

EXHIBIT

TMWA 1-0

Written Testimony of John Erwin

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8 STATE WATER RESOURCES CONTROL BOARD
9
10 DIVISION OF WATER RIGHTS
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12 In the Matter of:) Hearing Officers: Charles Hoppin
) and Tam Doduc
13 Water Right Applications 31487 and 31488)
14 filed by the United States Bureau of) **WRITTEN TESTIMONY OF**
14 Reclamation, and Petitions to Change License) **JOHN ERWIN ON BEHALF OF**
15 3723 (Application 5169) of Washoe County) **TRUCKEE MEADOWS WATER**
15 Water Conservation District, License 4196) **AUTHORITY**
16 (Application 9247) of Truckee Meadows Water)
16 Authority, Permit 11605 (Application 15673)) Date: July 21-23; 28-29, 2010
17 and License 10180 (Application 18006) of the) Time: 9:00 a.m.
17 United States Bureau of Reclamation) Dept: 1001 I Street, Second Floor
18) Coastal Hearing Room
18) Sacramento, California
19)

1 **I. PURPOSE OF TESTIMONY**

2 1. My name is John A. Erwin. I am currently the Director Natural Resources,
3 Planning and Management for the Truckee Meadows Water Authority ("TMWA"). The
4 purpose of my testimony is to provide historical background relating to TMWA, how it
5 manages its various water rights – storage, surface and groundwater - to ensure that annually
6 the utility has sufficient water supplies to meet the demands of its customers during non-
7 drought and drought conditions, and the importance of the Change Petitions, particularly
8 Change Petition for License 4196, to further protect and enhance TMWA's long-term water
9 resource objectives.
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11 **II. WITNESS BACKGROUND INFORMATION**

12 2. I am currently the Director Natural Resources, Planning and Management for
13 TMWA, having been with TMWA since its inception in June 2001. Before TMWA, I spent
14 over 10 years with Sierra Pacific Power Company's Water Division, which at times was
15 referred to as WestPac Utilities, holding various planning and management positions in the
16 Water Resources department. Prior to that, I was employed by the Regional Water Planning
17 and Advisory Board of Washoe County, Nevada and the Nevada Public Utilities Commission.
18 I hold bachelor degrees in zoology and accounting, and masters in business administration and
19 divinity, and have completed studies leading to a PhD in hydrology/resource economics. Over
20 the past 25 years, I have dealt with evaluating water supply/resource options, water right issues,
21 and economic and financial impacts of water-related issues/policies. TMWA Ex.1-1 sets forth
22 the specifics of my work experience and educational background.
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25 3. In my current position, I'm responsible for the activities involving TMWA's
26 Hydrologic Sciences; Resource Economics; Lands, Survey and Mapping; and Water Right
27 Services departments within TMWA's Natural Resources Division. Briefly, the activities of the
28 Water Rights Services personnel include evaluation of water right titles, purchase agreements,

1 filing necessary documents with California and Nevada to ensure water right permits are
2 current and usable, and assisting applicants for new water service to dedicate water resources
3 for their project.

4 4. The activities of the Hydrologic Sciences personnel include monitoring the
5 physical condition, capabilities/capacities, and availability of TMWA groundwater wells and
6 surface water resources which includes management of diversions to and releases of water from
7 Donner and Independence Lakes. These personnel work closely with TMWA's engineering
8 and water treatment personnel to ensure TMWA's production sources are able to meet the daily
9 water demands of TMWA's customers.
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11 5. The responsibilities of the Lands, Survey and Mapping Services personnel
12 include acquisitions, sales, or relinquishment of easements, rights-of-way, and real property;
13 property surveys and legal descriptions; digitally maintain data for multiple datasets including
14 contours/elevations, aerial photography, landbases, facilities, assessor, water rights, and
15 easements; and drafting designs for engineering projects and distribution models.
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17 6. The activities of the Resource Economics personnel include regularly updating
18 TMWA's water resource plans, planning for implementation of the Truckee River Operating
19 Agreement ("TROA"), demand analyses, population and water use forecasting, revenue
20 analyses including cost of service and rate design, and financial and economic analysis for the
21 utility and the region.
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23 **III. BACKGROUND OF THE TRUCKEE MEADOWS WATER AUTHORITY AND**
24 **ITS SERVICES**

25 7. The history of TMWA begins with the history of Sierra Pacific Power Company
26 ("Sierra") and its history as a water utility beginning as early as 1861. I became familiar with
27 that history in the over 10 years I was employed with Sierra's Water Division. Utility
28 companies involved in the delivery of natural gas, electricity, and/or water in the latter part of

1 the 1800's and the first part of the 1900's were often directly or indirectly involved in
2 developing water supplies for municipal and industrial use in the Truckee Meadows.

