

IN THE OFFICE OF THE STATE ENGINEER  
OF THE STATE OF NEVADA

IN THE MATTER OF APPLICATIONS 64648 AND 64649 )  
FILED TO APPROPRIATE WATER FROM FISH CREEK )  
SPRINGS WITHIN THE LITTLE SMOKY VALLEY- )  
NORTHERN PART HYDROGRAPHIC BASIN )  
(10-155A), EUREKA COUNTY, NEVADA. )

RULING

# 4942

GENERAL

I.

Application 64648 was filed on December 1, 1998, by Fish Creek Ranch, LLC, a Nevada Limited Liability Company, to appropriate 10.6 cubic feet per second (cfs), not to exceed 3,180 acre-feet annually of water from Fish Creek Springs within the Little Smoky Valley-Northern Part Hydrographic Basin, Eureka County, Nevada, for irrigating 1,060 acres of land within the NW $\frac{1}{4}$  NW $\frac{1}{4}$ , S $\frac{1}{2}$  NW $\frac{1}{4}$ , NE $\frac{1}{4}$ , SE $\frac{1}{4}$ , N $\frac{1}{2}$  SW $\frac{1}{4}$ , SE $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 8; the NW $\frac{1}{4}$  NW $\frac{1}{4}$ , NE $\frac{1}{4}$  NE $\frac{1}{4}$ , S $\frac{1}{2}$  N $\frac{1}{2}$ , S $\frac{1}{2}$  of Section 9; the N $\frac{1}{2}$ , N $\frac{1}{2}$  S $\frac{1}{2}$ , S $\frac{1}{2}$  SW $\frac{1}{4}$ , SW $\frac{1}{4}$  SE $\frac{1}{4}$  of Section 10; the NW $\frac{1}{4}$ , S $\frac{1}{2}$  NE $\frac{1}{4}$ , N $\frac{1}{2}$  SW $\frac{1}{4}$  of Section 11; the N $\frac{1}{2}$  of Section 12, all in T.16N., R.53E., M.D.B.&M.; the S $\frac{1}{2}$  SW $\frac{1}{4}$  of Section 6; the W $\frac{1}{2}$  NW $\frac{1}{4}$  of Section 7, both in T.16N., R.54E., M.D.B.&M. The proposed point of diversion is described as being located within the SE $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 8, T.16N., R.53E., M.D.B.&M.<sup>1</sup>

II.

Application 64649 was filed on December 1, 1998, by Fish Creek Ranch, LLC, a Nevada Limited Liability Company, to appropriate 0.21 cfs, not to exceed 63 acre-feet annually, of water from Fish Creek Springs within the Little Smoky Valley-Northern Part Hydrographic Basin, Eureka County, Nevada, for

<sup>1</sup> File No. 64648, official records in the office of the State Engineer; Exhibit No. 2, public administrative hearing before the State Engineer, January 12, 2000 (hereinafter "Exhibit").

irrigating 21 acres of land within the NW¼ NW¼ of Section 8, T.16N., R.53E., M.D.B.&M. The proposed point of diversion is described as being located within the NW¼ NW¼ of said Section 8.<sup>2</sup>

**III.**

Applications 64648 and 64649 were timely protested by the U.S. Fish and Wildlife Service on the grounds granting of the applications may negatively impact Fish Creek Springs Tui chub (*Gila bicolor euchila*), a species of concern to the Service. Fish Creek Springs Tui chub are found only in the Fish Creek Springs and associated outflows. The proposed diversion of water under the two subject applications would require improvements to the springs and ditches that may potentially lead to a reduction in the range and number of Fish Creek Springs Tui chub. Therefore, the granting of the applications may not be in the public interest.<sup>3</sup>

**IV.**

After all parties of interest were duly noticed by certified mail, a public administrative hearing was held in Carson City, Nevada, before representatives of the office of the State Engineer on January 12, 2000, with regard to the protests to Applications 64648 and 64649.<sup>4</sup>

**FINDINGS OF FACT**

**I.**

During the public administrative hearing, testimony by Luther K. Wise, the owner of Fish Creek Ranch, ("Applicant") clarified that his intent under Applications 64648 and 64649 is to divert water from the same spring sources as described under the existing

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<sup>2</sup> File No. 64649, official records in the office of the State Engineer; Exhibit No. 3.

