ATTACHMENT B - NOTICE OF INTENT (NOI)

FOR COVERAGE PURSUANT TO WATER QUALITY ORDER NO. 2009-0006–DWQ

GENERAL PERMIT FOR LANDSCAPE IRRIGATION USES OF MUNICIPAL RECYCLED WATER

I. Distributor (Required)[1]:

Agency / Organization / Name: Delta Diablo Sanitation District			
Facility, if any: Delta Diablo Sanitation District RWF # 0790004			
Conveyance Role (Check all that apply): ☒ Recycled Water Retailer ☒ Recycled Water Supplier ☐ Recycled Water Wholesaler	Distributor declares responsibility for administering program necessary to fulfill the requirements of this General Permit: ☒ Yes ☐ No		
Description of Recycled Water Conveyance Role: The District produces and distributes disinfected tertiary water which is sold to users in its Pittsburg-Bay Point and Antioch Service Areas			
Existing Water Reclamation Requirements (if any): SFRWQCB General Order 96-011	Do you request to rescind the identified existing WRRs? ☐Yes ☒ No		
Mailing Address: 2500 Pittsbutg-Antioch Highwya			
City: Antioch	County: Contra Costa	State: CA	Zip: 94509-1373
Phone Number: 925-756-1900	Fax Number: 925-756-1961		
Contact Person: Ms. Amanda Roa	E-Mail: amandar@ddsd.org		

II. Producer (Required)[1]: as above

Agency / Organization:			
Facility:			
Producer declares responsibility for administering program necessary to fulfill the requirements of this General Permit: ☒ Yes ☐ No			
Order Number:	WDID:	Treatment: ☒Disinfected Tertiary[2] ☐ Advanced[3]	
Existing Water Reclamation Requirements (if any):	Do you request to rescind the identified existing WRRs? ☐Yes ☒ No		
Mailing Address:			
City:	County:	State:	Zip:
Phone Number:	Fax Number:		
Contact Person:	E-Mail:		

[1] Attach multiple sheets if necessary; only one administrator of this General Permit is allowed per NOI.
[2] As defined in California Code of Regulations Title 22, sections 60301.230 and 60301.320
[3] Achieves "disinfected tertiary" quality and includes additional treatment.

III. Billing Address (Required):

Agency / Organization / Name: Delta Diablo Sanitation District			
Mailing Address: 2500 Pittsburg-Antioch Highway			
City: Antioch	County: Contra Costa	State: CA	Zip: 94509-1373
Phone Number: 925-756-1935		Fax Number: 925-756-1961	
Contact Person: Ms. Karen Ustin		E-Mail: karenu@ddsd.org	

IV. Salt and Nutrient Management Plans (required)

For projects where Salt and Nutrient Management Plan is in effect.

Salt and Nutrient Management Plan, approved by a Regional Water Board?

☐ Yes

☒ No; check one of the two boxes below:

☐ Under development, estimated completion date: I am actively participating in this development effort.

☒ No organized effort to develop a Salt and Nutrient Management Plan for the basin exists at this time. I will actively participate in the development of a Salt and Nutrient Management Plan when the effort commences.

For projects where Salt and Nutrient Management Plan is **not** in effect.

Antidegradation analysis completed consistent with Recycled Water Policy Paragraph 9d.(2)? ☒ Yes ☐ No

V. Certification (Required):

I hereby agree to meet and follow the requirements set forth in Water Quality Order No. 2009-0006-DWQ. I also agree to adhere to the Operation & Maintenance Plan, submitted herewith, and to ensure the proper use of recycled water for landscape applications. I also agree that, where an applicable Salt and Nutrient Management Plan is adopted by a Regional Water Board, I will ensure full compliance by all producers and distributors under this permit to any monitoring and reporting elements therein. Upon approval of coverage under the General Permit I will assume responsibility for administering an appropriate program necessary to fulfill the requirements of Water Quality Order No. 2009-0006-DWQ. I declare under the penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

I.	Signature of Administrator: 	Title: Operational Services Director
	Printed or Typed Name: Dennis F. Laniohan	Date: September 22, 2009

Anti-degradation Analysis Consistent with Recycled Water Policy Paragraph 9d.(2)

The State Water Board's adopted Resolution No. 68-16 as a policy statement to implement the Legislature's intent that high quality waters of the state be protected to the maximum benefit of the people of the State. The purpose of this analysis is to document that the groundwater in the proposed service area is not of high quality nor is it put to beneficial use.