3 8. Early companies involved in the water-delivery business in the Truckee
4 Meadows which were predecessors to Sierra and TMWA were the Reno Water Company,
5 incorporated 1874, and the Highland Ditch and Water Company, incorporated 1875. The Reno
6 Water, Land and Light Company acquired these two companies in 1889 and 1890, respectively.
7 The Nevada Power, Light and Water Company acquired the Reno Water, Land and Light
8 Company, which in 1904 became part of the Reno, Light and Water Company. By 1923,
9 through numerous acquisitions and mergers, the Truckee River General Electric Company had
10 emerged as the sole provider of gas, electricity, and water for the Truckee Meadows. In
11 becoming the primary provider of utility services, the company had acquired such properties as
12 hydroelectric plants, distribution systems, land, water rights, irrigation ditches, dams, and
13 reservoirs. The Truckee River General Electric Company became Sierra Pacific Power
14 Company in 1928. TMWA Ex. 1-2 is a chart showing the numerous companies that were
15 acquired or merged over the past one hundred plus years which resulted in Sierra's ownership
16 and operation of the water utility in the Reno and Sparks area.

17 9. TMWA was formed in direct response to a September 2000 announcement by
18 Sierra Pacific Resources, the parent company of Sierra Pacific Power Company, of its intention
19 to sell the water utility business of Sierra.

20 10. On October 20, 2000, the Cities of Reno and Sparks and Washoe County
21 ("RSW") submitted a joint proposal to purchase the water utility assets of Sierra through a Joint
22 Powers Authority agreement ("JPA") and to have the JPA in existence upon their selection as
23 the successful bidder. TMWA was officially created by RSW's execution of the "Cooperative
24 Agreement among City of Reno, City of Sparks, and County of Washoe" on or about
25 December 4, 2000 pursuant to the provisions of Chapter 277 of the Nevada Revised Statutes
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1 (“NRS”). TMWA Ex. 1-3 is a true and correct copy of the Cooperative Agreement and
2 amendments thereto.

3 11. Some of the objectives RSW sought to achieve through TMWA include:

- 4 • Assure that water resources are developed and managed to fulfill the present and
5 future water needs of the greater Truckee Meadows community, which includes
6 the Cities of Reno and Sparks and the Valleys immediately adjacent to them.
- 7 • Acquire and manage the water assets for the benefit of the Truckee Meadows
8 community.
- 9 • Act together with respect to such matters as water supply, allocation of water
10 supply, water quality, and treatment.
- 11 • Secure additional supplies of water and achieve the effective management of
12 existing supplies through the cooperative action of the RSW, operating through
13 TMWA.
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16 12. After the successful launch of TMWA, RSW subsequently submitted and were
17 awarded the bid to purchase all of the assets of Sierra’s water utility business. In January,
18 2001, TMWA and Sierra entered into an Asset Purchase Agreement. Thereafter, TMWA sold
19 \$452.3 million in bonds pledged against its revenues. Escrow closed on June 11, 2001 and
20 eventually title to all assets related to the water utility business including all water rights and
21 relevant agreements used in that business, diversion, treatment, conveyance, water
22 transmission, wells and distribution related facilities were transferred to TMWA. When
23 TMWA opened for business on that day with 127 employees, all former water division
24 employees of Sierra, TMWA continued managing and operating the water utility business for
25 the greater Truckee Meadows area, and began the process to meet the business objectives
26 established by the JPA, TMWA’s Board of Directors and its management team.
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1 13. Today, TMWA is the largest supplier of water for municipal and industrial use
2 in Washoe County, Nevada. TMWA provides retail water service to the residents of and
3 visitors to the Cities of Reno and Sparks, Nevada, and to adjacent portions of Washoe County
4 through wholesale agreements with Washoe County and Sun Valley General Improvement
5 District. TMWA serves a resident population through its retail and wholesale water services of
6 approximately 371,000 persons not including a transient visitor population that may range from
7 35,000 to 60,000 people at any point in time, depending on the season of the year. From its
8 Chalk Bluff Surface Water Treatment Facility with 85 million gallons a day ("MGD") capacity,
9 its Glendale Surface Water Treatment Facility with 37 MGD capacity, and its 33 wells with 66
10 MGD capacity, the utility delivers water to over 81,000 residential service connections, over
11 7,500 commercial/industrial service connections, and 3 wholesale service areas.

