docs/2008/080514_Water.doc.htm))

3. UC Davis report finds vegan diets are better at conserving water. In 1991. University of California-Davis researcher Marcia Kreith (who is still at UCD, just in a new role) was written for the Water Education Foundation in Sacramento titled "Water Inputs in California Food Production." In the report, she detailed that

1 serving of beef grown in California requires 1,232 gallons of water.  
1 serving of chicken grown in Calif. requires 330 gallons of water.  
1 complete well balanced vegan meal of tofu, brown rice and two servings of broccoli requires only 98 gallons of water.

I suggest we encourage California restaurants and food service to put their creative talents to work on creating good vegan food for their menus to help people embrace a vegan diet, and encourage Californians to embrace a vegan diet to conserve water and save emissions, since the United Nations states that 18 percent of global emissions come from livestock rearing -- more than global transportation.

In closing, I'd like to address two objections to eating vegan :  
1) that people are concerned vegan diets are not healthy and 2) that people are afraid they will not enjoy a vegan diet.

1) From "Position of the American Dietetics Association and the Dietitians of Canada: Vegetarian Diets"

"Well-planned vegan and other types of vegetarian diets are appropriate for all stages of the life cycle, including during pregnancy, lactation, infancy, childhood and adolescence."

"It is the position of the American Dietetics Association and the Dietitians of Canada that appropriately planned vegetarian diets are healthful, nutritionally adequate, and provide health benefits in the prevention and treatment of certain diseases...The position paper reviews the current scientific data related to key nutrients for vegetarians, including protein, iron, zinc, calcium vitamin D, riboflavin, vitamin B-12, vitamin A, n-3 fatty acids and iodine. A vegetarian, including vegan, diet can meet current recommendations for all of these nutrients. In some cases, use of fortified foods or supplements can be helpful in meeting recommendations for individual nutrients. Well-planned vegan and other types of vegetarian diets are appropriate for all stages of the life cycle, including during pregnancy, lactation, infancy, childhood and adolescence. Vegetarian diets offer a number of nutritional benefits, including lower levels of saturated fat, cholesterol, and animal protein as well as higher levels of carbohydrates, fiber, magnesium, potassium, folate, and antioxidants such as vitamins C and E and phytochemicals. Vegetarians have been reported to have lower body mass indices than nonvegetarians, as well as lower rates of death from ischemic heart disease; vegetarians also show lower blood cholesterol levels; lower blood pressure; and lower rates of hypertension, type 2 diabetes, and prostate and colon cancer.

Source: <http://www.eatright.org/ada/files/vegnp.pdf>

2. For those doubting they will enjoy the taste, I submit Oprah Winfrey's entry to her blog during her 21 day vegan cleanse, which eliminated all animal products, wheat, grains containing gluten, alcohol and sugar: "Wow, wow, wow! I never imagined meatless meals could be so satisfying. I had been focused on what I had to give up--sugar, gluten, alcohol, meat, chicken, fish, eggs, cheese. "What's left?" I thought. Apparently a lot. I can honestly say every meal was a surprise and a delight, beginning with breakfast--strawberry rhubarb wheat-free crepes."

SOURCE:

[http://www.oprah.com/article/food/healthyeating/pkgoprahscleanse/20080521\\_orig\\_cleanse\\_blog](http://www.oprah.com/article/food/healthyeating/pkgoprahscleanse/20080521_orig_cleanse_blog)  
2

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-09-29 21:00:23

No Duplicates.





## **Comment 32 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: S.

Last Name: Lapaire

Email Address: Sophie@bridgemakersconsulting.com

Affiliation:

Subject: Water Efficiency - what about livestock production?

Comment:

Thank you for taking a leadership role in addressing climate change. We have little time and a lot of work ahead of us.

One aspect I do not see addressed here is the significant water savings that can be had by recommending Californians eat less meat and even adopt over time a plant based diet, which is the quickest and most efficient means of reducing water consumption.