The Use Areas proposed to be added are at the very northeastern end of the Tracey Subbasin of the San Joaquin Valley Groundwater Basin in Contra Costa County, directly adjacent to the San Joaquin River, as illustrated in Figure 1.

According to Bulletin 118 of California Groundwater, the water bearing formations include the Tulare formation, Older Alluvium, Flood Basin Deposits and Younger Alluvium.

The Tulare formation dips eastward toward the axis of the valley from the Coast Range foothills. It is comprised of discontinuous deposits of clay, silt and gravel. The Corcoran Clay is a unit near the top of the Tulare formation and forms a confining layer for underlying potable water deposits. Most of the potable groundwater use is from below this Corcoran clay however, small domestic wells sometimes obtain their supply from above the clay, but according to Bulletin 118, this groundwater is often of poor quality.

Flood Plain Deposits were likely deposited in the proposed Use Areas over the Tulare formation. Flood plain deposits occur closer to the Delta. They are similar to the Tulare sediments and consist of primarily of silts and clays, with occasional gravels along waterways. The deposits have low permeability and do not produce large quantities of water to wells. Occasional zones of fresh water are found in these deposits, but they tend to be of poor quality.

The information included in Bulletin 118 is supported by the fact that groundwater is not put to beneficial use in the service area. According to the City of Antioch's Urban Water Management Plan: "The City does not currently use groundwater nor does it plan to use groundwater by the year 2025."

As part of preparing this analysis, research was conducted with the Central Valley Regional Water Quality Control Board (Regional Board). There is a not significant data in the area, which is consistent with the fact that the groundwater is not put to beneficial use. Data was obtained from one clean up site in the area, Oakley Road and Willow Avenue in Antioch (Diablo Sanitation District Permit # SDP-0500468) which is consistent with DWR's narrative description of water quality in the basin. This data from monitoring and extraction wells is presented in Table 1, below.

Because of the poor quality and limited use of the basin, Resolution 68-18's intent to protect high quality waters for beneficial uses is not triggered and an assimilative capacity calculation is not applicable.

Table 1 Water Quality Data available in the Antioch Service Area	
Well ID	TDS
DMW97-1	1540
DMW97-2	1700
DMW97-3	1640
DMW97-4	1840
DMW97-5	6700
DMW97-6	550
DMW97-7	3170
DMW97-8A	820
DMW97-9	1450
DMW97-10	670
DMW97-11	1180
DMW97-12	760
DMW97-13	1170
DMW97-14	2110
DMW97-15	1480
EW-1A	5530
EW-2	2910
EW-3	1640
EW-4	2320
EW-5	1640
EW-6	2180