12 **IV. THE WATER SUPPLY OF THE TRUCKEE MEADOWS WATER** 13 **AUTHORITY**

14 14. Early water purveyors in the Truckee Meadows appropriated water directly for
15 municipal use. In more recent times, growth in water demands were managed by Sierra through
16 changes to Orr Ditch Decree irrigation water rights to municipal use, and augmenting those
17 river supplies with privately owned stored water ("POSW") from Independence Lake and
18 Donner Lake during dry years. The Orr Ditch Decree, issued in 1944, adjudicated the irrigation
19 water rights associated with the Truckee River and all its tributaries by reach, by priority, by
20 owner, and by quantity. TMWA's predecessor, Sierra, began accumulating and changing
21 Truckee River irrigation rights recognized by the Orr Ditch Decree to municipal use in the
22 early 1950's, which practice continues today. This change in the use of Truckee River water
23 reflected the urbanization of the Truckee Meadows; as municipal use of water increased,
24 irrigation use decreased.
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1 15. To date, TMWA has accumulated the right to use over 64,000 acre feet of
2 changed Orr Ditch Decree irrigation water rights that are available for diversion for municipal
3 uses. Having a sufficient quantity of changed irrigation water rights is essential for TMWA to
4 meet its customers' demands. However, during drought cycles, there may not be sufficient
5 flows in the Truckee River to supply 100 percent of these water rights so it is critical that
6 TMWA have reserve water supplies available to back-up its Truckee River water rights when
7 river flows are not available.
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9 16. During non-drought conditions, the utility retains its upstream stored water in
10 the event successive years are dry and Truckee River flows cannot be sustained for the whole
11 year. These stored waters are not used year-in, year-out to meet annual demands because when
12 the dry years occur TMWA must have sufficient supplies of water in reserve to provide water
13 since Truckee River flows no longer support direct diversion Orr Ditch Decree water rights.
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15 17. During drought conditions, when Truckee River flows cannot be sustained,
16 which usually happens when Boca Reservoir is empty and Lake Tahoe is at or below its natural
17 rim, TMWA will release its water it has stored in upstream lakes and reservoirs. Currently that
18 includes water stored in Donner and Independence Lakes, and water that may have been re-
19 diverted to storage the previous Fall after being released from those lakes and stored in Boca
20 and/or Stampede Reservoirs pursuant to the terms of the Interim Storage Agreement ("ISA").
21 TMWA is successor in interest to Sierra to the ISA which was consummated in 1994 between
22 the United States, Pyramid Lake Paiute Tribe, and the Washoe County Water Conservation
23 District. TMWA Ex. 1-4 is a true and correct copy of that Interim Storage Agreement. The
24 Interim Storage Agreement, the background for which has been provided by Janet Carson
25 Philips, is called an "interim" storage agreement because it is intended to bridge the gap
26 between enactment of the Settlement Act, Public Law 101-618 ("PL 101-618"), and the time
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1 when the ability to store water under the Truckee River Operating Agreement becomes
2 available.

3 18. Simply stated, TMWA's water supply operations seek to (i) accumulate water
4 rights as required to meet the demands of its customers, (ii) expand the amount of drought
5 reserves to back-up surface water rights when river flows are not available, (iii) use its surface
6 water rights by diverting Truckee River water when available, and (iv) preserve drought
7 reserves in order to sustain water supplies in the event of extended and successive drought
8 years.
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10 **IV. PUBLIC INTEREST ASPECTS OF THE CHANGE PETITIONS AND THE**
11 **WATER SUPPLY OF THE TRUCKEE MEADOWS WATER AUTHORITY**

12 19. For many years, there have been a number of uncertainties related to the long-
13 term water supply for the greater Reno/Sparks area. These include: (1) how would Truckee
14 River reservoirs be operated to accommodate the needs of the endangered and threatened
15 species; (2) how much water would California be entitled to use and store that could affect the
16 amount of water available for Nevada; (3) how would California agencies charged with
17 managing wildlife issues implement their regulation programs such as increasing minimum
18 releases or in-stream flows and what would be the impact on water available for Nevada; (4)
19 how would a 60-year old operating agreement adapt to changing uses or conversion of water
20 uses from irrigation to municipal; (5) how would pending litigation, each decided by different
21 courts inspiring even more litigation, be resolved; (6) how would Federal and Tribal claims to a
22 water right with the earliest priority on the Truckee River be resolved; and (7) what impacts
23 would all these unsettled issues have on Sierra's, and now TMWA's, ability to provide for the
24 communities' demand for water.
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27 20. Eventually, in 1989, Sierra and the Pyramid Lake Paiute Tribe ("PLT") signed
28 an agreement known as the Preliminary Settlement Agreement ("PSA"). The agreement

1 established a framework to settle numerous issues (some are mentioned above), and laid the
2 foundation for a more comprehensive settlement envisioned by PL 101-618.

