

EBMUD Bayside Groundwater Project

Benefits

One half of One percent of EBMUD's projected customer demand in 2020.



INCREASED RISKS:

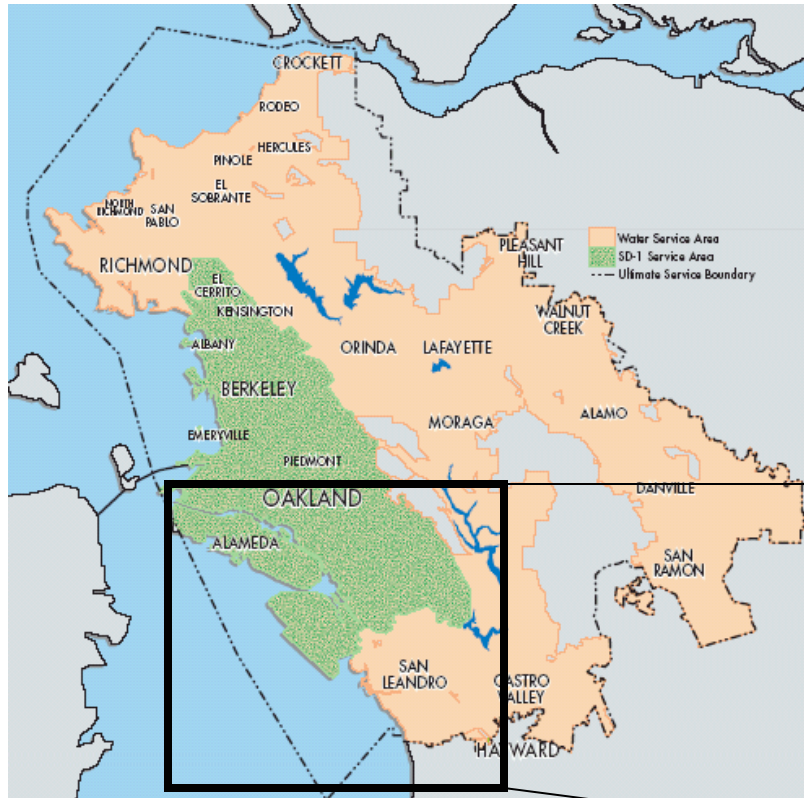
- **Ground movement** damaging our homes, schools or businesses.
- **Cancer** from known higher levels of **Arsenic** and **Radon** in our drinking supply.
- **Contamination** of our drinking supply from known plumes and spills
- **Flowing wells** damaging homes and property
- **Air Quality pollution** from Aeration

Heron Bay Task Force (HBTF)

Who We Are:

- Homeowners, of various professions and backgrounds, speaking on behalf of concerned residents in Heron Bay and communities throughout San Leandro and San Lorenzo.
- Since 2001, we have studied the documents provided by EBMUD, made public requests for others, and engaged the EBMUD staff and Board in discussions regarding the Bayside project.
- After extensive consideration, it is our assertion that approval of the Bayside project would demonstrate that EBMUD:
 1. Has allowed Advocacy to replace Assessment
and
 2. Intends to allow a minority of their customers – in neighborhoods apparently over represented in Senior and Immigrant populations - to carry an undue burden for the claimed benefit of all EBMUD customers.

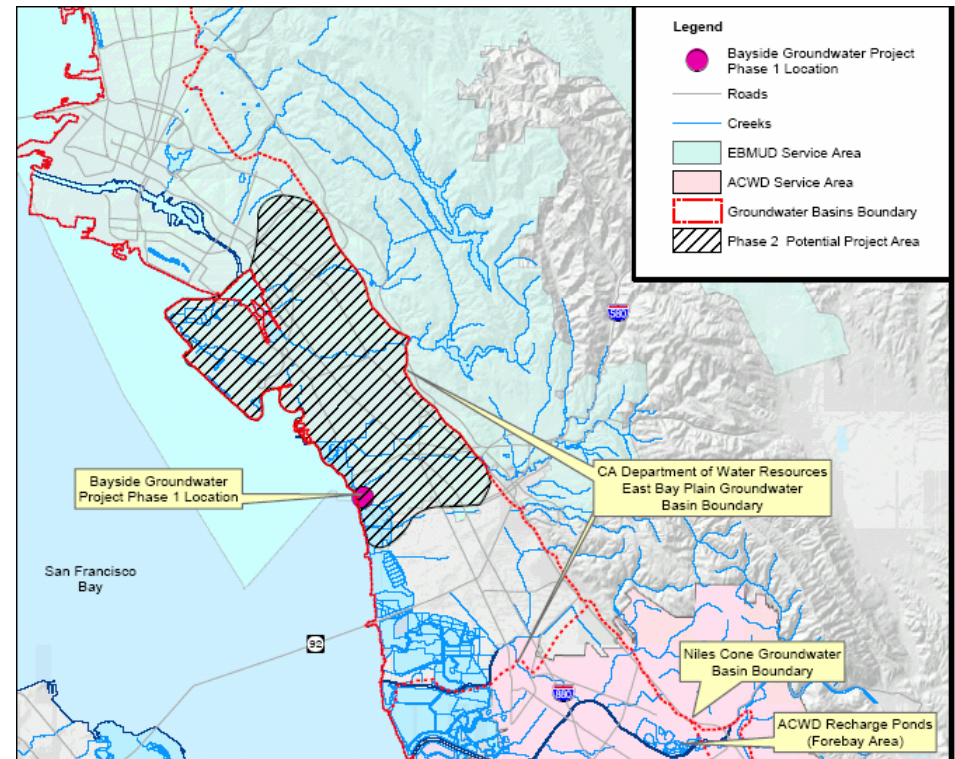
A Minority of customers ...