<sup>3</sup> Exhibit Nos. 7 and 8.

<sup>4</sup> Exhibit No. 1.

appropriations to irrigate additional lands within his ranch by installing pumps at the described points of diversion.<sup>5</sup>

A review of the records in the office of the State Engineer indicate that there are a number of existing certificated water rights on the same source of water as that described under Applications 64648 and 64649.<sup>6</sup> The State Engineer finds that the Applicant is the current owner of record for all existing appropriations and pending applications for the waters of Fish Creek Springs. The State Engineer further finds that under the existing appropriations for said source of water the total diversion rate is 14.65 cfs to irrigate approximately 1,460 acres of land.

## II.

The applicant testified that the acreage currently irrigated under his existing appropriations for the waters of Fish Creek Springs is approximately 1,500 acres, of which a portion is sub-irrigated or swampy requiring no direct diversion of water and that his intent is to irrigate a total of 2,000 acres within his ranch.<sup>7</sup> Application 64648 applied for water to irrigate 1,060 acres within a proposed place of use encompassing 2,520 acres which includes the places of use described under Application 64649 and the existing appropriations for the waters of Fish Creek Springs.<sup>1,6</sup> Application 64649 applied for water to irrigate 21 acres of land in a subdivision of land that is also described in the places of use under Application 64648 and Permit 13723, Certificate 3987.<sup>1,2,6</sup> The State Engineer finds the proposed places of use under Applications 64648 and 64649 are for additional acreage not contained within the existing certificated places of

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<sup>5</sup> Transcript, pp. 20, 21, 22, public administrative hearing before the State Engineer, January 12, 2000. (hereinafter "Transcript").

<sup>6</sup> Permit 2465, Certificate 396; Permit 4889, Certificate 973; Permit 13723, Certificate 3987, official records in the office of the State Engineer.

use under Permit 2465, Certificate 396, Permit 4889, Certificate 973, and Permit 13723, Certificate 3987. The State Engineer further finds that the applicant's intent is to irrigate with the waters of Fish Creek Springs a total acreage, consisting of the proposed places of use under Applications 64648 and 64649 and the existing appropriations within Fish Creek Ranch, not to exceed 2,000 acres.

### III.

Fish Creek Springs consist of a number of springs emanating in the western half of Section 8, T.16N., R.53E., M.D.B.&M.<sup>8</sup> The springs are the source of water to a unique species of fish called the Fish Creek Springs Tui chub. This sub-species of fish is found only in these springs and was first collected in 1938.<sup>9</sup> In 1979, under the Endangered Species Act of 1973 as amended, a petition was filed with the U.S. Fish and Wildlife Service to list the Fish Creek Springs Tui chub as a threatened species and to designate an area as critical habitat for that species of fish.<sup>10</sup> In 1984, the U.S. Fish and Wildlife Service proposed a rule that described the conditions of the Tui chub's habitat and some of the threats. An investigation by the U.S. Fish and Wildlife Service in 1985 determined that the fish were in abundance and the proposed rule was withdrawn. After this withdrawal, the U.S. Fish and Wildlife Services continues to recognize that the Fish Creek Springs Tui chub is a species with some degree of threat to it and is on their species of concern list.<sup>11</sup> The State Engineer finds that the Fish Creek Springs Tui chub is not a species of fish listed under federal regulation known as the Endangered Species

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<sup>7</sup> Transcript, p. 27.

<sup>8</sup> Exhibit No. 6.

<sup>9</sup> Exhibit No. 13.

<sup>10</sup> Exhibit No. 14.

<sup>11</sup> Transcript, p. 86.

Act. The State Engineer further finds that Fish Creek Springs Tui chub is a species of concern with the U. S. Fish and Wildlife Service.

