

PONO WATER PLANNING FOR MAUI'S FUTURE

Maui's Historic 2003 East Maui Water Consent Decree



Presented by Sierra Club Maui

EAST MAUI WATER CONSENT DECREE A CITIZEN TOOL FOR ACCOUNTABLE WATER PLANNING

GET DATA • ANALYZE ENVIRONMENTAL & FINANCIAL COSTS • RESEARCH
ALTERNATIVES • COMPLY WITH LAWS • MAKE DECISIONS

December 2003 signing ceremony- after 10 years of litigation



1992

Citizen Groups challenge a Maui County EIS for 10 proposed wells & water tanks in Ha'iku & Pa'ia Aquifers w/ 16 miles of pipeline, to send 10 mgd of water to S. Maui

ESTIMATED COST : \$48.5 mil (1990)

Both Aquifers had a long history of pineapple farming with toxic chemicals, and no studies of aquifer capacities

The Coalition to Protect East Maui Water Resources
Maui Malama Pono & Hui Alanui o Makena had many concerns about costs and impacts of this very expensive project.

1992 East Maui EIS Proposed:

- two “exploratory wells” in Pa’ia aquifer (Hamakuapoko wells)
 - 8 additional wells in Ha’iku aquifer
- Total capacity= 16 mgd for a reliable yield of 10 mgd



**Photo No. 10: Hamakuapoko Well No. 2
(Mauka South View)**

CITIZEN CONCERNS:

- Hamakuapoko wells not properly tested for toxic chemicals
 - Who pays high cost? The taxpayer. Who benefits most? likely large landowners -no benefit to Ha'iku residents.
 - Native Hawaiian Water rights ignored. Water needs of Ha'iku farmers & residents ignored.
 - Alternative water sources not clearly discussed
 - Impacts of wells on streams, springs and fisheries not studied
 - No funding proposed to collect baseline data in Ha'iku & no firm studies of aquifer capacity exist

