**Meeting the demand for water**

Use page 174-175 of your text book and the ‘Cambridge IGCSE textbook’ extract t fill int eh table below

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| **Water source** | **Explanation** | **Benefits** | **Drawbacks** |
| **Boreholes / Aquifer**  https://s-media-cache-ak0.pinimg.com/736x/61/47/c3/6147c3c5f0e7f7f0f0396a8d7638ddd2.jpg | A well/borehole is a way of harvesting groundwater from aquifers (water-bearing rocks). They are sunk directly down to the water table, which is the highest level of underground water. | Normally, they are reliable (assuming the rain is reliable too), and they don’t lose water to evaporation. They aren’t polluted by factories or towns above them. | If too much water is drawn at once, it may take a while to replenish the supply with rain. |
| **Desalination plant**  Image result for desalination plant | These distil sea water and make it safe to use by removing the salt. Traditionally, we would have boiled the water, but now some new techniques are being developed, like ‘reverse osmosis’, which plans to make it cheaper and easier. | It does not affect water level in rivers, and it means that we don’t need as many dams, which can be very bad environmentally (see bottom right cell). We can use water that otherwise is useless, and make it useful (‘to turn urine to gold’). | The sea water still has to be filtered to get rid of impurities, and it is still all very expensive. |
| **Small-scale rainwater harvesting**  Image result for rain water harvesting | This is when residents (or landlords) place water collection bins connected to the rain drainage system. | We can use water that otherwise would just flow away, and it is almost free to do (you only have to buy a cistern and replace it rarely). | That water might still flow into rivers if it wasn’t captured, meaning that we might be reducing the effectiveness of other methods, or even damaging wildlife habitats. |
| **Rivers and Lakes**  https://a2ua.com/rivers/rivers-002.jpg | These are massive sources of easily accessible water, where we can just directly harvest water. | Easily accessible – no boiling, drilling or anything of the like. | Water has to be strongly purified, as lots of pollutants seep into lakes and rivers. |
| **Dams and Reservoirs**  Image result for dams and reservoirs | A dam is a barrier that holds back water, and are mainly used to save, manage and prevent the flow of excess water into specific regions. | We can also use them to provide roads across lakes or rivers. We can use them to generate hydro-electric (relatively) clean energy. | We need an awful lot of concrete and other building materials to build dams. There can also be environmental damage, as we might block migration routes. Finally, places up water of the dam may be flooded behind the dam. |