3 21. The PSA, assumed by TMWA, provided a significant part of the foundation for
4 PL 101-618. That Act includes provisions for the interstate allocation of water from the
5 Truckee River Basin between California and Nevada, together with provisions for negotiation
6 of TROA which provides TMWA and its customers with certainty regarding the operation of
7 the system and additional drought supplies for existing as well as new customers. At the heart
8 of this agreement are benefits for those who are party to it, and non-injury to the water rights of
9 those who are not party to it.
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11 22. The operation contemplated under TROA affords TMWA the opportunity to
12 further secure, enhance, preserve and manage its drought reserve supplies during droughts or
13 other emergency situations. Having storage and a drought supply, and more importantly, the
14 ability to enhance a drought supply and/or an emergency supply is a prudent water supply
15 management practice. In exchange for that drought supply, TMWA has agreed to, in effect,
16 "turn over" a portion of that water for other benefits recognized by the Truckee Meadows
17 communities, such as water quality, instream flow, wildlife maintenance, fish recovery, and,
18 ultimately, enhancement of flows into Pyramid Lake.
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20 23. TROA was signed in September 2008. Numerous contingencies must be
21 completed before TROA can be implemented. In 2006, TMWA filed 59 Nevada Change
22 Applications with the Nevada State Engineer to change the point of diversion, place and
23 manner of use of various water rights of the Truckee River. The water rights have priority
24 dates that range between 1861 and 1887. These Nevada changes flings are a necessary
25 component to implement TROA.
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27 24. The purpose of the recently approved Nevada Change Applications is to allow
28 TMWA to either (1) store, when the water right is not needed to meet yearly demands, its

1 consumptive use fraction, thereby ensuring no conflict or injury to junior water right holders or
2 downstream diverters; or (2) directly divert the water to TMWA's treatment plants to meet
3 yearly demands, which after treatment and delivery to customers, the non-consumed portion of
4 the water right returns to the Truckee River. Under either operation, the historical consumptive
5 use of a water right when used as originally decreed is the quantity of water that is allowed to
6 be consumed while the return flow or non-consumptive use component of the right remains in
7 the river resulting in a non-injury with existing rights. By operating in this manner, TMWA is
8 able to store water for drought years, which was a principle purpose for TMWA pursuing
9 execution of TROA.
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11 25. The Nevada State Engineer held hearings on these applications in December
12 2009 and subsequently issued Ruling 6035 permitting the applications and their exercise as
13 presented above and subject to certain conditions consistent with existing Federal Water Master
14 administration of Orr Ditch Decree water rights. The protestants in that filing, Truckee-Carson
15 Irrigation District, the City of Fallon, and Churchill County, have filed a petition for judicial
16 review of that decision. TMWA Ex. 1-5 is a true and correct copy of Nevada State Engineer
17 Ruling No. 6035.
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19 26. These Change Petitions are essential to improved flexibility of reservoir
20 operations. These Change Petitions will make the operations of the reservoirs involved, each of
21 which presently has specific points of diversion, specific points of rediversion, specific places
22 of use and specific purposes of use for water, better coordinated and more flexible so that the
23 water from one reservoir may be rediverted in place of water from another reservoir. The
24 Change Petitions are particularly important in connection with the portion of TMWA's
25 Independence Lake water that is turned over for environmental benefit. They allow that water
26 to be used for those environmental purposes at those places of use. They are also important in
27 connection with the enhanced minimum reservoir releases in allowing water released from one
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1 reservoir in order to meet those releases to be rediverted in a downstream reservoir. The
2 instream flow need is satisfied, but the water remains available in storage, albeit in a different
3 reservoir. The Change Petition related to TMWA's License 4196 is of particular importance to
4 TMWA because it will allow TMWA to redivert water under the Independence Lake License to
5 storage for drought purposes. TMWA requests the State Board approve the Change Petitions
6 and Applications as filed. TMWA also recommends that any order issued include the
7 following:
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9 • These changes are not effective until the conditions required for the Truckee
10 River Operating Agreement to enter into effect have been satisfied. All diversions, storage, use
11 of water and operations under this *[LICENSE]* *[PERMIT]* shall be in accordance with the
12 provisions contained in this *[LICENSE]* *[PERMIT]* and the Truckee River Operating
13 Agreement.
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