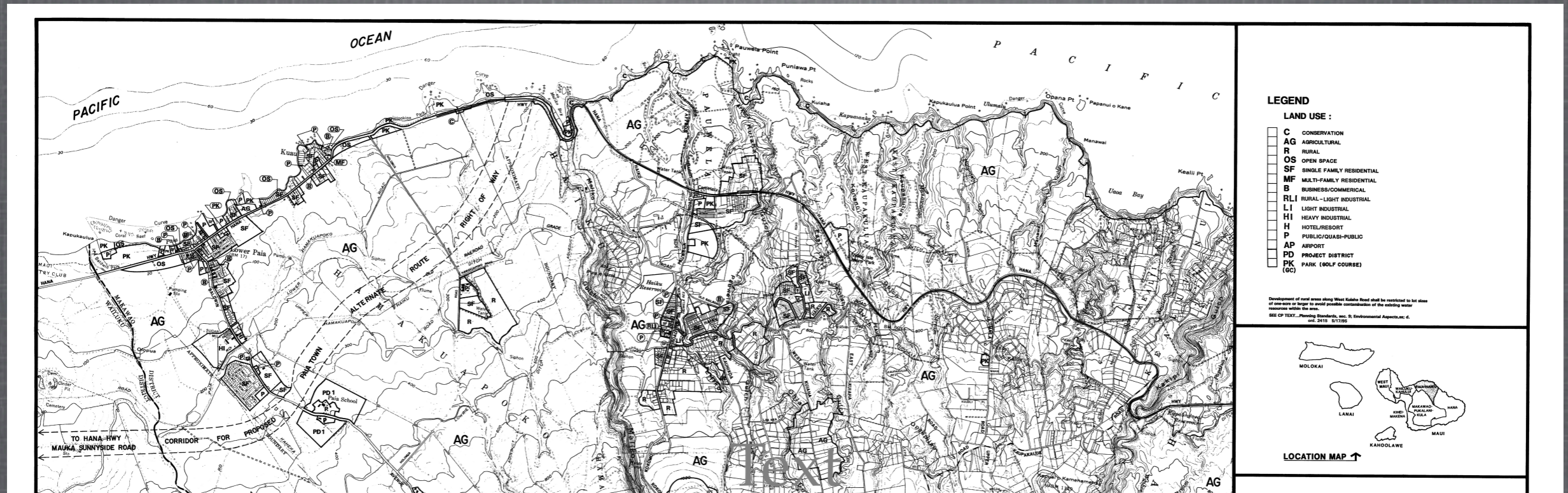
1994

Judge rules in favor of citizens and orders a new Supplemental EIS for well plan.

“ to address the serious concerns raised by the plaintiffs regarding water contamination, impact upon stream flow, and other issues raised by the plaintiffs.”

Maui Dept Water Supply (DWS) acknowledged that Hamakuapoko wells tested for DBCP toxins in 1992 and pronounced "clean", were actually contaminated. One well tested 5 times above state levels for toxic chemicals, once tests were sent to a certified lab

1995: Pa'ia-Ha'iku Community Plan updated w/ strong water policies



1996 Pa'ia-Ha'iku Community Plan states:

“Water allocation is one of chief concerns in region”

“Objective 6” states:

“Ensure adequate supply of groundwater for residents of the region before water is transported to other regions of the island.”

The East Maui Well Plan EIS made no provisions to meet this need.

1994-1999

Citizens return to court several times to compel Maui County to follow the judge's order to drill a monitor well in Ha'iku aquifer and complete an updated EIS.

A 1997 Water Commission report estimated that the Ha'iku wells might not have the capacity expected.

“thinness of the lens indicates that each well will yield just 0.5 mgd each,” the report states –

far less than the 16 mgd potential that the long-range plan anticipated from the 10 East Maui wells.

2000

The Court orders Maui County to construct the promised Ha'iku monitor well, as a test well.

USGS Chief Dr. Bill Meyer specifies a protocol to be used.

2002

Maui County drills an “exploratory well” that can be converted to a production well, and ignores the USGS protocols. The County also issues a supplemental EIS on the East Maui well project.

2003

Many citizen groups comment on the updated East Maui EIS, concerned that it still lacked the most basic information.

Even the 2003 USGS comments to the EIS noted the lack of data:

“Sustainable Yield assumptions of Haiku aquifer made by DWS not accurate or up to date” and

“DWS consultants appear to be more interested in proving a foregone conclusion, rather than getting impartial and accurate data”

Three citizen groups challenged the 2002 Updated EIS:

- The Coalition to Protect East Maui Water Resources
 - Hui Alanui o Makena
- Sierra Club Maui, and Ha'iku resident Mark Sheehan

- December 2003- settlement agreement/
“Consent Decree” signed
- County’s 2002 East Maui EIS withdrawn.



East Maui Consent Decree: Main Points

- County can use Hamakua wells
- Decree does not apply to Existing county wells in Ha'iku-Makawao
- Any future East Maui wells will be an entirely new project, with new studies and new EIS
- County agrees to consult with citizen groups on the studies and give them copies of any new studies or reports
 - County will consult with citizen groups to develop a new test well

County will do new stream & marine life studies that analyze the impact of well pumping on streams, springs, and private wells- with citizen groups consulted