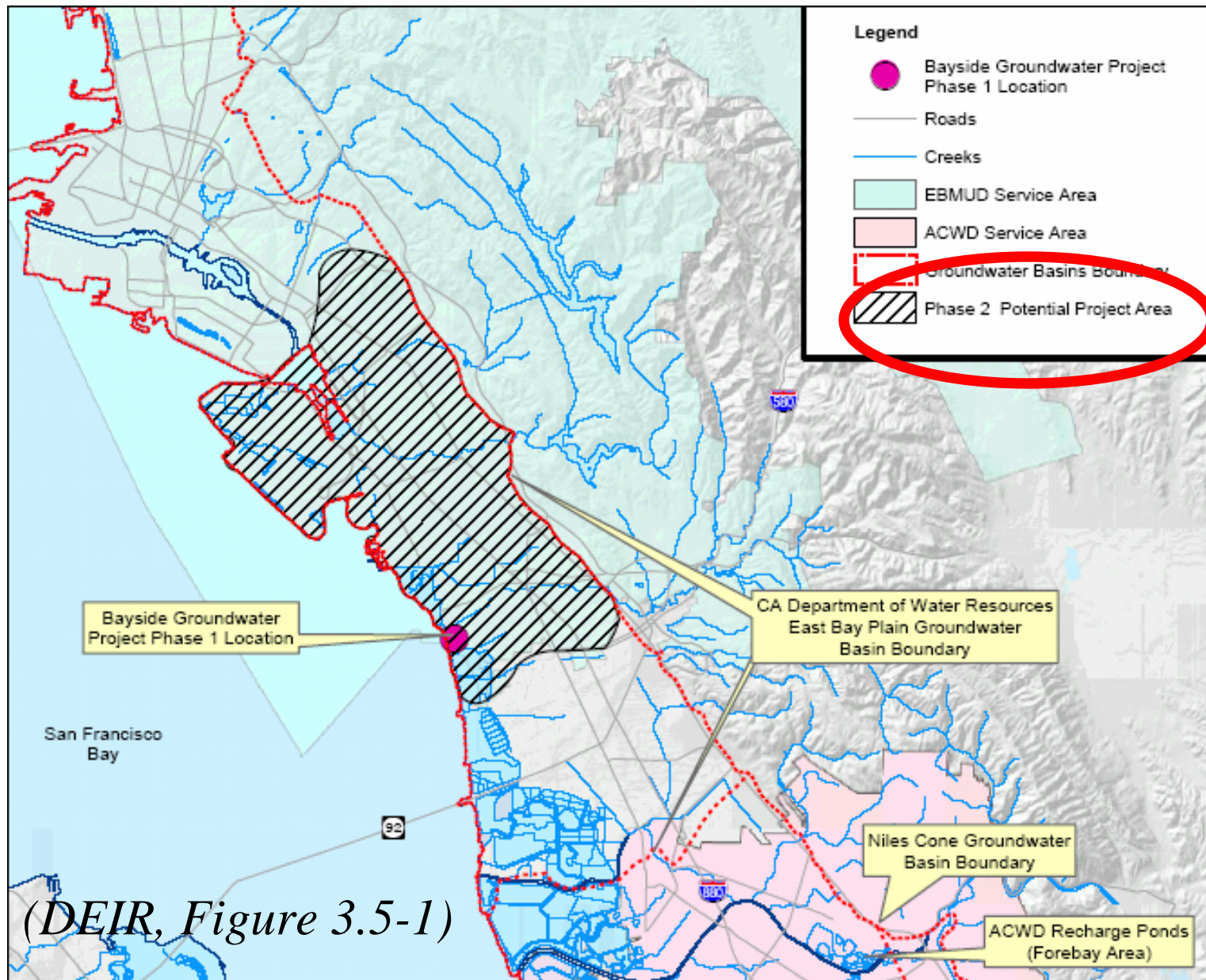
Approval of this project would require a minority of EBMUD customers – in neighborhoods apparently over represented in Senior and Immigrant populations - to carry an undue burden for the claimed benefit of all EBMUD customers.

