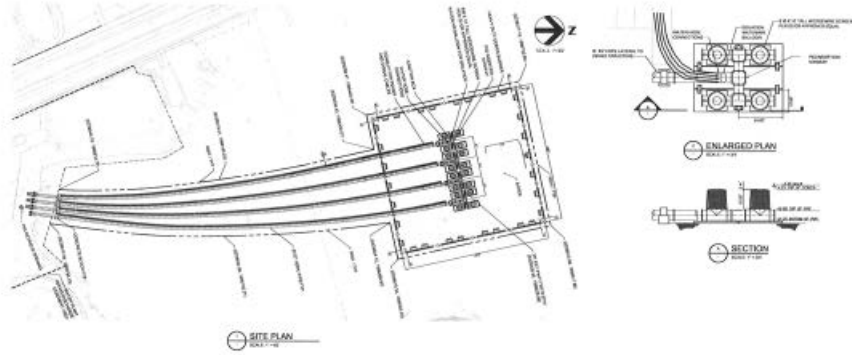


**Appendix EEE**  
**Carlsbad Desalination Project**  
**Revised Feasibility Assessment for Intake Alternatives 1, 15, and 21**  
**April 4, 2018**

Environmental Impact	Impact Assessment Method	Impacted Area (Acres)			
		Alternative 1	Alternative 15	Alternative 21 Active Screens	Alternative 21 Passive Screens
<b>Intake</b>	APF calculated per Appendix E of the Staff Report/SED to the Ocean Plan Amendment using a 95% confidence bound for an assumed 100% mortality of all forms of marine life entrained by 127 MGD CDP process water with an APF of 35.76 acres and 172 MGD flow augmentation with an APF of 47.68 acres after accounting for a 1% credit for 1 mm screening technology.	83.44	83.44	83.44	83.44
	Potential mortality associated with the operation of the fish return system.	0.93	0.85	0	0
<b>Discharge</b>	Area within the BMZ potentially exposed to a salinity in excess of 2 ppt over natural background salinity.	18.51	18.51	18.51	18.51
<b>Construction</b>	Permanent impacts to marine habitat.	<0.10	<0.10	0.20	0.20
	<b>Total Environmental Impacts (Acres)</b>	<b>102.98</b>	<b>102.90</b>	<b>102.15</b>	<b>102.15</b>
<b>Cost</b>	Capital Cost	\$68,159,000	\$71,935,000	\$55,982,000	\$52,835,000
	Annual O&M Cost	\$4,808,000	\$4,808,000	\$5,288,000	\$5,895,000
	Annualized Cost (Capital and O&M)	\$10,674,000	\$11,002,000	\$10,167,000	\$10,499,000
<b>Schedule</b>	Expected Operation Date of Ocean Plant Compliant Intake and Discharge Facilities	<b>2021</b>	<b>2021</b>	<b>2023</b>	<b>2023</b>
<b>Conclusion</b>	Overall Feasibility Assessment	<b>Feasible</b>	<b>Feasible</b>	<b>TBD<sup>1</sup></b>	<b>TBD<sup>1</sup></b>

<sup>1</sup> Currently there is no operational data available to assess the performance and reliability of wedge wire screens (WWS) in an estuarine environment similar to Agua Hedionda Lagoon. A pilot-scale demonstration project will be conducted in Agua Hedionda Lagoon to determine the feasibility of using WWS at this location, refine the design and operation and Maintenance (O&M) requirements for the WWS, and validate the capital and O&M cost assumptions included above.

## Intake Screen Layout



## Intake Screens Permanent Impact - 0.2 Acres