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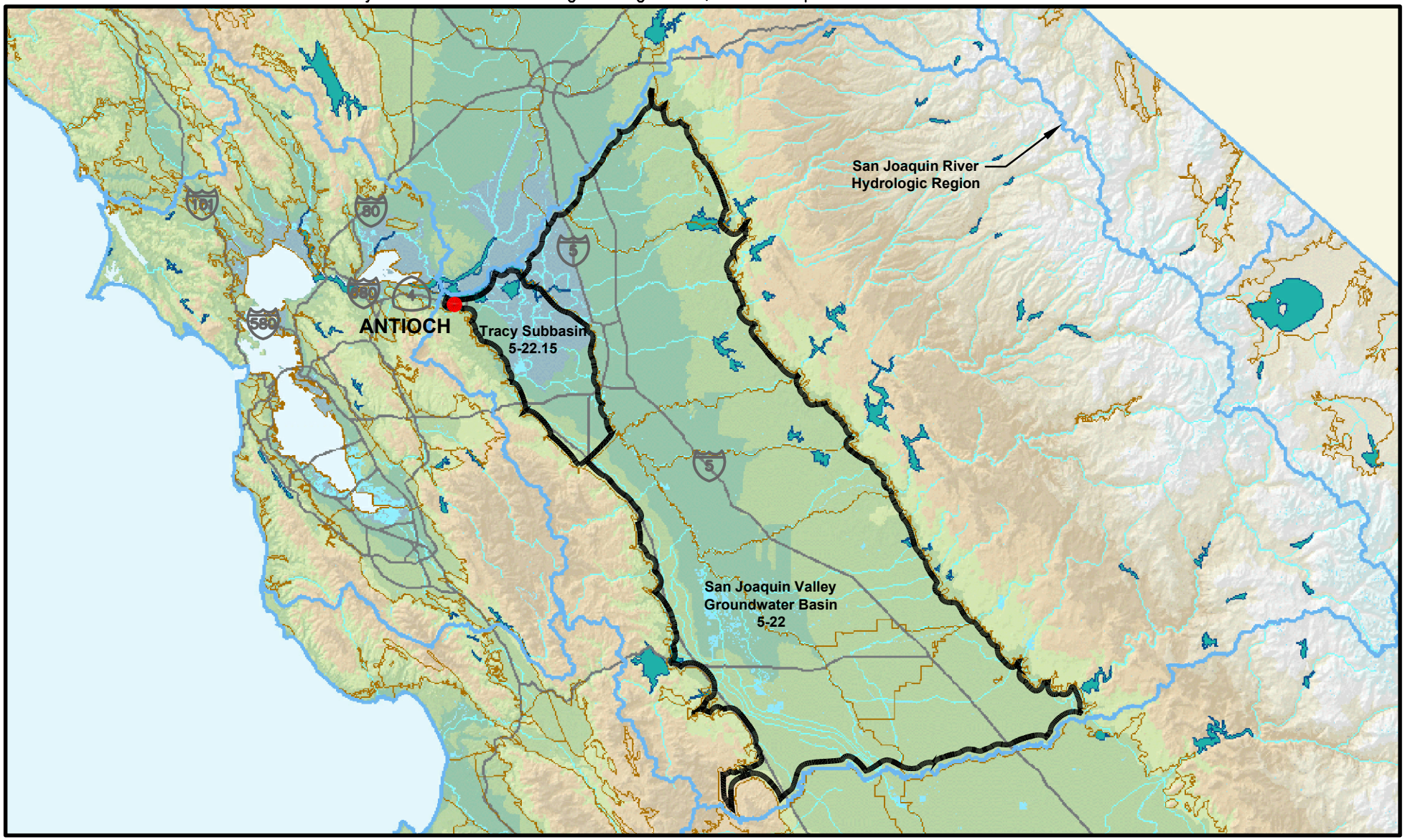


Legend

- DWR Hydrologic Regions
- Groundwater Basins
- 5.22 Basin Number
- 15 Subbasin Number
- Rivers & Streams
- Lakes
- Highway

0 25 50 MILES

Recycled Water Program
Location Map

Delta Diablo Sanitation District
Contra Costa, CA
11811-09-001
October 2009
Figure 1

WINZLER & KELLY

Antioch Recycled Water Project

The Antioch Recycled Water Project expands the service provided by DDSD in order to:

- **Reduce Dependence on Delta Supplies.** Delta supplies represent the bulk of water used within DDSD's service area. Expanded use of recycled water within this area would lessen the amount of Delta water diverted by the Contra Costa Water District and the City of Antioch, making water not used available for other purposes.

- **Improve Water Supply Reliability.** Since recycled water is not affected by hydrologic conditions, it provides additional dry-year reliability for irrigation customers and other users.