(DEIR, Figure 3.5-1)

Environmental Justice assures that no community in the district bears an inequitable risk burden as a result of District facilities, operations, or practices. (EBMUD, Policy 71)



Special Note ... Phase Two



(DEIR, Figure 3.5-1)

Advocacy, not Assessment of the Bayside Project

- Bending numbers to get to ‘Much Needed Drought Supply’
- Skipping the hard questions: Aeration Towers
- Publishing what fits one view:
 - Radon
 - Subsidence
 - Flowing Wells
 - Water Quality
- Communicating what fits at the time.

Bayside: Bending numbers to get to 'Much Needed Drought Supply'

1 cubic foot = 7.481 gallons	7.481
1 acre = 43,560 square feet	43,560
1 acre foot = 325,872 gallons	325,872
1MGD = 3.068 acre foot per day	3.06869
3 years = 365 days	1,095

MGD Imputed Calculation
 $(TAF\# \times 1,000) / (((3 \times 365) \times 325,872) / 1,000,000)$
 MGD calculated values are derived from the TAF value table column from the "Data Values from EBMUD"

Data Values from EBMUD (aggregated to 3 year assumption)	
Source: EBMUD CLG slide presentation on 3/16/2005	TAF
3 year normal customer demand (277 mgd)	932
Demand reduction through conservation	-114
Demand reduction through recycling	-47
Supply Need (229 MGD)	771
Available yield from reservoirs	-440
Drought shortage	331
Drought rationing program	-146
Need for water	185
Freeport Yield (max)	-165
Remaining 3 Year need(6mgd*)	20

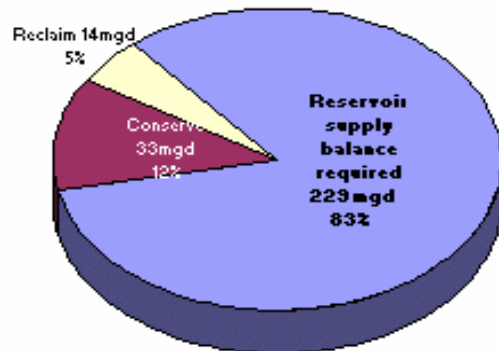
TAF#
 Thousands of Acre Feet
 Acre Feet = (TAF x 1,000)

Description	MGD	MGD %
Annual MGD Demand , 2020	277	100%
Conserve	-34	-12%
Reclaim	-14	-5%
Reservoir supply balance required	229	83%
Reservoirs at time of drought	-131	-47%
Drought shortage difference	98	35%
Rationing	-43	-16%
Need = Shortage minus Rationing	55	20%
Freeport	-49	-18%
Need minus Freeport	6	2%

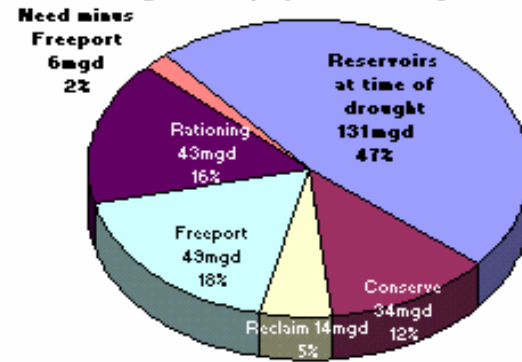
Normal Year (imputed from 3 year assumption)	MGD	MGD %
Reservoir supply balance required	229	83%
Conserve	34	12%
Reclaim	14	5%

Severe Drought Year (imputed from 3 year assumption)	MGD	MGD %
Reservoirs at time of drought	131	47%
Conserve	34	12%
Reclaim	14	5%
Rationing	43	16%
Freeport	49	18%
Need minus Freeport	6	2%

Non-Drought Year (imputed from 3 year assumption)



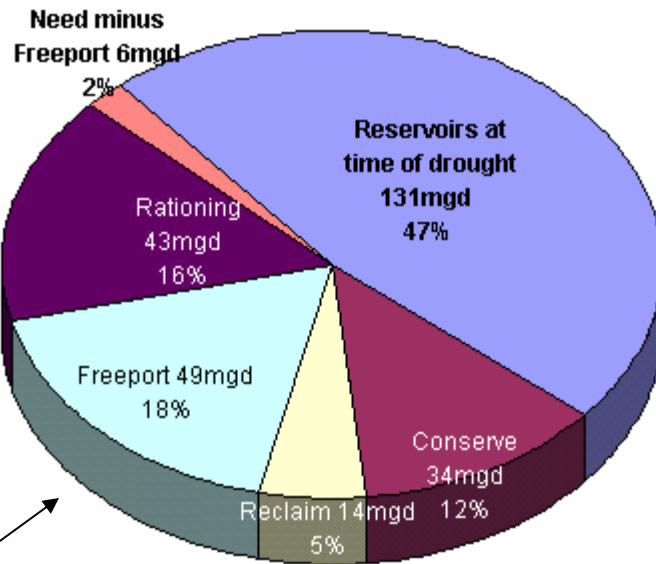
Severe Drought Year (imputed from 3 year assumption)