**IV.**

Chapter 503 of the Nevada Revised Statutes empowers the Division of Wildlife of the State of Nevada's Department of Conservation and Natural Resources with the ability to list sensitive fish species within this state under the Nevada Administrative Code. The Nevada Division of Wildlife has promulgated regulations to this effect and the Fish Creek Springs Tui chub is listed as a sensitive fish species within the State of Nevada.<sup>12</sup>

The Nevada Natural Heritage Program of the Department of Conservation and Natural Resources conducted an inventory throughout the state of conservation sites in 1998, and assigned a priority of conservation for each site based on various criteria. The scorecard indicates that the Fish Creek Springs habitat is an area susceptible to destructive forces and irretrievable degradation may occur if conservation measures are not immediate or an ongoing management program is not in place.<sup>13</sup> The State Engineer finds that the Fish Creek Springs Tui chub is a species of fish found only within the State of Nevada that is listed as protected under the laws and regulations of this state.

**V.**

A witness for the U.S. Fish and Wildlife Service performed a field investigation at the subject springs on May 13, 1999, and described the area of concern for their habitat as being the spring described under the proposed point of diversion under Application 64649 and above the proposed point of diversion under

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<sup>12</sup> Exhibit No. 16. A review of the 1999 Nevada Administrative Code lists the Fish Creek Springs Tui chub under NAC § 503.065 as protected and no longer as a sensitive species under NAC § 503.067.

<sup>13</sup> Exhibit No. 17.

Application 64648, up to and including the spring sources, which includes the area downstream of the point where the diversion box in the SE $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 8, T.16N., R.53E., M.D.B.&M. is located.<sup>14</sup> The State Engineer finds that the habitat area of concern is above and below the point of diversion described under Application 64648 and at the point of diversion described under Application 64649.

#### VI.

Application 64649 proposed point of diversion is described as being from a spring source located in the NW $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 8, T.16N., R.53E., M.D.B.&M. and the described place of use is for land not currently under Permit 13723, Certificate 3987. The spring source described under this application has become somewhat isolated from the other springs due to the ditches silting in and not readily transporting the flows away from the spring.<sup>15</sup> The applicant testified that he does not know the depth and actual flow from this spring, but believes that the spring was previously pumped. The State Engineer finds that the depth and flow of the spring is unknown and the flow from this spring is isolated from the other springs in the general vicinity.

The applicant testified that he proposes to pump from this spring because the described place of use under Application 64649 is located upon ground that is up gradient of this spring source.<sup>16</sup> The State Engineer finds that the proposed place of use is for land not under any existing water rights and that the point of diversion is down gradient of the place of use described under Application 64649. The State Engineer further finds that to prevent adverse affects prior to the proposed pumping of water from the spring source, measures must be taken so as to not have a deleterious effect on the Fish Creek Springs Tui chub and its

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<sup>14</sup> Transcript, p. 84.

<sup>15</sup> Transcript, pp. 20, 35 and 94.

<sup>16</sup> Transcript, pp. 20, 22, 36.

habitat. These preventive measures include, but are not limited to, effectively screening the pump intake, insuring that the pumping will not dry up the spring source, and maintaining a minimal pool depth at all times. All of these measures must be in place and be approved by the State Engineer prior to pumping.

**VII.**

The point of diversion under Application 64648 is described as being at the confluence of two irrigation ditches located in the SE¼ NW¼, of Section 8, T.16N., R.53E., M.D.B.&M., which is the same point of diversion described under all other existing water rights on Fish Creek Springs.<sup>6</sup> The application further describes the source of water in the remarks section as three different springs by bearing, distance and tie. The springs are located in the SE¼ NE¼ of Section 7, and in the NW¼ NW¼, and the NW¼ SW¼ of Section 8, all in T.16N., R.53E., M.D.B.&M. The applicant testified that he proposes to install a pump at the described proposed point of diversion under Application 64648 to increase the flow from the springs and irrigate land that cannot be currently irrigated by gravity methods.<sup>17</sup>