- **Preserve Potable Water Supplies.** Using recycled water to serve non-potable demands such as irrigation will preserve high-quality drinking water supplies for potable needs.

- **Reduce Wastewater Discharges**. DDSD currently discharges its wastewater effluent into the New York Slough. With the advent of Total Maximum Daily Load (TMDL) requirements for mercury and other constituents of concern, wastewater dischargers are facing increasingly stringent regulations. Increasing the production of recycled water will help DDSD to comply with these future regulations by reducing the amount of effluent discharged.

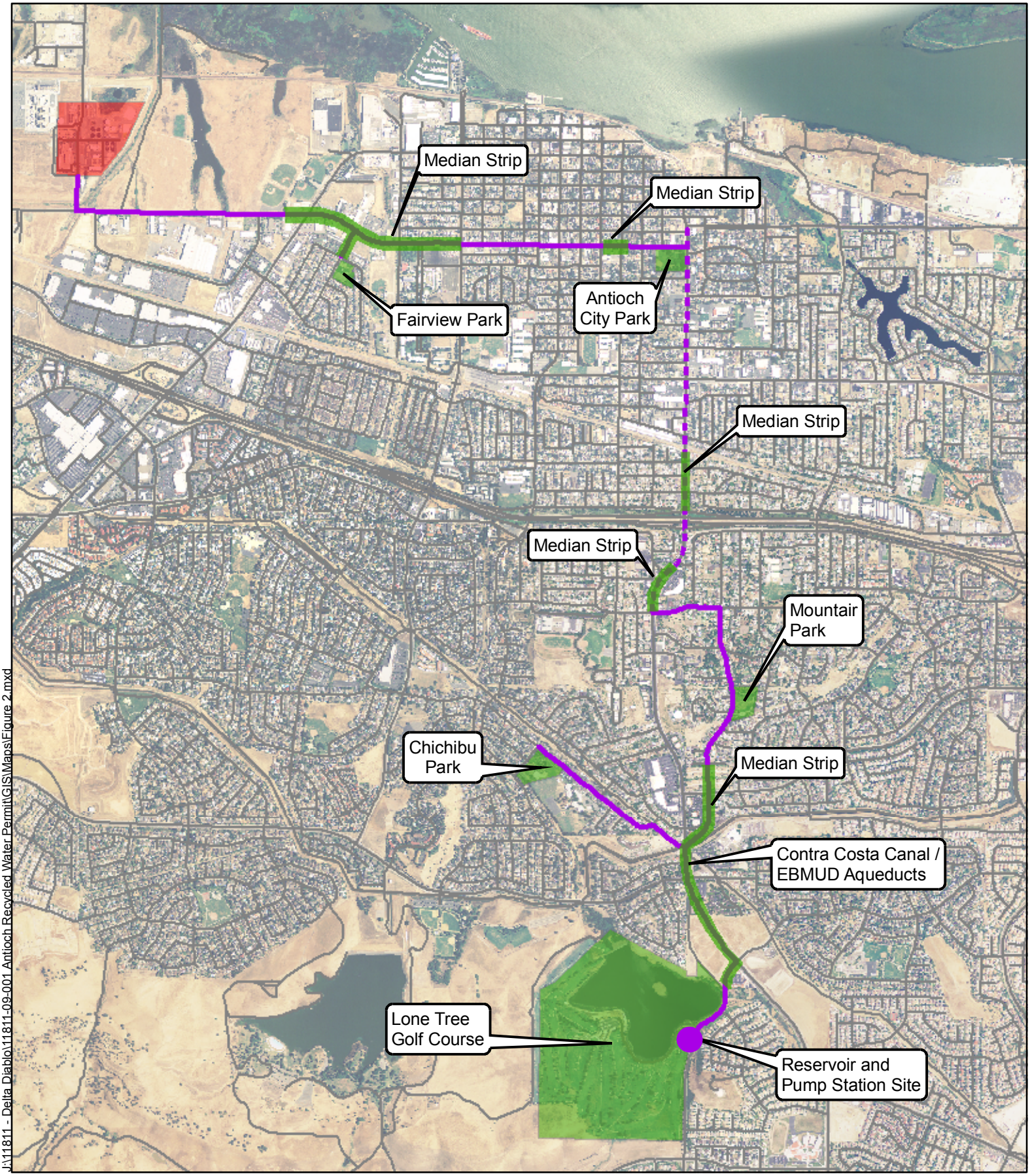
- **Better Utilize Existing Recycled Water Facilities.** Currently, DDSD's existing recycled water facilities are underutilized. Expanded recycled water use would make use of available capacity. Providing recycled water for irrigation will reduce the City's draw on the Delta, the current raw water source for the City. In addition to the environmental benefits associated with reducing intake of Delta waters, the City will also be able to increase its supply reliability for irrigation customers. Unlike current potable supplies, recycled water is unaffected by drought conditions.