*HBTF converted CLG presentation to MGD, then used MGD values from DEIR

HBTF: Unbending the numbers

Severe Drought Year (imputed from 3 year assumption)



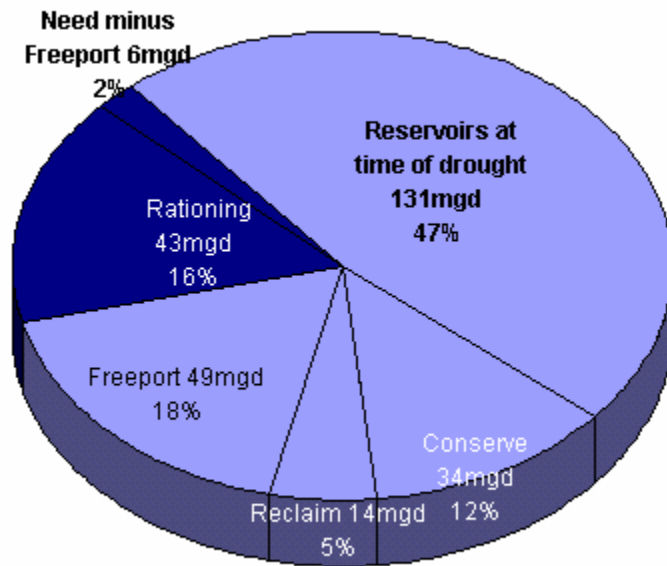
Short Term Need?

Freeport comes on line in roughly the same timeframe as Bayside would.

- Severe drought year only requires 16% Rationing... (2010 and 2020 versions)
- EBMUD policies support up to 25% rationing!

HBTF: Unbending the numbers

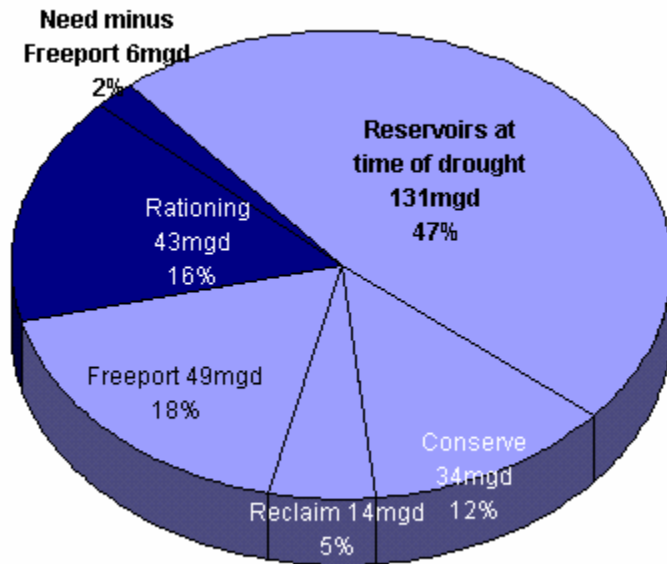
Severe Drought Year (imputed from 3 year assumption)



Is 18% Rationing that much worse than 16%?

Unbending the numbers

Severe Drought Year (imputed from 3 year assumption)