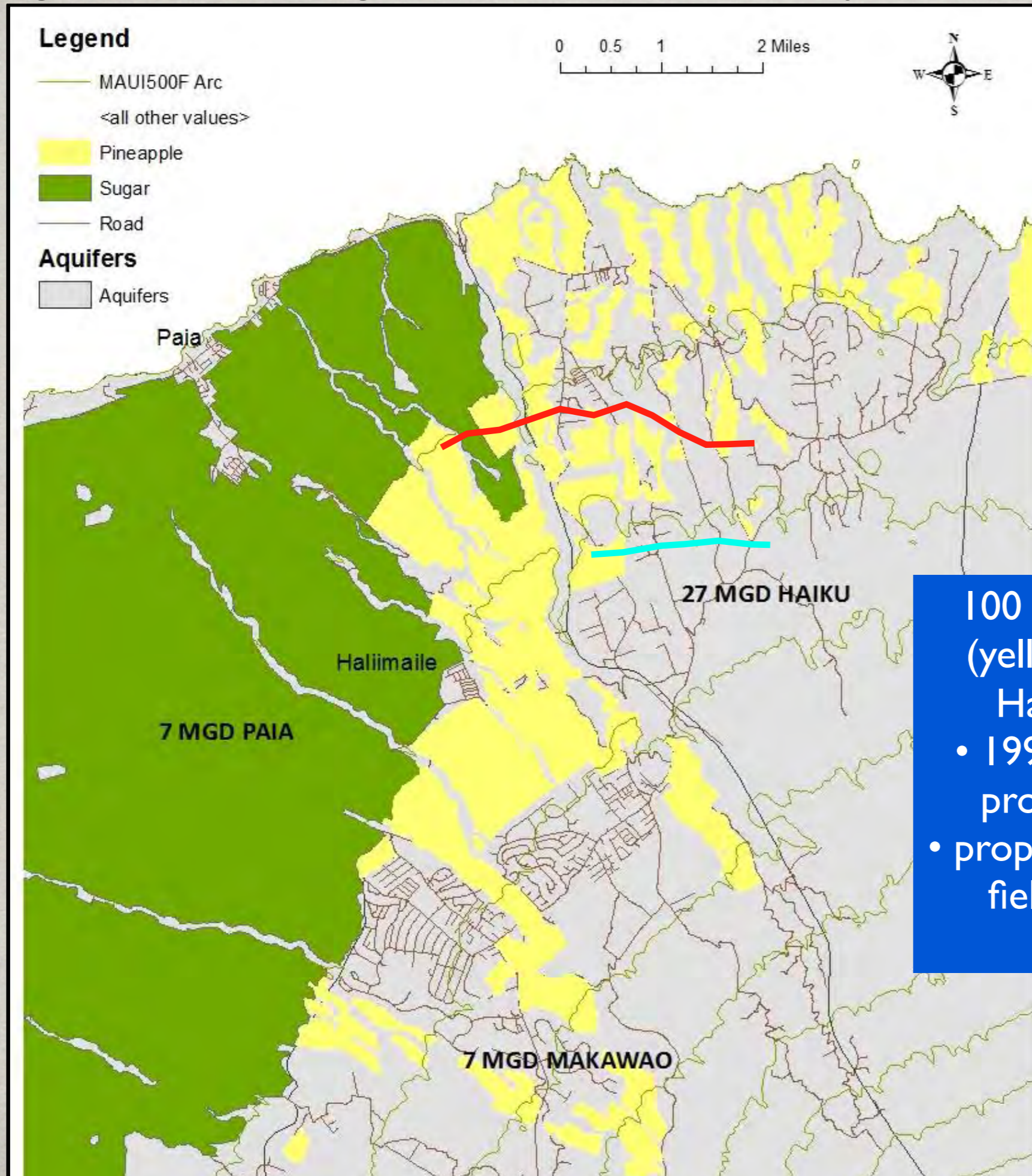


- Will future wells impact 100 existing homeowner wells or springs in Ha'iku?

Old, discredited studies on Aquifer Water Quantity cannot be used. New studies, reviewed by citizen groups need to be done.



Figure 15-32 Historic Agriculture in Ha`ikū and Pā`ia Aquifers



100 years of Pineapple production (yellow area) has left chemicals in Ha'ikū & Pā'ia groundwaters.

