

Public Attitudes Toward the Development of Seawater Air Conditioning in Waikīkī

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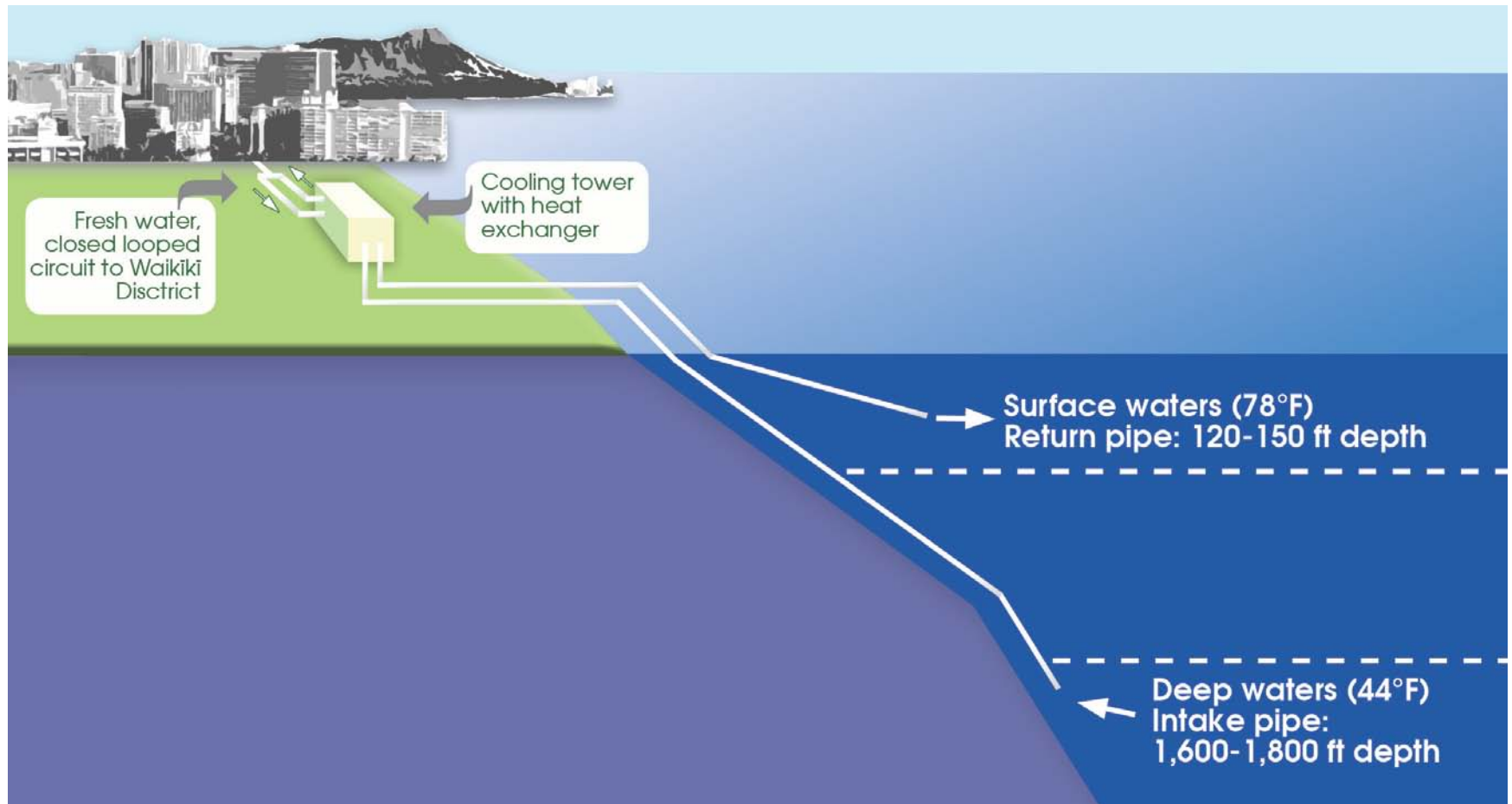


UH SWAC research

- Interdisciplinary research project
 - UH Sea Grant
 - Economic Research Organization at the University of Hawai'i (UHERO)
 - Center for Microbial Oceanography: Research and Education (C-MORE)
- Applicability, environmental impacts and public attitudes towards SWAC in Waikīkī
- Work supported by DOE through DBEDT



How SWAC works



Why SWAC?

- Potential to reduce AC demand by 70-90%
- HI most fossil fuel dependent state in the nation
 - 75% of electricity generation from oil
 - Hawai'i Clean Energy Initiative

- Highest state electricity prices (2011 per kWh)

O'ahu	33¢	Maui	35¢
Kaua'i	42¢	Moloka'i	42¢
Lana'i	44¢	Big Island	44¢
US	12¢		

SWAC public opinion survey

- Survey sent to 2,000 O'ahu residents:
559 responses (33% response rate)



55% of O'ahu residents aware of SWAC



62% support SWAC in Waikiki (8% oppose)



69% support among previously aware



54% support among previously unaware

SWAC compared to other options

Technology	% who rank in top-3 choices	% who rank as top choice
Biofuels/biomass	31%	18%
Geothermal energy	26%	11%
Natural gas	8%	3%
OTEC	16%	3%
Rooftop solar water heaters	44%	11%
SWAC	11%	1%
Solar power (PV)	68%	39%
Wave energy	31%	5%
Wind energy	60%	10%

Factors that increase support for SWAC

Statement	Opponents: More Supportive	Undecided: More Supportive
Reduce the amount of energy used by buildings connected to SWAC system by 30%	19%	63%
Reduce fresh water use by 110 million gallons a year (1% of what O'ahu uses)	25%	70%
Reduce CO ₂ emissions by 120,000 metric tons (1% of Hawai'i's total CO ₂ emissions)	38%	69%

Factors that decrease support for SWAC

Statement	Supporters: Less Supportive	Undecided: Less Supportive
If SWAC caused traffic disruption for up to six months during construction	19%	38%
If SWAC caused minor damage to Waikīkī's reef during construction	60%	73%
If SWAC caused algae to form off Waikīkī Beach	72%	68%

Mahalo nui for your time

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