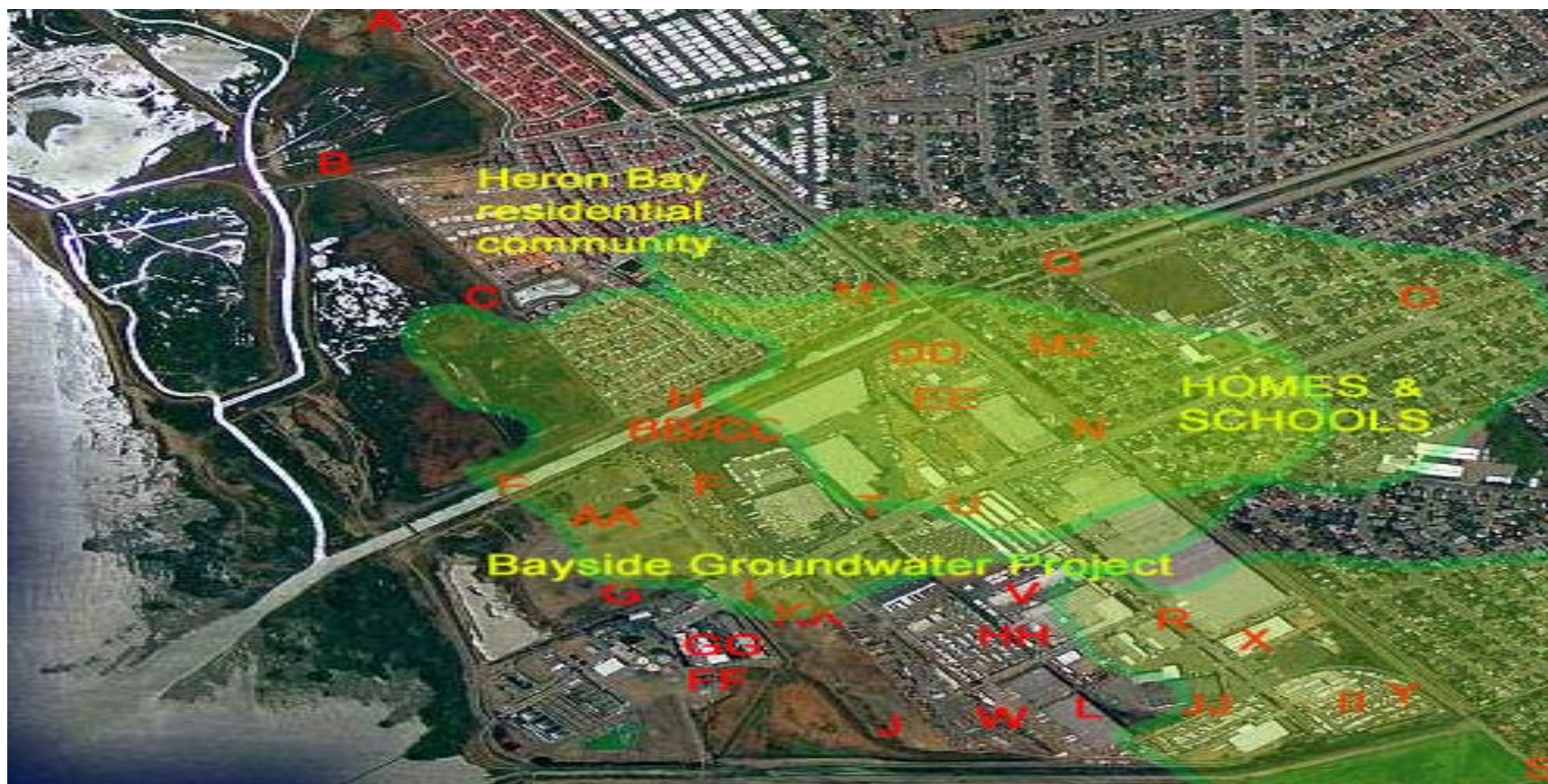
Alternatives to reduce rationing requirements

- East Contra Costa Groundwater (rural?)
- Desalination
- Repair Leaking EBMUD Pipelines



About 9.9 TAF per year (~ 3 MGD) wasted...

Skipping the Hard Questions: Aeration Towers



*HBTF Representation of Potential Chloroform Plumes, from 2001 EBMUD drawing ^{Slide 10/18}

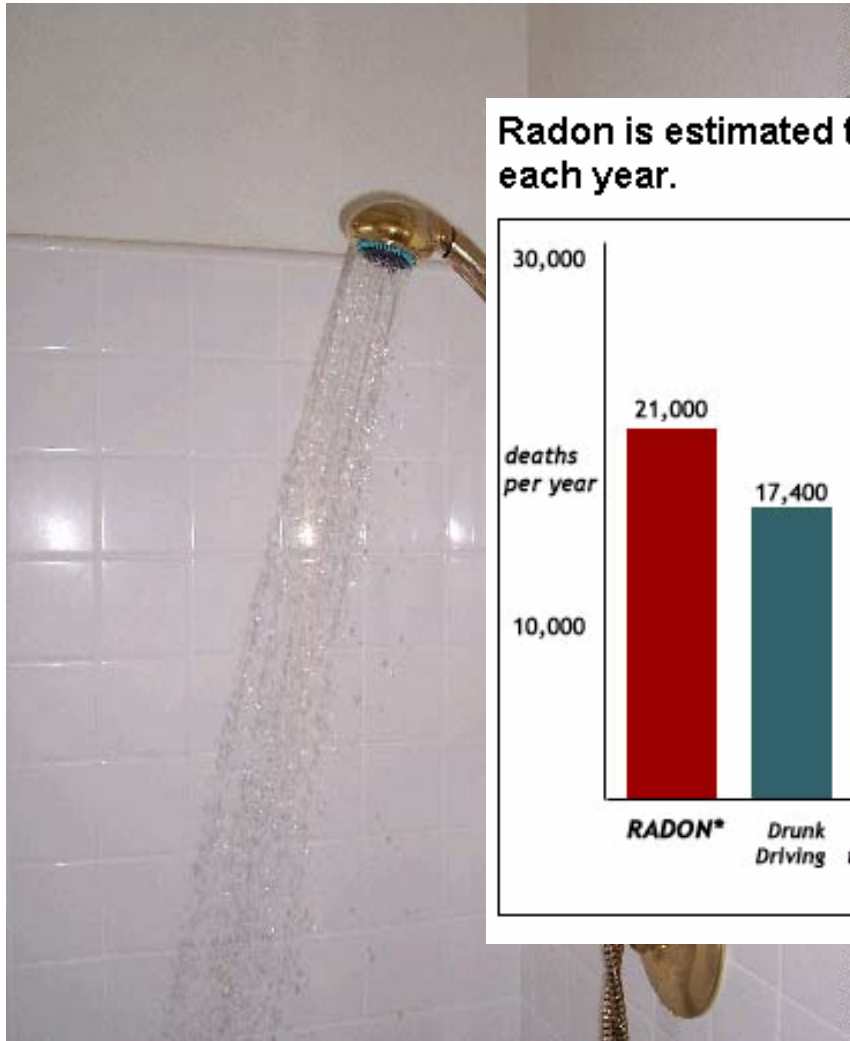
Skipping the Hard Questions: Aeration Towers