The irrigation channel just downstream of the proposed point of diversion under Application 64648 and above the main diversion box in the SE¼ NE¼ of Section 8, T.16N., R.53E., M.D.B.&M. is the stretch that is considered by the U.S. Fish and Wildlife Service to be the most important habitat for the Tui chub.<sup>18</sup> The concern of the U.S. Fish and Wildlife Service would be how much of the spring flow is diverted from the source, and if pumping is to occur, is there going to be enough water left for the Tui chub and its habitat to ensure its protection.<sup>19</sup> The periodic cleaning of the ditches and springheads that has occurred throughout the history of Fish Creek Ranch occurred in a manner not detrimental

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<sup>17</sup> Transcript, p. 24.

<sup>18</sup> Transcript, p. 123.

<sup>19</sup> Transcript, pp. 47 and 51.

to the fish.<sup>20</sup> The State Engineer finds that the point of diversion under Application 64648 is described as being located in the SE¼ NW¼ of Section 8, T.16N., R.53E., M.D.B.&M., and the spring sources supplying water to this point are described in the remarks of the application. The State Engineer further finds that the proposed pumping of the spring source under Application 64648 would need to occur in such a manner that while pumping, a portion of the available flow is to bypass this point and continue to naturally flow downstream in the main channel at a reasonable depth that must be maintained downstream within this channel so as to not negatively impact the Fish Creek Springs Tui chub and their critical habitat.

#### VIII.

The Nevada Division of Wildlife indicated in a letter dated March 3, 1999, to the U.S. Fish and Wildlife Service that the Fish Creek Springs Tui chub is part of the State Native Fish program, wherein some of the objectives of the program would be to monitor the population by resurvey and work with the landowner as necessary to protect this species of fish.<sup>21</sup> Attached to the letter was a report of a field investigation. The field trip report described that the Fish Creek Springs Tui chub exist in the spring source and in the channels associated with the existing works of diversion, which is described as the proposed point of diversion under Application 64648 and for the point of diversion described under Application 64649.<sup>22</sup> The report also states that it is the opinion of the Nevada Division of Wildlife that the proposed activities will have no significant impact on the Fish Creek Springs Tui chub. The State Engineer finds that to protect the public interest and to insure that this species of fish is not harmed under the proposed applications would require a monitoring

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<sup>20</sup> Exhibit No 9; Transcript, p. 129.

<sup>21</sup> Exhibit No. 10.

<sup>22</sup> Exhibit Nos.10 and 24.

plan to be in place prior to the proposed pumping. The State Engineer further finds that such a monitoring plan must be devised by the applicant using consultants knowledgeable in the area of the preservation of a sensitive species of fish, and that said monitoring plan must be submitted to his office subject to his approval or denial. The development of this monitoring plan may occur separately or in cooperation with the Nevada Division of Wildlife to insure that the proposed activities under Applications 64648 and 64649 will have no significant impact to this only one of its kind species of fish.

**IX.**

A field investigation by the office of the State Engineer in November 1999 measured the flow from the springs to be approximately 7.0 cfs.<sup>23</sup> Additional measurements and estimates of the amounts of flow from the springs indicate the flows to vary from 5.4 cfs to 10.0 cfs.<sup>24</sup> The records in the office of the State Engineer reflect that the combined existing diversion rate under certificated water rights on Fish Creek Springs is 14.65 cfs to irrigate 1,458.609 acres of land for a total duty of 5,669.4 acre-feet which equates to an average acre-feet per acre duty of 3.89.<sup>6</sup> The State Engineer finds that the current committed surface water diversions for the available flows of Fish Creek Springs exceed the estimated and measured flows. The State Engineer further finds there is no additional diversion rate available as requested under Applications 64648 and 64649.

**X.**

The requested appropriation under Application 64648 is for an additional diversion rate of 10.61 cfs to irrigate 1,061 acres within a described place of use totaling 2,520 acres and the

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<sup>23</sup> Transcript, p. 58.