- 1992 Ha'iku wells (red line) were proposed in old pineapple lands
- proposed 2002 higher elevation well field is blue line- still some risk

**Table 14-40 Selected Demand Scenario: Projected Water Demand and Supply Options
Wailuku ASEA and MDWS Central System**

DEMAND (MGD)	2014	2015	2020	2025	2030	2035
MDWS Potable Wailuku and Central ASEA	22.274	22.699	25.421	28.100	31.224	34.134

Short and Long-term Costs of Ha'ikū Wells need to be compared with costs of alternative water sources and strategies.

NOTE: Current Maui Water Plan just assumes the Ha'iku wells will be built in ten years. There is NO PLAN 'B' if Ha'iku wells are too expensive or damaging to environment

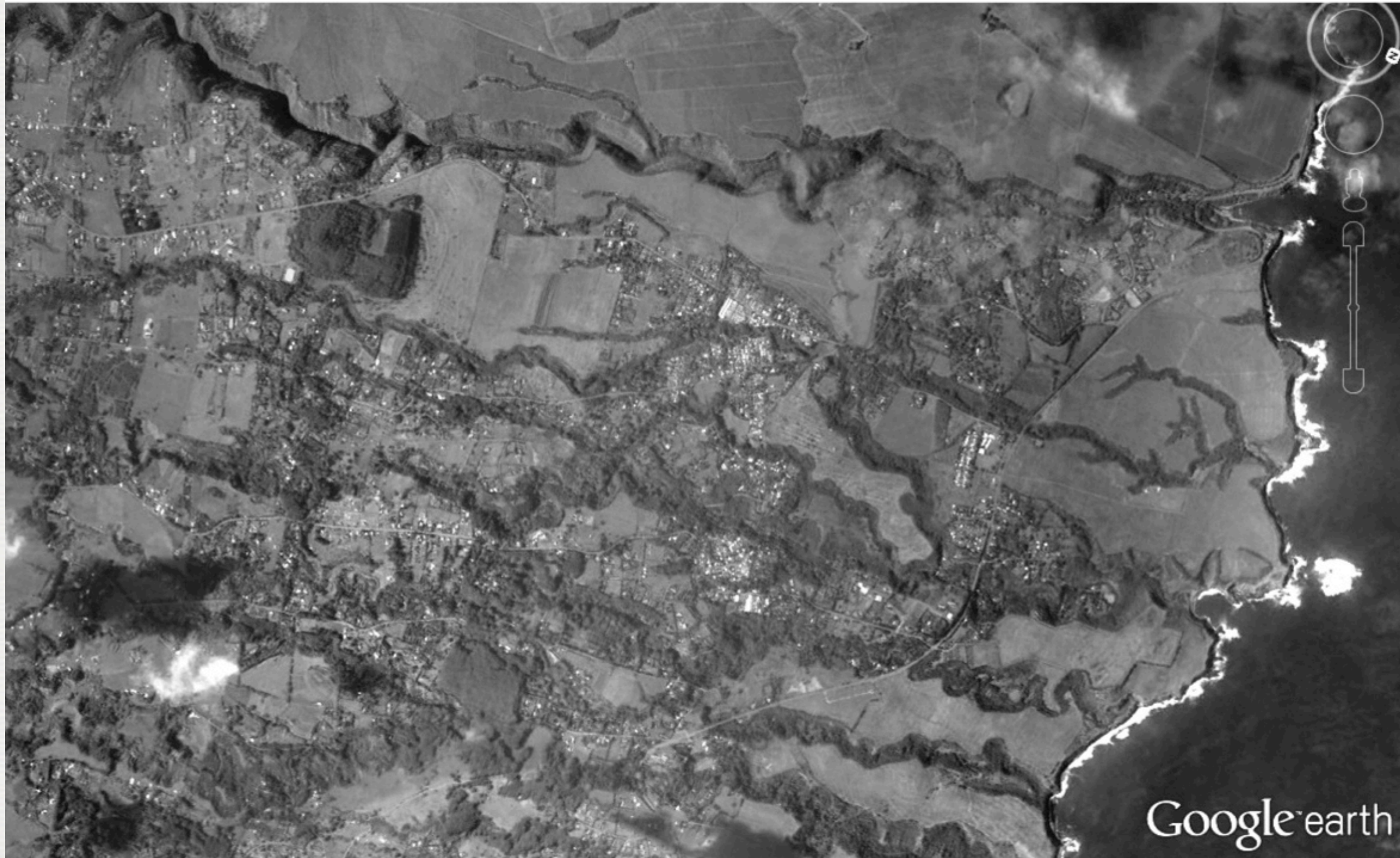
SUPPLY (MGD)	2014	2015	2020	2025	2030	2035
Potable Groundwater Wailuku ASEA	20.353	19.909	19.939	21.355	19.071	16.493
Iao Aquifer GWMA	17.28	16.430	15.939	14.255	12.171	9.593
Waihee Aquifer	3.479	3.479	4.000	4.900	4.900	4.900
Waikapu Aquifer	0.000	0.000	0.000	2.200	2.000	2.000
Potable Groundwater Import Kahului Aquifer (Maui Lani Wells)	0.930	1.090	1.090	1.090	1.090	1.090
Non Potable Groundwater	0.400	0.408	0.457	0.505	0.561	0.613
Iao Aquifer GWMA	0.341	0.348	0.377	0.405	0.441	0.493
Waihee Aquifer	0.058	0.06	0.08	0.1	0.12	0.12
Potable surface water (Wailuku River)	0.990	1.700	3.200	3.200	3.200	3.200
Non potable surface water	36.161	36.154	30.600	30.610	30.622	30.632
Waikapu Stream	2.957	2.957	2.957	2.957	2.957	2.957
Wailuku River	5.438	4.728	3.228	3.228	3.228	3.228
Waiehu Stream	0.833	0.833	0.833	0.833	0.833	0.833
Waihee River	8.327	8.327	8.327	8.327	8.327	8.327
Nā Wai `Ehā multiple sources	18.606	19.308	15.255	15.265	15.276	15.287
Recycled Water (South Maui MDWS Service Area)*	1.580	1.580	2.080	2.280	2.280	2.280
Water Conservation	0.000	0.000	0.692	1.755	3.163	4.651
Potable Groundwater Import Ko'olau ASEA (Haiku Aquifer)	0.000	0.000	0.000	0.000	4.000	8.000
TOTAL SUPPLY	60.414	60.841	58.058	60.794	63.986	66.960