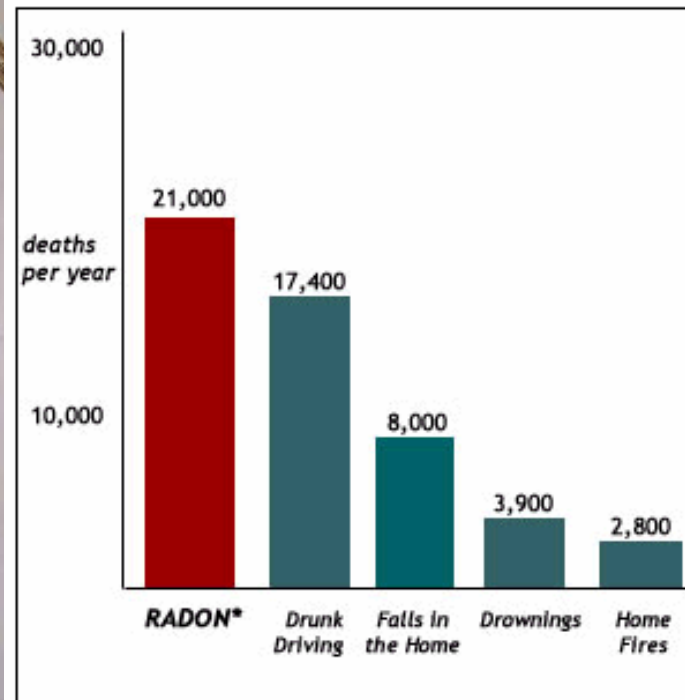
Instead,
we will have mini
Aeration towers in our
homes.



Publishing what fits one view: **Radon**



Radon is estimated to cause thousands of lung cancer deaths in the U.S. each year.



** Radon is estimated to cause about 21,000 lung cancer deaths per year, according to [EPA's 2003 Assessment of Risks from Radon in Homes \(EPA 402-R-03-003\)](#). The numbers of deaths from other causes are taken from the Centers for Disease Control and Prevention's 1999-2001 National Center for Injury Prevention and Control Report and 2002 National Safety Council Reports.*

Publishing what fits one view: **Radon**



- According to the proposed regulation, if ... radon concentration is less than 300 picocuries per liter ... water will not need to be treated. (*DEIR, 3.2-11 para 5*)

- Radon in Recovered Groundwater
470 – 700 picocuries per liter
(*DEIR, Table 3.2-1*)

- **When [approved], the standard is likely to be higher than radon concentrations at Bayside.**

(*DEIR 3.2-11 para 6*)

Publishing what fits one view: **Subsidence**

...inelastic subsidence would not be expected (*DEIR, 3.1-55*)

...elastic subsidence...is expected to range from about a quarter inch
...to about a tenth of an inch several miles [away] (*DEIR, 3.1-54*)



Figure 2. Photograph of house in Windsor Park subdivision in North Las Vegas

Photo by John W. Bell.



Figure 1. Photograph of Las Vegas Valley Water district Well No. 5 showing well-head protrusion caused by subsidence.