<sup>24</sup> Exhibit No. 20; Division of Water Resources letter of July 20, 1999, File No. 64648, official records in the office of the State Engineer.

appropriation requested under Application 64649 is for an additional diversion rate of 0.21 cfs to irrigate 21 acres. However, at the public administrative hearing, the Applicant clarified he was requesting to irrigate a total of 2,000 acres between the existing appropriations and the subject applications.<sup>25</sup> The period of use requested under both applications is from January 1 to December 31 of each year each with a duty of three acre-feet per acre. Permit 2465, Certificate 396 and Permit 4889, Certificate 973, period of use is from April 1 to October 1 of each year each with a seasonal duty of three acre-feet per acre from any and all sources. Permit 13723, Certificate 3987, period of use is January 1 to December 31 of each year with an annual duty of four acre-feet per acre from any and all sources.<sup>5</sup> The length of the growing season for various crops is dependent upon the elevation and latitude. The frost-free period for the Fish Creek Ranch is for a period of only 77 days.<sup>26</sup> The seasonal period of use from April 1 to October 1 is for 183 days each year. The State Engineer finds that the periods of use under the subject applications need to coincide with an irrigation season from April 1 to October 1 of each year.

#### XI.

The average duty for the existing places of use described under the existing appropriations on Fish Creek Springs is 3.89 acre-feet per acre from any and all sources. The applicant testified that the necessary duty for his operation would be in the amount of approximately two acre-feet per acre,<sup>27</sup> which is nearly the same acre-feet per acre estimate of water use for

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<sup>25</sup> Transcript, p. 27.

<sup>26</sup> Rush, Eugene F., and Everett, Duane E., Water Resources-Reconnaissance Series Report 38, Water-Resources Appraisal of Little Fish Lake, Hot Creek, and Little Smoky Valleys, Nevada, State of Nevada Department of Conservation and Natural Resources in cooperation with the U.S. Department of the Interior Geological Survey, p. 6, May 1966.

<sup>27</sup> Transcript, p. 26.

meadow grass and alfalfa for Fish Creek Ranch.<sup>28</sup> The Nevada Irrigation Guide indicates that the amount of consumptive use for alfalfa for a growing season of 112 days using two different methods for estimation is between 24.7 inches (2.06 feet (ft)) and 44.4 inches (3.70 ft) per year where the average seasonal precipitation is approximately 2.81 inches (0.23 ft).<sup>29</sup> A practical actual consumptive use value most likely lies between the values obtained by the two methods and the seasonal precipitation must also be taken into consideration.<sup>30</sup> The State Engineer finds that the duty of water for consumptive use in the Fish Creek Ranch area is less than four but greater than two acre-feet per acre. The State Engineer further finds that additional acreage in the amounts of 520.4 acres and 21 acres within the described places of use under Applications 64648 and 64649, respectively, would reduce the available acre-feet per acre duty to 2.83 and when combined with the existing certificated water rights could be limited to a total of 2,000 acres of irrigation with a total combined diversion rate of 14.65 cfs, and total duty not to exceed 5,669.4 acre-feet from the waters of Fish Creek Springs without impacting the Fish Creek Springs Tui chub and its habitat.

### CONCLUSIONS

#### I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.<sup>31</sup>

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<sup>28</sup> Rush, Eugene F., and Everett, Duane E., Water Resources-Reconnaissance Series Report 38, Water-Resources Appraisal of Little Fish Lake, Hot Creek, and Little Smoky Valleys, Nevada, State of Nevada Department of Conservation and Natural Resources in cooperation with the U.S. Department of the Interior Geological Survey, Table 5, p. 17, and Table 9, p. 24, May 1966.

<sup>29</sup> U.S. Department of Agriculture Soil Conservation Service Nevada Irrigation Guide, Table NV 683.51 (18), September 1981 as amended.

<sup>30</sup> Ibid, p. NV683-2, July 1992.

<sup>31</sup> NRS chapter 533.