More water used in agriculture than urban usage. Your report mentions reducing water usage by 20 % in urban areas and having a public use charge on a per hook up basis. According to "Saving Water From Field to Fork," a report presented to the UN and written by the Stockholm International Water Institute et al, although most water conservation efforts are in the home, (ie urban areas), only 10 percent of water is actually used in the residences. Another 20 percent is used by industry. A full 70 percent on a global basis is used by agriculture. They also state that vegetarian diets are far more efficient than meat centered diets, citing that one kg of beef takes 5,000 to 20,000 liters to produce vs. one kg of wheat which takes 500 to 2,000 liters.

(sources: Saving Water from Field to Fork, Stockholm International Water Institute, International Water Management Institute, Chalmers, and Stockholm Environment Institute. May 2008, <http://www.siwi.org/sa/node.asp?node=305>

Press Conference on "Saving Water from Field to Fork," United Nations, Department of Public Information, New York, May 14, 2008, [http://www.un.org/News/briefings/docs/2008/080514\\_Water.doc.htm](http://www.un.org/News/briefings/docs/2008/080514_Water.doc.htm))

UC Davis report finds vegan diets are better at conserving water. In 1991. University of California-Davis researcher Marcia Kreith (who is still at UCD, just in a new role) was written for the Water Education Foundation in Sacramento titled "Water Inputs in California Food Production." In the report, she detailed that

1 serving of beef grown in California requires 1,232 gallons of water.

1 serving of chicken grown in Calif. requires 330 gallons of water.

1 complete well balanced vegan meal of tofu, brown rice and two servings of broccoli requires only 98 gallons of water.

These numbers speak for themselves and therefore should be considered in your plan. Not to mention that United Nations Food and Agriculture Organization(UNFAO)states that 18 percent of global emissions come from livestock rearing -- more than global transportation.

So if you are really serious about wanting to save water in California, you should go after the number one industry (agro-farming-livestock production) that is not only responsible for using a frightening amount of it but for also for polluting it with absolutely no responsibility to clean its mess, years after year after year after year.

So I would consider serious measures to limit its availability and usage and make sure that they clean their mess so that people that happen to live around them don't end up with polluted wells, chronic diseases and have no recourse against them. But that's a broader topic.

All is connected and when the good of all is considered, we all benefit, not just the few.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-09-29 21:24:59

No Duplicates.

## **Comment 33 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Jay

Last Name: Kinnear

Email Address: jlarba@gmail.com

Affiliation: concerned citizen

Subject: AB 32 and agriculture water

Comment:

To Whom It May Concern:

I am gravely concerned that AB 32 does not address the use of California water by the agricultural industry. Yes, they need water, but free flowing water is not sustainable nor prudent.

Please modify this very thoughtful and comprehensive bill, AB 32, to address the use of water in the state, especially as it pertains to agriculture.

We can no longer afford to have precious fresh water used to freely irrigate desert land without consideration for it's actual cost and the necessity for reuse.

thank you,  
Jay Kinnear

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-10-04 14:28:35

No Duplicates.

## **Comment 34 for Water Comments for the GHG Scoping Plan (sp-water-ws) - 1st Workshop.**

First Name: Lynn  
Last Name: Axelrod  
Email Address: lynnl@rri.org  
Affiliation:

Subject: Draft to Proposed Plan  
Comment:

At a meeting on Oct. 10, Mary Nichols said that the current version of the Water component would not change very much from Draft Plan to Proposed Plan, despite the comments submitted. She said that ARB depends on other agencies for information and that there is not much data so more research needs to be done. Having also said that the Water Board was one agency consulted, it is remarkable that adequate data was available to put together water efficiencies for municipal use, for example, but not for agricultural water use. This appears to be more of business as usual, by not requiring major agricultural and irrigation interests to reduce their wasteful energy use by controlling their wasteful use of the public water supply.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2008-10-13 14:22:23

No Duplicates.

**There are no comments posted to Water Comments for the GHG Scoping Plan (sp-water-  
ws) that were presented during the Workshop at this time.**