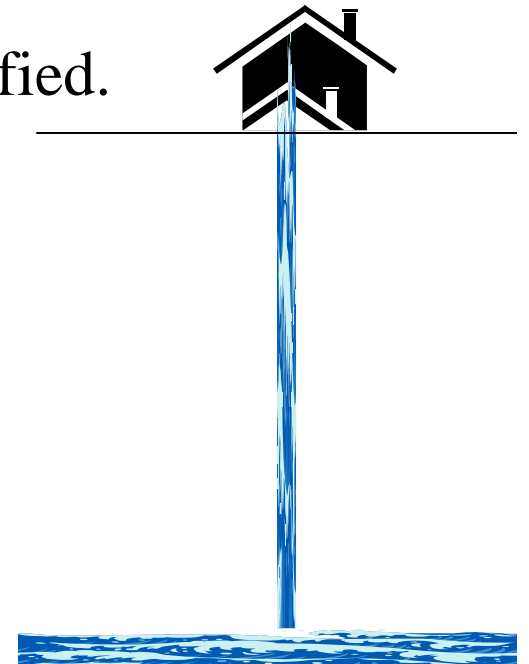
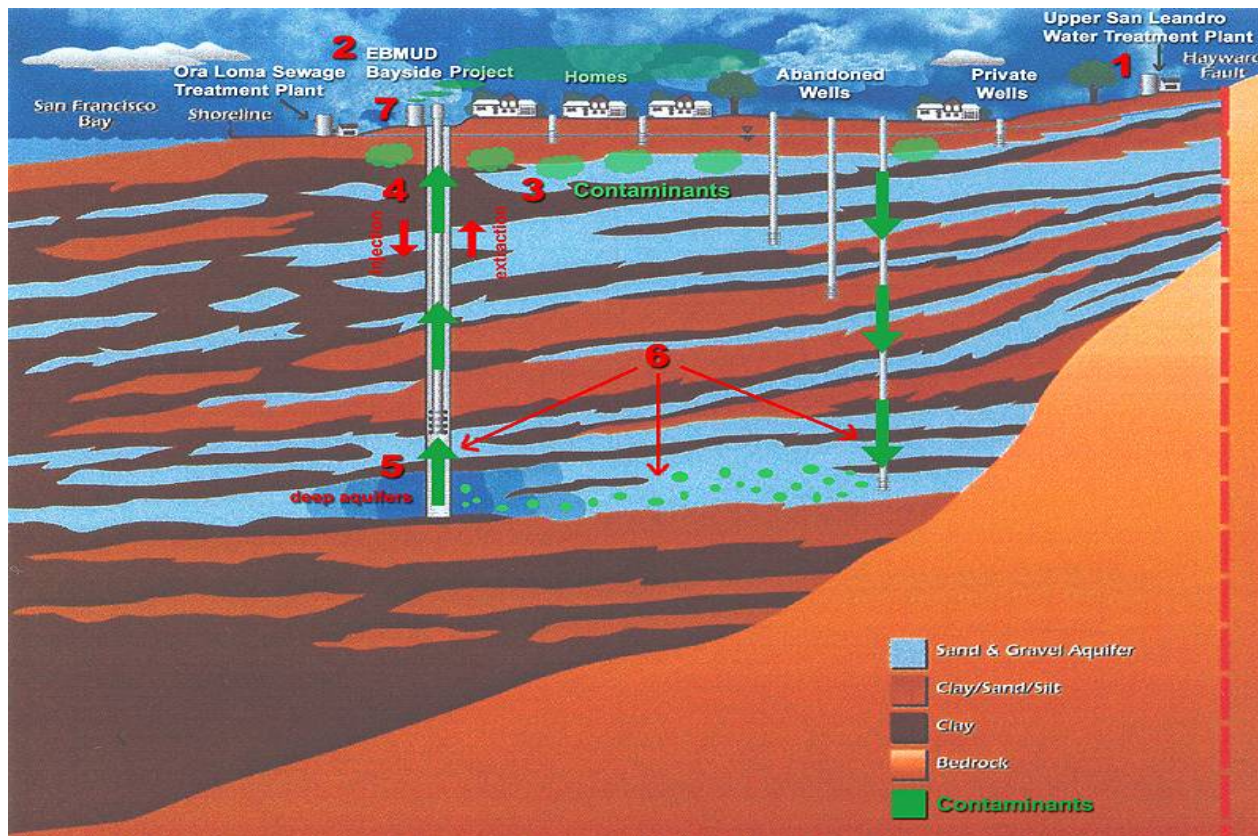
Photo by John W. Bell, 1989.

Insurance won't cover subsidence or settlement.