**II.**

The State Engineer is prohibited by law from granting a permit under an application to appropriate the public waters of Nevada where:<sup>32</sup>

- A. there is no unappropriated water at the proposed source,
- B. the proposed use conflicts with existing rights, or
- C. the proposed use threatens to prove detrimental to the public interest.

**III.**

The State Engineer concludes that the Fish Creek Springs Tui chub is a species of fish existing only in Fish Creek Springs and is listed as a protected fish under the laws and regulations of this state. The State Engineer further concludes that the Fish Creek Springs Tui chub is not listed under the Endangered Species Act of 1973, as amended, however, the fish is listed as a species of concern with the U.S. Fish and Wildlife Service.

**IV.**

The State Engineer concludes that the proposed places of use under Applications 64648 and 64649 is for additional land outside the places of use described under existing appropriations on Fish Creek Springs and that the intent of the owner of the existing water rights and the subject applications is to irrigate a total of 2,000 acres. The State Engineer further concludes that the existing appropriations on Fish Creek Springs allow the holder of those rights to divert and put to beneficial use the amounts certificated which includes maintenance of the springs and irrigation ditches associated with said appropriations.

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<sup>32</sup> NRS § 533.370(3).

**V.**

The State Engineer concludes that the measured and estimated quantity of flow from Fish Creek Springs is an amount less than the existing diversion rates on the source and that there is no additional diversion rate available for appropriation. The State Engineer further concludes that upon approval of Applications 64648 and 64649 the period of use will be reduced to seasonal use from April 1 to October 1 of each year for an additional 541.40 acres having no additional diversion rate and duty and that the places of use of all appropriations on Fish Creek Springs will be limited to 2,000 acres, with a total combined diversion rate of 14.65 cfs, and a total duty of water not to exceed 5,669.4 acre-feet.

**VI.**

The State Engineer concludes that Fish Creek Ranch, LLC is the only owner of the existing appropriations and pending applications for the waters of Fish Creek Springs and that approval of the subject applications would not conflict with other existing water rights.

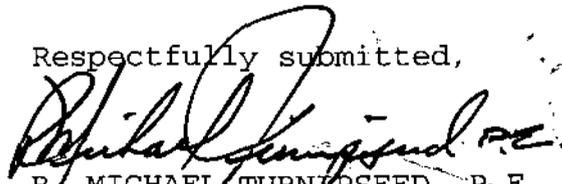
**VII.**

The intent under Applications 64648 and 64649 is to install pumps at the described points of diversion to irrigate additional lands not currently under existing appropriations for the waters of Fish Creek Springs. The approval of said applications would be subject to the terms and conditions imposed in the permit terms that would incorporate a monitoring plan that may be revised and amended by the State Engineer at any such time he deems it necessary. The State Engineer concludes that the proposed pumping at the described points of diversion of the waters flowing from Fish Creek Springs described under Applications 64648 and 64649 may occur in a manner as to not have a deleterious effect on the Fish Creek Springs Tui chub nor to the public interest.

**RULING**

The protests to Applications 64648 and 64649 are upheld in part, since the approval is not for any additional diversion or duty and overruled in part on the grounds that the proposed action under the subject applications to irrigate additional lands would not be detrimental to the sensitive species and would not interfere with existing rights. Applications 64648 and 64649 are hereby approved subject to existing rights, the payment of statutory fees and to the terms and conditions herein stated. The appropriations under Applications 64648 and 64649 are for the diversion rates and duty requested, however, they are not for any additional duty or diversion rate. The total appropriations for the waters of Fish Creek Springs are limited to a diversion rate of 14.65 cfs, with a total combined duty not to exceed 5,669.4 acre-feet to irrigate a maximum of 2,000 acres of land. The monitoring plan devised by the applicant is to be filed in the office of the State Engineer within 120 days from the date of issuance of the permits under Applications 64648 and 64649.

Respectfully submitted,

  
R. MICHAEL TURNPSEED, P.E.  
State Engineer

RMT/RKM/cl

Dated this 29th day of  
June, 2000.