-----Original Message-----
From: James MacDonald [mailto:jbmd56@yahoo.com]
Sent: Wednesday, August 20, 2008 8:55 PM
To: Context, DeltaVision@CALFED
Subject: Fw: Tidal Buffer, Flood Control

--- On Thu, 10/25/07, James MacDonald <jbmd56@yahoo.com> wrote:

> From: James MacDonald <jbmd56@yahoo.com>
> Subject: Tidal Buffer, Flood Control
> To: tom@tomtorlakson.com
> Date: Thursday, October 25, 2007, 10:28 PM
> I would like to discuss the benefits of a tidal buffer
> north of the San Rafael/Richmond Bridge in the narrows between San
> Pablo Bay and San Francisco Bay.
>
> 1) A tidal buffer would allow
> environmentalists to control the salinity level of San
> Pablo Bay and the Delta for the best protection of
> Delta species. The tidal buffer would stop the
> intrusion of salt water into the north bay and the
> delta. Traditional salinity levels could be
> reestablished with the delta being totally fresh
> water. If environmentalists felt it would be useful,
> fresh water could be impounded behind the tidal buffer
> and released at low tide creating a cleansing effect
> in the delta. It might even be possible to direct this outflow via a
> channel to help the south bay's water circulation problems and improve
> the environmental quality of the south bay.
>
> 2) A tidal buffer would be the most
> economical and feasible way to impound the maximum of
> fresh water for California's future.
>
> 3) Thinking a little bit further into the future, a
> tidal buffer could protect
> surrounding counties of the upper bay and delta,
> including Contra Costa, Marin, Napa, and
> Sacramento, from catastrophic floods due to global
> warming and rising sea levels. (Google provides
> simulations of flooding due to rising sea levels.)
>
> 4) A tidal buffer could supply winter
> flood control for the upper bay and delta. When
> flooding is anticipated during the spring runoff, the
> tidal buffer could be closed at low tide, allowing the
> upper bay to act as a vast reservoir for flood waters.
> This is cheaper and more feasible than trying to
> update the levies in Sacramento.

>
> 5) The construction of the tidal buffer could include
> locks for navigation. If built in a modular fashion,
> the structure could easily be adapted to the future
> needs of California, such as the easy installation of possible
> hydroelectric generators or high flow pumps: If global warming
> continues, sea levels continue to rise and California does not have a
> place to store excessive fresh water; it may be necessary to pump
> water out of the San Pablo Bay and into San Francisco
> Bay to prevent flooding in the upper Bay, delta, and
> Sacramento. But of course, the reality is when sea
> levels do increase, the state of California will have
> hundreds of thousands of gallons of excess fresh water
> impounded behind the tidal buffer to export to where
> ever it is needed. Environmentalists have to realize
> that the delta is going to be destroyed because of
> rising sea levels causing salt water intrusion up to
> Sacramento and beyond. So the question is, will we
> allow the current method of pumping water to destroy
> the delta or wait for increasing ocean levels to
> destroy the delta ecosystem as we know it. A tidal
> buffer is the only sensible answer to both problems of
> maintaining a high quality ecosystem and a high
> quality supply of fresh water for California.
>
> 6) The construction of a tidal buffer
> would be extremely cheap compared to any other
> alternatives proposed thus far. The distance is
> relatively short and the bay is relatively shallow in
> this area.
>
> 7) Another possible advantage to a tidal buffer is
> that it could easily accommodate a
> BART connection from Richmond to Marin county to Santa
> Rosa. If built with wide service roads on either side
> of the BART tracks, the service roads could be
> modified for public use in the future if needed.
>
> I hope this clarifies my position and that you can
> send this email to the appropriate agencies. It is my understanding
> that Arnold has a task force to investigate these issues and make its
> recommendations. This would be a committee that I would really like to
> be appointed to in order to help push this project
> along.
>
> Sincerely,
>
> James B. MacDonald
> Director of CARE (CAlifornians for Renewable Energy)
> 274 Pebble Beach Loop
> Pittsburg, CA 94565
> (925) 439-7665 (please feel free to call at any time) jbmd56@yahoo.com
>

> In 1996, I attended a meeting in Oak Grove with most
> of California's water agencies and brought up this
> matter in regards to salinity and flood control, not
> being aware of issues of rising sea levels at that
> time. It was completely dismissed as it is currently
> being dismissed now despite several phone calls to the
> state resource agencies. This project is even more
> viable now considering the current situation.
>