Publishing what fits one view: **Flowing Wells**

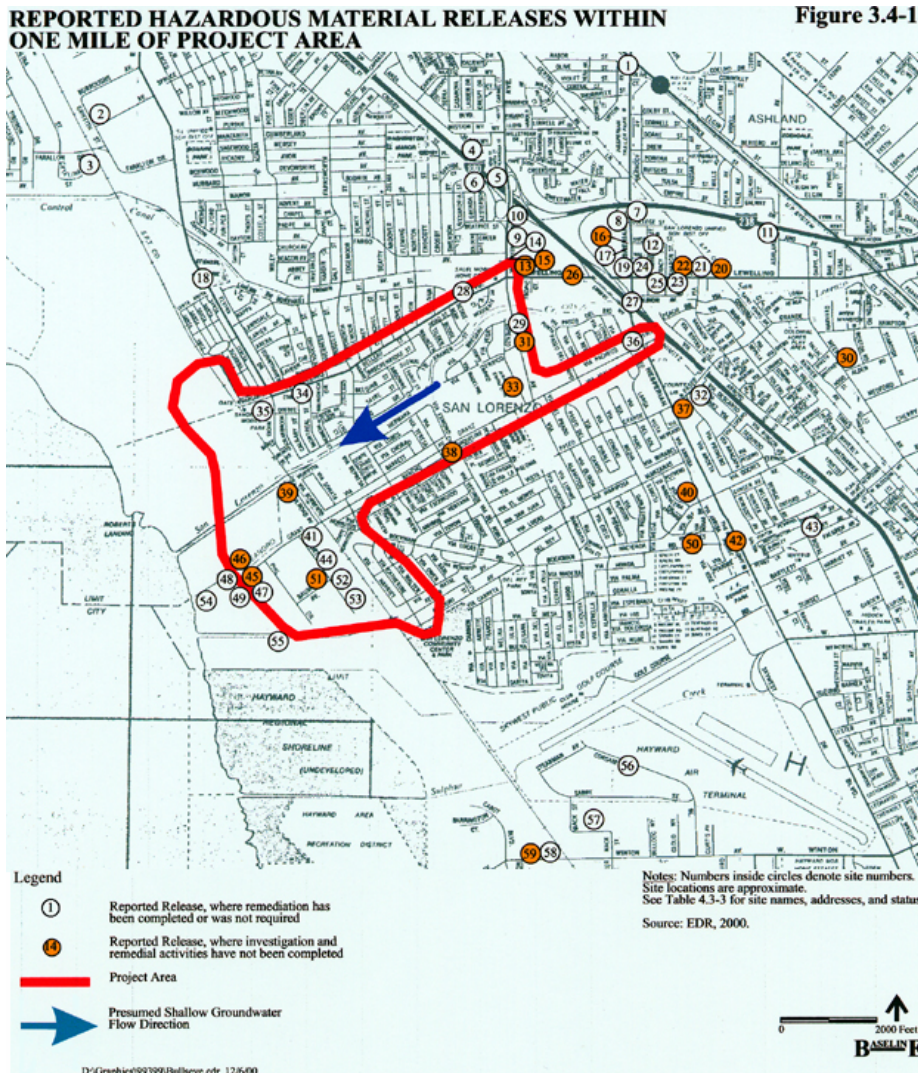
- Called “Less than significant after Mitigation.” (*DEIR, 3.1-52, para 2*)
- But, mitigation includes capping after identification of problem wells

... after damage has occurred and been identified.



Publishing what fits one view: **Water Quality**

Meets the standards, but so did proposed Crematorium



Lower quality water for drinking and usage for all San Leandro and San Lorenzo residents

- Higher levels of arsenic & radon (known carcinogens), manganese, etc. (DEIR,
- Potential for further contamination from shallow aquifer contaminant plumes (MTBE, waste oils, etc.)

...minimize public health risks by seeking the best available water source, **protected from potential degradation ...** (EBMUD Policy 81)

Communicating What Fits at the Time.

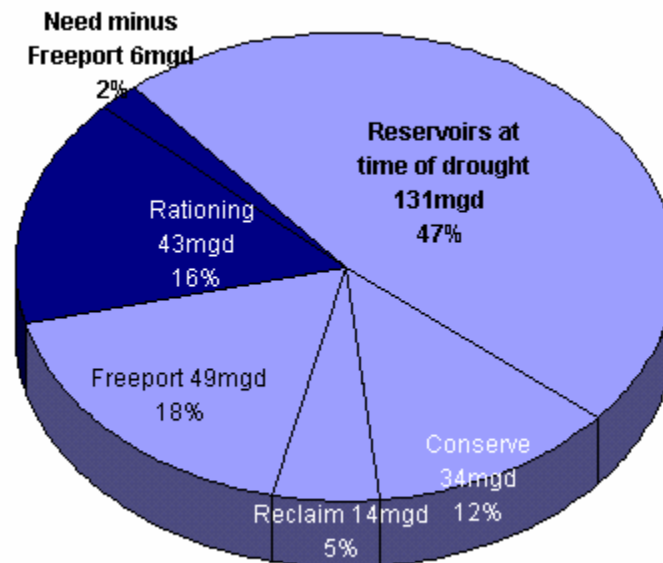
Regarding Freeport Project in Lodi News-Sentinel, May 31, 2001

“This is a drought project,”** said Charles Hardy, spokesman for EBMUD. **“We have enough water to serve our customers now.”

Statement in San Leandro Times, June 24, 2004

***“The Freeport project was our main drought prevention project but it is not enough to eliminate all water rationing that would occur during a drought,”** says Hardy.*

Severe Drought Year (imputed from 3 year assumption)



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INCREASED RISKS:

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- **Cancer** from known higher levels of **Arsenic** and **Radon** in our drinking supply.
- **Contamination** of our drinking supply from known plumes and spills
- **Flowing wells** damaging homes and property
- **Air Quality pollution** from Aeration in your home.

Board Members: Please vote 'no'.