Frequently Asked Questions

PLANT SIZE AND LOCATION

WHAT SIZE PLANTS ARE BEING CONSIDERED?
Initially a 20-30 mgd (million gallons per day) plant is envisioned though this could change depending on growth of our region.

WHERE WILL THE PLANTS BE LOCATED?
Two plants will be permitted – one in the area of the Inner Harbor and one in the La Quinta Channel area.

HOW LARGE A SITE IS REQUIRED FOR EACH PLANT?
It depends on the size of a plant, but approximately a 10 acre site would be sufficient.

HOW MANY SITES HAVE BEEN EVALUATED?
Nineteen sites have been evaluated in the initial analysis. The candidate sites were then evaluated further and a smaller list was developed. Then two preferred sites were chosen in mid-2019.

WHAT FACTORS ARE CONSIDERED IN THE SITE SELECTION PROCESS?
There are a range of factors considered. To name a few key ones for this project: power availability, proximity to the water transmission system, the character of the source water, location of a suitable concentrate discharge location, and a whole range of other environmental issues.

CAN A PLANT BE EXPANDED?
Yes, intake and outfall structures can be sized to allow for expansion, within limits.

WHY NOT JUST BUILD A VERY LARGE PLANT?
There are a number of reasons including costs. It is best to build a plant for what can be reasonably forecast in terms of demand with some upsizing of intake and outfall as discussed above. It is not practical to not fully utilize the capacity of a plant. A 100 mgd plant does not automatically less expensive water. There is a point in terms of size where the economies of scale do not produce cheaper product costs. There are potential environmental issues that must be carefully assessed, and technological improvements are likely over time.

PLANT OPERATIONS

WHAT WOULD A FACILITY LOOK LIKE/SOUND LIKE?
The architecture of facilities varies worldwide with plant location and community surroundings and desire being some of the factors in design. Plants generally look like a typical water plant, and there is relatively little noise associated with a desalination facility. There will be some traffic associated with a plant with vehicular trips generated by employees, visitors, delivery of supplies and periodic removal of brine. While plants are relatively low.volume traffic generators, suitable road way access is a factor considered in site selection.

WOULD IT OPERATE ALL THE TIME?
Yes, essentially, though a plant does need to be taken off-line for a period of time annually.

WILL ENVIRONMENTAL IMPACTS BE CONSIDERED?

Yes, an important aspect of the planning and permitting process is to ensure the environment is protected.

CAN YOU DRINK THE WATER AND IF SO, WHAT WILL IT TASTE LIKE?

Yes you can drink the water, the plant will produce potable water.

WHY WOULD YOU WANT TO PRODUCE POTABLE VERSUS INDUSTRIAL WATER?

Producing potable water would allow the greatest flexibility since it would allow potentially for the use of the existing water distribution/ transmission system. This saves the cost of having to build a separate distribution/transmission system. If there is sufficient demand in a relatively small area near a plant then producing non-potable water could make sense. The difference is just the additional processing required to meet drinking water (potable) standards for health and safety and to meet taste expectations.

ENVIRONMENTAL PROTECTION

WHAT IS PRODUCED BY PLANTS AND RETURNED TO THE BAY?

Desalination plants take in seawater and then filter out certain solid type of materials including salts. This “brine” that is caught in the filters is collected and disposed of, typically at landfills. It is not returned to the bay. What does return to the bay is liquid which is saltier than the incoming water and is called concentrate. The term concentrate is descriptive in that it is just a concentrated form of what came from the water body and was not caught in the filters. It is saltier so a diffusing system is desirable to remix it with the source water. The only additional chemicals that might be present are food grade type that may be used in the filtering process.

WON’T THERE BE AN IMPACT ON MARINE LIFE?

There should be only minor impacts on marine life when a plant is properly located and designed. Concern over entrapment or entrainment of sea life during intake of water is an issue. Again, the location and design of intake structure can reduce any impact.

HOW COMMITTED IS THE CITY TO ENSURING THE ENVIRONMENT IS SAFEGUARDED?

The City is very committed to conducting the analysis required to ensure the plant is designed and operated environmentally responsible and uses the best available control technology.

COST

HOW MUCH WILL THE FACILITY(IES) COST AND WHO WILL PAY FOR IT?

The estimated cost for a plant on the Inner Harbor is in the range of $220 million.

WHO WILL PAY FOR IT? WILL IT IMPACT MY WATER RATES?

The users of the water would pay for the plant. As envisioned, the large volume Industrial customers would help pay for a large portion of the debt service for the plant. Little to no impact to the general user is anticipated.

OTHER PROJECTS

IS THE CITY PROJECT THE SAME AS THE PORT PROJECT? WHAT ABOUT THE PRIVATE PROJECTS BEING DISCUSSED?

The city and the Port have been coordinating on their efforts. The Port projects are distinct, however. The City has stated that, for purposes of this project, the Harbor Island site being permitted by the Port would not meet its requirements, but the La Quinta site might and is being evaluated.

There are private sector developers who have expressed interest in designing, building and operating plants. In terms of the City effort, their proposals will be sought and considered once certain initial activities are completed, including optimum location for plants, securing of permits, and key features to be potentially incorporated in the design. There is also one industrial company that built their own plant for a number of reasons.