

**“EWUA” Presentation to California Water Commission
Sacramento, California
by
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March 16, 2016

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1. Components to comprehensive water usage facilities design including infrastructures for State of California.

(1a) Build water capture & storage facilities-immediately

**(1b) Build state of the art clean energy hydro pneumatic buoyancy Electricity generation plants. This process has already been patented by “Absolute Energy source, Inc.”
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(1c) Use surface water for providing potable water for use in Central California

(1d) Desalination energy source for operating coastal facilities.

(1e) Hydroponic growth of animal feed crops. This process uses 2% of the water required to irrigate land.

(1f) Recharge ground water aquifer system using established easements & right of ways such as bypass rivers & canals. Install coffer dams and drilled inverted well systems utilizing perforated casings.

(1g) Expand recycle water systems for open and closed land using more catch basins and ponds.

2. Notice the opinion newspaper article with summary marked in yellow

3. In summary I am requesting a meeting with the water board to go into detail on ways to implement the items I presented at this meeting. People I have talked with believe it is time to stop talking and take action. We have been kicking the water problem ball down the road for 12 years and just around the corner in the road is a canyon and the ball is about to fall over the cliff and burst.

Thank you for your time,

**COMPONENTS TO COMPREHENSIVE WATER USAGE FACILITIES
DESIGN INCLUDING INFRASTRUCTURES FOR STATE OF CALIFORNIA:**

1. Build water capture and storage facilities.
 - a. Temperance Flat Reservoir – San Joaquin River water shed
 - b. Sites Reservoir – Sacramento River water shed

2. Build state of the art clean renewable energy hydro pneumatic buoyancy electricity generation plants.
 - a. Power source to be horizontal water ways with a flow rate of 250 CFS or more example: California Aqueduct flow rate is between 1,500 CFS to 12,500 CFS.
 - b. Suggested initial number of electric generating plants to be ten (10). Two (2) on Friant-kern canal. Three (3) on California Aqueduct. Three (3) on Sacramento River, with one or two close to sites reservoir. Two (2) at locations close to where power is needed to update water usage facilities, such as, water treatment and distribution facilities, including desalination facilities on Pacific Coast areas.

3. Use surface water for providing potable water for use in Central California. Particularly in San Joaquin Valley. Source of obtaining water for treatment facilities would be rivers and canal [Friant Kern, Madera, Delta Mendota, California Aqueduct, et.al.]
 - a. This is to provide a water supply for treatment /distribution facilities that are not contaminated with nitrates and other health compromising chemicals.
 - b. The treatment plants can be located close to the water way providing the surface water. The processed treatment water would be stored in elevated water tanks to reduce pumping cost to consuming communities.
 - c. The cost of the treatment/distribution facilities including maintenance and operating cost would be paid by the end users through meter installations at the point of use. This is current practice throughout the state.

4. The pneumatic buoyancy engines established along the coastal area can be used to drive the desalination plants for treatment of ocean water converting it to potable water for use along our Coastal regions. The metering program for end users can apply here for repayment of infrastructure cost and maintenance/management cost.

5. Encourage the hydroponic growth of animal feed crops such as Mario Daccarett is doing East of Chowchilla, California.

- a. He is growing the equivalent feed volume produced by 320 acres of irrigated land in a 40' X 60' building.
 - b. The system uses 2% of the water required for 320 acres of irrigated land.
 - c. Encourage the State of California to offer a 50% construction cost rebate to animal raisers who construct hydroponic buildings and grow feed for their animals. This allows 98% reduction of water usage to grow the same amount of feed on cultivated land.
6. Ground water recharge system.
- a. Establish catch basins at the head of flood control bypass canals, such as the Fresno River bypass that runs through the city of Madera and crosses Hwy 152 between Dos Palos and Los Banos, California.
 - b. These flood control channels with bermed banks are ideal easements for installing water carrying pipe lines. The conveyed water can be spigot fed into well casing that are perforated into the desired depth of the aquifer, during winter and spring run off period the water can be diverted into the well casing and recharge the aquifer for use during the summer irrigation season.
7. Implement recycle water systems and drip systems as a standard practiced for farmers, dairymen, and ranchers.
- a. Drainage recycle ponds are encouraged to stop losing run off water after just one water cycle.
 - b. Drip systems should be used on all orchards
 - c. Buried root watering systems can be installed for crops such as tomatoes.

Notes:

1. Charging more for water doesn't make more water. Water is a necessity of all living plants, animals and humans, as such, the cost should kept to a minimum just covering the supply cost and maintenance cost and not a profit making commodity.
2. The old adage "waste not-want not" does apply for water usage. We must live with what God supplies us with in the form of rain, hail, sleet and snow.
3. We do need a water capturing and storage infrastructure system as a first priority. We cannot manage what we do not possess.
4. We must establish a start date for construction of dams. We cannot have a projected finish date without a start date.

Sincerely your fellow citizen,

Don Brumfield – CEO
Educational Water Usage Assoc.

OUR VIEW

Bureau of Reclamation Should raise water exports

There's no other way to say it. The federal Bureau of Reclamation's decision Wednesday to export less water south from the Delta than is legally allowed defies common sense.

Rain and snow finally have returned to California following three years of intense drought. This most recent storm was big enough to inflict damage on coastal areas and bury the northern Sierra under deep blankets of snow.

Reservoirs need to be filled, and Valley farmers dependent on federal irrigation water deliveries need to know that they will get some much-needed relief after having to fallow hundreds of thousands of acres of cropland because of the drought.

But the Bureau of Reclamation, acting on a U.S. Fish and Wildlife determination of current Delta water temperatures, isn't operating the pumps at the maximum set by the biological opinion that seeks to improve conditions for the threatened Delta smelt.

An official with Westlands Water District told a Fresno Bee



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A snowblower clears a road at Shaver Lake in January. It makes no sense that after recent rain and snowfall vast amounts of water are being allowed to roll out to the ocean instead of being sent to farms.

Editorial Board member Wednesday that pumping operators and fish agencies should recognize how dry the last three years were.

"This should be a time to

maximize water supply deliveries for people, farms and cities," said Johnny Amaral, the district's deputy general manager for external affairs. "We are in a huge water hole because of the

drought."

The tragedy is that this biological opinion - or management plan - for the Delta smelt is based largely on what fish experts believe to be true or is probably true, rather than proven science. The Delta smelt faces other challenges beyond getting caught in the pumps. These include non-native species, contaminants and the loss of tidal habitat in the Delta, scientists have said.

Understand: We don't want to see the Delta smelt go extinct. It is an important indicator of the Delta's health. But the Bureau of Reclamation must also consider the economic impact of its decisions on Valley farmers. In this specific case, its decision to pump less than is allowed under the biological opinion is a blow to our region's agriculture-powered economy.

Last year, ironically, with the Department of Interior unable to meet its contract demands

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for water deliveries, it borrowed 200,000 acre-feet of water from Westlands. This was water that the district had bought and then stored in San Luis Reservoir. Under their agreement, the Department of Interior was supposed to return the water by Dec. 31.

The failure of federal agencies to maximize water deliveries right now - when water is readily available - is a sure-fire way to delay the promised repayment of water or even create a situation in which it is never paid back.

Even as bone-dry California is receiving precious rain and snow from the heavens above and water is pouring into the Delta, vast amounts of water are being allowed to roll out to the Pacific Ocean.

It makes no sense. Especially when long-range scientific modeling suggests that this season's El Niño could transition into a La Niña and increase the threat of more drought for California. The Bureau of Reclamation must do better. It needs to stop kicking farmers in the teeth.