

Attachment 1 - Diablo Canyon Desalination Near-Term Opportunities Summary

Desalination Water Supply Opportunities and Considerations Report

Diablo Canyon Power Plant Near-Term Opportunities Analysis

Objective: Provide information on the opportunity to bring desalinated water from Diablo Canyon Power Plant (DCPP) to Los Osos Groundwater Basin or the Northern Cities Management Area (NCMA) of the Santa Maria Groundwater Basin so that management entities can compare against other alternatives to address existing deficiencies and drought reliability needs.

Desalinated Supply ¹	DCPP-Side Logistical Steps ²	SLO County-Side Logistical Steps ³	Need/Beneficial Use Concepts	End Use Concepts
Estimated Available to Areas of Need at Existing Capacity 500 AFY	<ul style="list-style-type: none"> • Post-treatment system capital and O&M • Conveyance capital and O&M • Existing system compensation • Project implementation steps and level of complexity 	<ul style="list-style-type: none"> • Develop Project Description • Evaluate ability to use existing distribution infrastructure • Conveyance capital and O&M • Project implementation steps and level of complexity 	<u>NCMA</u> 1,026 AFY⁴ Offset current urban pumping from the Northern Cities Management Area of the Santa Maria Groundwater Basin to mitigate against drought / seawater intrusion <u>Los Osos</u> 460 AFY⁵ Halt seawater intrusion into Los Osos Groundwater Basin's Lower Aquifer (Basin Plan Immediate Goal No. 1)	<u>NCMA</u> Urban customers via agreements between project partners <u>Los Osos</u> Urban customers Recharge basins Injection wells
Estimated Available to Areas of Need at Full Capacity 1,000 AFY	<ul style="list-style-type: none"> • Treatment expansion capital and incremental O&M • Post-treatment system capital and O&M • Conveyance capital and O&M • Existing system compensation • Project implementation steps and level of complexity 	<ul style="list-style-type: none"> • Develop Project Description • Evaluate ability to use existing distribution infrastructure • Conveyance capital and O&M • Project implementation steps and level of complexity 		

¹ These estimates continue to be refined by PG&E. Assumes potable water supply is desired (i.e., treated to drinking water standards)

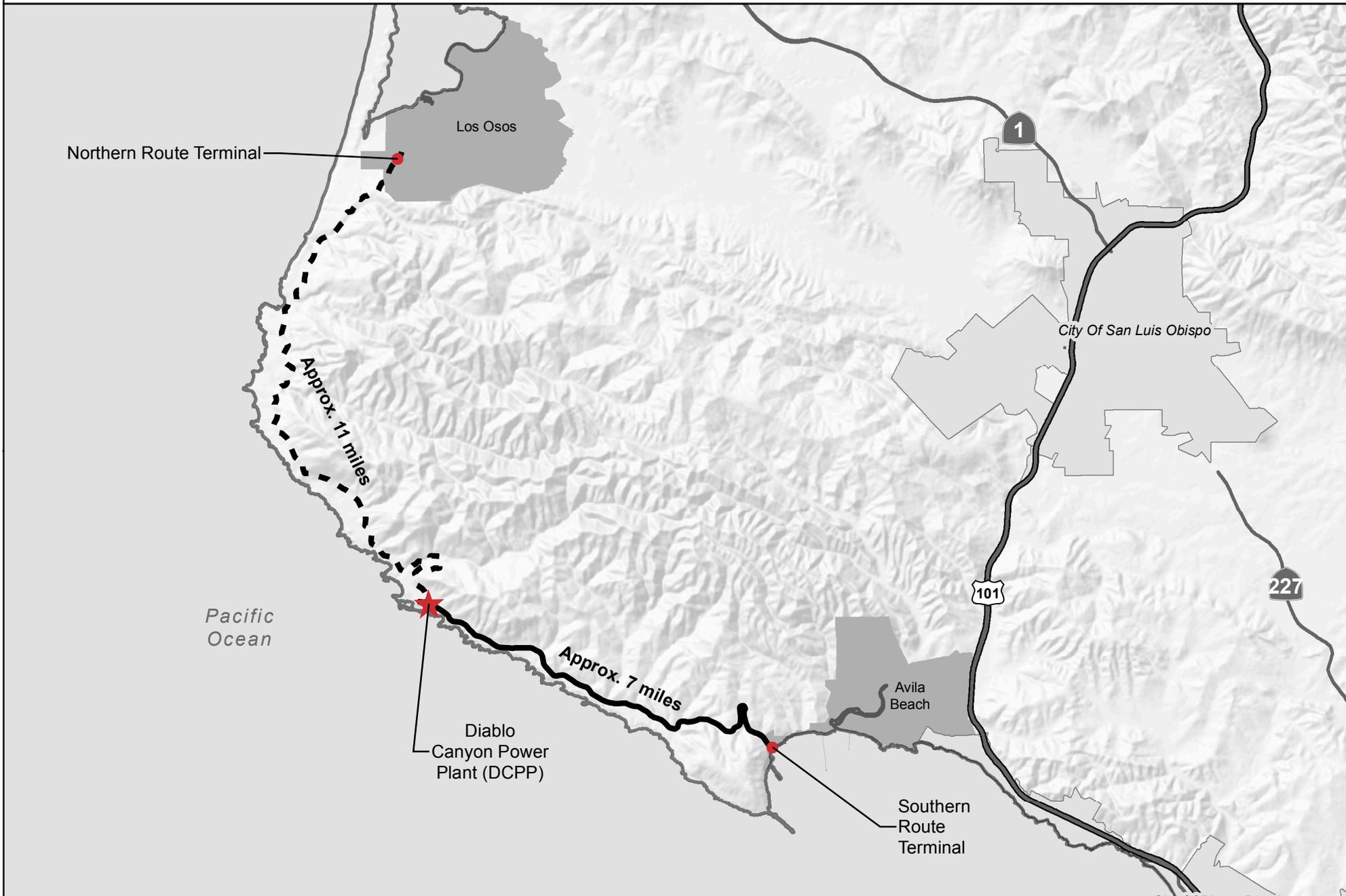
² Information to be developed by PG&E upon Board direction (see page 2).

³ Information to be developed by SLO County (Public Works Department) upon Board direction.

⁴ In 2014 the total groundwater pumping in the NCMA of the Santa Maria Groundwater Basin (urban, agriculture, and rural domestic) was 4,020 AF, which is 42% of the 9,500 AFY identified safe yield. The NCMA Agencies pumped 1,026 AF out of their 4,330 AF allocation of the Santa Maria Groundwater Basin identified safe yield, or 24% of their allocation. However, groundwater elevations declined several feet to levels similar to those seen in 2009, when seawater intrusion was detected in one of the sentry wells. The current condition, with groundwater extractions at 42% of the safe yield and declining water elevations, illustrates the impacts of the ongoing severe drought that has significantly reduced recharge (reference: NCMA 2014 Annual Monitoring Report, April 2015). The need would be refined with NCMA upon Board direction.

⁵ Under current conditions, replacing 460 AFY of lower aquifer production in the Western Area with an alternative potable water source would halt seawater intrusion into the Lower Aquifer (reference: Updated Basin Plan for the Los Osos Groundwater Basin, January 2015, page 230).

Near Term Diablo Canyon Opportunity Concept



-  Diablo Canyon Power Plant (DCPP)
-  Southern Pipeline Route
-  Northern Pipeline Route
-  City Limits
-  Urban Reserve
-  County Boundary

