

1 DOWNEY BRAND LLP
KEVIN M. O'BRIEN (Bar No. 122713)
2 MEREDITH E. NIKKEL (Bar No. 254818)
621 Capitol Mall, 18th Floor
3 Sacramento, CA 95814-4731
Telephone: 916.444.1000
4 Facsimile: 916.444.2100
kobrien@downeybrand.com
5 mnikkel@downeybrand.com

6 Attorneys for North Delta Water Agency

7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

BEFORE THE CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the matter of 2016 SWRCB Hearing re
CalWaterFix Petition for Change

**TESTIMONY OF TOM SLATER,
RECLAMATION DISTRICT 999**

DOWNEY BRAND LLP

1 1. My name is Tom Slater. I am the current President of the Board of Trustees of
2 Reclamation District 999 (“RD 999”). I also serve as an Alternate Commissioner on the Delta
3 Protection Commission representing North Delta Water Agency (“NDWA”).

4 2. I am a third-generation farmer in the Delta. I have been involved in my family’s
5 farming operation since graduating from UC Davis in 1976. I currently grow wine grapes,
6 alfalfa, safflower and wheat. In connection with my farming operations I utilize water diverted
7 on my behalf by RD 999. The main source of water for RD 999 is the Sacramento River and its
8 channels and sloughs, including Elk Slough, Minor Slough, Steamboat Slough, Babel Slough, and
9 the Sacramento Deep Water Ship Channel.

10 3. I am very familiar with irrigation and agricultural practices within RD 999. The
11 primary crops grown in RD 999 are alfalfa, wheat, safflower, tomatoes, corn, dichondra and wine
12 grapes. The percentages of these crops have changed dramatically over the past twenty years
13 with wine grapes currently being grown on approximately 8,000 acres, more than any other crop
14 in the District. The primary irrigation season within RD 999 is from April through September.

15 4. RD 999 was created by special act of the Legislature in 1913. There are
16 approximately 25,550 acres in RD 999. Land elevations within RD 999 range significantly.
17 There are small areas of RD 999 that are below sea level and there are small areas near the town
18 of Clarksburg with ground elevations up to 10 or 11 feet above mean sea level. The average
19 elevation within RD 999 is about 3 feet above mean sea level.

20 5. The water rights held by and claimed by RD 999 are accurately described in the
21 Testimony of Gary Kienlen (Exhibit NDWA-3).

22 6. The proposed new diversion intakes for the “California WaterFix” Project
23 (“Project”) would be located across the Sacramento River from Clarksburg. The northern-most
24 intake is less than a half-mile downstream of Elk Slough. Elk Slough feeds RD 999’s largest
25 siphon, the Headquarter Siphon, and additional pumps owned by individual landowners. Elk
26 Slough is approximately parallel to the Sacramento River and joins with Sutter Slough, which is
27 also fed by the Sacramento River. During the summer months, flow into Elk Slough from the
28

1 Sacramento River upstream from the proposed intakes is impeded by the buildup of silt in the
2 slough. During these months, water flows into Elk Slough from the south at its connection with
3 Sutter Slough, which is located downstream of the proposed intakes. Approximately five miles
4 from the Sacramento River along Sutter Slough is the Sutter Slough Siphon that RD 999 relies on
5 to irrigate the lower end of RD 999. RD 999's third siphon, the RD 999 River Siphon, is located
6 about one mile north of the northern-most proposed Project intake. It provides water into
7 Winchester Lake and serves the northern portion of RD 999. Winchester Lake is subject to
8 significant silting and requires sufficient water supply from the River Siphon. RD 999 also has
9 water right licenses to operate two pumps, including one along Elk Slough. RD 999's siphons
10 and proximity to the proposed intakes are depicted in a map I prepared using Google Earth, which
11 is identified as Exhibit NDWA-41.

12 7. As a farmer I have serious concerns that the proposed Project will negatively affect
13 the operations of users of water within RD 999. First, based on my many years of observing the
14 hydrodynamics of the northern Delta, I have serious concerns that the lower water surface
15 elevations that will result from operation of the proposed Project intakes will induce more sea
16 water to intrude into the northern Delta particularly in dry years.