The project includes construction of pipeline and connection of users as illustrated in Figure 2. The project includes a new recycled water pipeline that extends from the DDSD RWF along A Street to Lone Tree Way terminating at the Lone Tree Golf Course. Lateral pipelines are installed off the main pipeline to deliver water to specific user sites. A recycled water storage tank and pump station are located at the Lone Tree Golf Course. The project serves five major users and median strips along the pipeline route which are also illustrated on Figure 1. All water will be used for irrigation purposes. All the use areas are owned and maintained by the City of Antioch. Section 2 of the Program Manual provides detailed information on use area permitting and operating procedures. **Table 1** provides detailed information on the use area acreage, agronomic application rates, salt and nutrient loading from the potable water supply, salt and nutrient loading from the recycled water supply and the additive loading created by the conversion.

Table 1 Comparative Loading Calculations

		Water Application		***Potable Water Loading***				***Recycled Water Loading***				***Comparative Increase***	
				TDS		Nitrogen		TDS		Nitrogen		TDS	Nitrogen
User Name	Acreage	AF per acre	AF at site	LBS per acre	LBS at site	LBS per acre	LBS at site	LBS per acre	LBS at site	LBS per acre	LBS at site	LBS per acre	LBS at site
Lone Tree Golf Course	12.90	3.80	49.02	2,921.60	37,688.58	22.55	290.95	10,097.44	130,257.03	7.89	101.83	92,568.45	-189.12
Chichibu Park	14.50	3.80	55.10	2,921.60	42,363.13	22.55	327.03	10,097.44	146,412.94	7.89	114.45	104,049.80	-212.58
Mountaire Park	3.70	3.80	14.06	2,921.60	10,809.90	22.55	83.45	10,097.44	37,360.54	7.89	29.21	26,550.64	-54.24
Antioch City Park	3.80	3.80	14.44	2,921.60	11,102.06	22.55	85.70	10,097.44	38,370.29	7.89	30.00	27,268.22	-55.71
Fairview Park	1.90	3.80	7.22	2,921.60	5,551.03	22.55	42.85	10,097.44	19,185.14	7.89	15.00	13,634.11	-27.85
Medan Strips	2.03	3.80	7.71	2,921.60	5,930.84	22.55	45.78	10,097.44	20,497.81	7.89	16.02	14,566.97	-29.76
Project Totals	38.83		147.55		113,445.55		875.77		392,083.75		306.50	278,638.20	-569.27

TDS and Nitrogen Loading for Recycled Water from Chapter 2 of the Program Manual
TDS for Potable Water = 285 mg/l average from City of Antioch Annual Water Quality Report
Nitrogen as NO3 = 2.2 mg/l average from City of Antioch Annual Water Quality Report



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Legend

- Recycled Water Pipeline Route
- Slipline Existing 18" Pipeline
- Recycled Water Use Areas
- DDSD RWF
- Streets

0 1,000 2,000 Feet

Recycled Water Program
New User Areas in Antioch

Delta Diablo Sanitation District
Contra Costa, CA
11811-09-001
October 2009

WINZLER & KELLY **Figure 2**