The consent decree requires compliance with laws protecting native Hawaiian rights

- East Maui Coalition wants future County hydrological studies for wells to tell the whole story of how Ha'ikū's streams, springs and oceans are connected to Hawaiian families and culture.
- Generational fishing/farming areas will lose life-giving groundwater if honest, accurate studies not done.



Any future Ha'ikū well plans need to include in-depth stream studies and restoration plan for Ha'ikū streams



East Maui Consent Decree provides an important safeguard to save taxpayers millions of dollars, protect public trust resources and ensure a reliable supply of water for Maui's future.

Current costs of the East Maui Well Plan are estimated at over \$90 mil but there is no certainty whether the 8 wells proposed will yield the 8 mgd of water the current WUDP estimates is needed by 2035. If 16 wells, rather than 8 are needed, costs will increase substantially.

Maui Water Use and Development Plan needs to discuss Ha'iku wells in realistic terms

- 1) Real requirements of Consent Decree and costs
- 2) Real plans to meet Ha'iku's own water needs
- 3) Uncertainty of Ha'iku aquifer water yield capacity
- 4) uncertainty of Ha'iku aquifer water quality
- 5) Real impacts of large wells on traditional agriculture and fisheries in Ha'iku
- 5) Uncertainty of actual future South/Central Maui demand on County system

Mahalo

From Sierra Club Maui and Coalition Allies