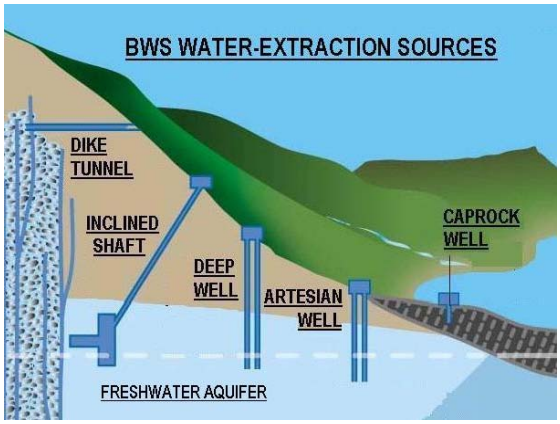
Board of Water Supply

How Does Water Get to Your Tap?

Our island has been blessed with a bountiful supply of clean, fresh water. But how does the Board of Water Supply (BWS) get that water from the ground to your tap?

How does BWS draw water from our island?

The BWS utilizes four shafts, 12 tunnels and 84 well stations around the island to draw water from the ground.



- Dike Tunnels are drilled through a mountain to its dike rock compartment where freshwater is drawn out before it reaches the aquifer.
- Inclined Shafts descend hundreds of feet to the top of the aquifer, skimming its upper layer to extract freshwater.
- Deep wells are located over the aquifer and supply the majority of Oahu's water. Artesian wells are located in coastal plains and allow water to flow naturally. Caprock wells are located in coastal plain sediments and draw non-potable water for irrigation.

How does the water get to my home?

Once up on the surface, the water enters a complex and unique water transmission system, which transports water from pumping stations to our customers. Pumping Stations pump water from the shafts, tunnels and wells into our transmission system. Occasionally, Booster Stations are used to push water over long distances and to higher elevations. The purpose of Pumping and Booster Stations are to deliver freshwater to our Reservoirs, which store water for future use. Finally, when the water is needed, it is fed back into water mains for delivery to homes and businesses. Over 2,000 miles of transmission mains are utilized to convey freshwater from the pumping stations, to reservoirs, and to your home.

As you can see, the freshwater flowing from your tap is the result of a long and complicated process. For more information on our water supply or the BWS Transmission System, visit www.boardofwatersupply.com.