17 8. As detailed in the Testimony of Steve Mello (Exhibit NDWA-9), salt loading is a
18 significant concern for farmers in the north Delta. The recent planting of wine grapes in RD 999
19 has significantly increased the value of the land that could be destroyed or significantly impaired
20 by salt water intrusion. Based on my experience as a farmer, once wine grapes are irrigated with
21 salt water (or salt water is introduced into the water table), the plants will typically die and land
22 values will decline rapidly.

23 9. I have reviewed the Testimony of Parviz Nader-Tehrani (Exhibit DWR-66)
24 submitted in this proceeding. In his testimony, Dr. Nader-Tehrani states in relevant part: "For all
25 scenarios except Boundary 2, in the months of July and August there is an increase in EC at
26 Emmaton of about 18-19 percent when compared to the NAA." (Exhibit DWR-66, p. 5, lines
27 16-17.) I am concerned that Dr. Nader-Tehrani's use of average annual figures regarding
28

1 projected increases in EC in north Delta channels masks much more significant short-term EC
2 increases that will occur during extremely dry conditions such as those that occurred in 2014 and
3 2015. From the standpoint of a Delta farmer, if we are dealing, for example, with a 40 percent
4 increase in EC during a critically dry year, the impact on crops—particularly permanent crops—
5 could be devastating.

6 10. In addition, the lower water surface elevations that would be caused by Project
7 diversions would adversely affect how much fresh water would be available to feed the sloughs
8 and channels referenced above. Elk Slough is already silted up considerably and RD 999 is not
9 allowed to remove silt in that watercourse because of restrictions imposed by the California
10 Department of Fish & Wildlife and other state and federal agencies. When the northern inlet to
11 Elk Slough is blocked during summer months, water flows into Elk Slough from the Sacramento
12 River through Sutter Slough and north to RD 999's Headquarter Siphon and south to the Sutter
13 Slough Siphon. If less water is available in the Sacramento River at Sutter Slough under
14 operation of the proposed project, then less water would be available to supply both the
15 Headquarter Siphon and the Sutter Slough Siphon that RD 999 operates under its water rights.

16 11. I am also concerned that reduced water levels caused by the Project will adversely
17 impact the operation of RD 999's siphons, which together supply irrigation water to
18 approximately 21,000 acres of land within RD 999. The Headquarter Siphon is a 60-inch siphon
19 located approximately one mile from the Sacramento River at Elk Slough can service
20 approximately 18,000 acres of cropland. Two photographs that I took of the Headquarter Siphon
21 as seen in Elk Slough are identified as Exhibits NDWA-42 and NDWA-43. The Sutter Slough
22 Siphon is a 20-inch siphon located downstream of the proposed intakes along Sutter Slough and
23 can service approximately 3,970 acres of cropland.

24 12. It has been my experience under current conditions that the Headquarter Siphon
25 operates best when water levels at the siphon are 4.2 feet above mean sea level or above. The
26 siphon, however, has difficulty operating at low tide during drought conditions (when the
27 Sacramento River is low). The lower the level in the River the more difficult it is to siphon water
28

1 out of it due to the reduction in head differential between the river water level and the siphon's
2 point of discharge. For example, this year the Headquarter Siphon operated at 130,000 gallons
3 per minute when water levels were at 4.2 feet above mean sea level and at 100,000 gallons per
4 minute when water levels were reduced to 2.5 feet above mean sea level. If reduced water levels
5 become the norm during operation of the Project, then RD 999's siphons will operate at a
6 continuously reduced efficiency level and result in crop damage within RD 999.

7 13. If water levels are reduced so far that RD 999's siphons are inoperable, then RD
8 999 will be forced to abandon its current preferred method of diversion and replace the siphons
9 with an alternative and costlier method of diversion such as electrical pumps. In some areas
10 within RD 999 new infrastructure and power lines would be required to build alternative methods
11 of diversion.

12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28