

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

IN THE MATTER OF APPLICATIONS 59922, 59923,)
59924, 59925, 59926, 59927, 59928, 59929, 59930,)
59931, 59935, 59936, 59937, 59938, 59939, 59940,)
59941, 59942, 59943, 59944, 59945, 59946, 59947,)
59948, 59949, 59950, 59951, 59952, 59953, 59954,)
59955, 59956, 59957, 59958, 59959, 59960, 59961,)
59962, 59963, 59964, 59965, 59966, 59967, 59968,)
59969, 59970, 59971, 59972, 59973, 59974, 59975,)
59976, 59977, 59978, 59979, 59980, 59981, 59982,)
59983, 59984, 59985, 59986, 59987, 59988, 59989,)
59990, 61725, 61727, 61728 AND 61729 FILED TO)
APPROPRIATE THE PUBLIC WATERS OF)
SURFACE AND UNDERGROUND SOURCES)
WITHIN THE RUBY VALLEY HYDROGRAPHIC)
BASIN (176), ELKO COUNTY AND WHITE PINE)
COUNTY, NEVADA.)

RULING
#6277

GENERAL

I.

Applications 59922, 59923, 59924, 59925, 59926, 59927, 59928, 59929, 59930, 59931, 59935, 59936, 59937, 59938, 59939, 59940, 59941, 59942, 59943, 59944, 59945, 59946, 59947, 59948, 59949, 59950, 59951, 59952, 59953, 59954, 59955, 59956, 59957, 59958, 59959, 59960, 59961, 59962, 59963, 59964, 59965, 59966, 59967, 59968, 59969, 59970, 59971, 59972, 59973, 59974, 59975, 59976, 59977, 59978, 59979, 59980, 59981, 59982, 59983, 59984, 59985, 59986, 59987, 59988, 59989 and 59990 were filed on April 12, 1994, and Applications 61725, 61727, 61728 and 61729 were filed on December 1, 1995, by the U.S. Fish and Wildlife Service (USFW) to appropriate water from surface and underground sources in the Ruby Valley Hydrographic Basin for wildlife purposes within the Ruby Lake National Wildlife Refuge. Applications 59922 through 59929 were amended to correct the source of water from underground to “other surface water” pursuant to a letter from the Applicant dated August 15, 2013. Applications 59922 through 59928 were republished and became ready for action on December 9, 2013.¹ Application 59929 was republished and became ready for action after November 11, 2013.²

¹ File No. 59922, official records in the Office of the State Engineer.

² File No. 59929, official records in the Office of the State Engineer.

Application 59922 has a proposed point of diversion described as being located within the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 18, T.27N., R.58E., M.D.B &M.¹

Application 59923 has a proposed point of diversion described as being located within the NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 19, T.27N., R.58E., M.D.B.&M.³

Application 59924 has a proposed point of diversion described as being located within the SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 30, T.27N., R.58E., M.D.B.&M.⁴

Application 59925 has a proposed point of diversion described as being located within the SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 30, T.27N., R.58E., M.D.B.&M.⁵

Application 59926 has a proposed point of diversion described as being located within the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 32, T.27N., R.58E., M.D.B.&M.⁶

Application 59927 has a proposed point of diversion described as being located within the NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 4, T.27N., R.58E., M.D.B.&M.⁷

Application 59928 has a proposed point of diversion described as being located within the NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 29, T.27N., R.58E., M.D.B.&M.⁸

Application 59929 has a proposed point of diversion described as being located within the NW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 19, T.26N., R.58E., M.D.B.&M.²

Application 59930 has a proposed point of diversion described as being located within Lot 1 of Section 12, T.26N., R.57E., M.D.B.&M.⁹

Application 59931 has a proposed point of diversion described as being located within the NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 14, T.26N., R.57E., M.D.B.&M.¹⁰

Application 59935 has a proposed point of diversion described as being located within Lot 3 of Section 23, T.26N., R.57E., M.D.B.&M.¹¹

Application 59936 has a proposed point of diversion described as being located within the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 27, T.26N., R.57E., M.D.B.&M.¹²

³ File No. 59923, official records in the Office of the State Engineer.

⁴ File No. 59924, official records in the Office of the State Engineer.

⁵ File No. 59925, official records in the Office of the State Engineer.

⁶ File No. 59926, official records in the Office of the State Engineer.

⁷ File No. 59927, official records in the Office of the State Engineer.

⁸ File No. 59928, official records in the Office of the State Engineer.

⁹ File No. 59930, official records in the Office of the State Engineer.

¹⁰ File No. 59931, official records in the Office of the State Engineer.

¹¹ File No. 59935, official records in the Office of the State Engineer.

¹² File No. 59936, official records in the Office of the State Engineer.

Application 59937 has a proposed point of diversion described as being located within the NE¼ SE¼ of Section 27, T.26N., R.57E., M.D.B.&M.¹³

Application 59938 has a proposed point of diversion described as being located within the NE¼ SE¼ of Section 27, T.26N., R.57E., M.D.B.&M.¹⁴

Application 59939 has a proposed point of diversion described as being located within the NE¼ SE¼ of Section 27, T.26N., R.57E., M.D.B.&M.¹⁵

Application 59940 has a proposed point of diversion described as being located within the NE¼ SE¼ of Section 27, T.26N., R.57E., M.D.B.&M.¹⁶

Application 59941 has a proposed point of diversion described as being located within the NE¼ SE¼ of Section 27, T.26N., R.57E., M.D.B.&M.¹⁷

Application 59942 has a proposed point of diversion described as being located within the SW¼ NE¼ of Section 34, T.26N., R.57E., M.D.B.&M.¹⁸

Application 59943 has a proposed point of diversion described as being located within the NW¼ SE¼ of Section 34, T.26N., R.57E., M.D.B.&M.¹⁹

Application 59944 has a proposed point of diversion described as being located within the SE¼ SE¼ of Section 34, T.26N., R.57E., M.D.B.&M.²⁰

Application 59945 has a proposed point of diversion described as being located within the NE¼ SE¼ of Section 3, T.25N., R.57E., M.D.B.&M.²¹

Application 59946 has a proposed point of diversion described as being located within Lot 4 of Section 30, T.27N., R.58E., M.D.B.& M.²²

Application 59947 has a proposed point of diversion described as being located within the NE¼ NE¼ of Section 36, T.27N., R.57E., M.D.B.& M.²³

Application 59948 has a proposed point of diversion described as being located within the NE¼ NE¼ of Section 25, T.27N., R.57E., M.D.B.&M.²⁴

¹³ File No. 59937, official records in the Office of the State Engineer.

¹⁴ File No. 59938, official records in the Office of the State Engineer.

¹⁵ File No. 59939, official records in the Office of the State Engineer.

¹⁶ File No. 59940, official records in the Office of the State Engineer.

¹⁷ File No. 59941, official records in the Office of the State Engineer.

¹⁸ File No. 59942, official records in the Office of the State Engineer.

¹⁹ File No. 59943, official records in the Office of the State Engineer.

²⁰ File No. 59944, official records in the Office of the State Engineer.

²¹ File No. 59945, official records in the Office of the State Engineer.

²² File No. 59946, official records in the Office of the State Engineer.

²³ File No. 59947, official records in the Office of the State Engineer.

²⁴ File No. 59948, official records in the Office of the State Engineer.

Application 59949 has a proposed point of diversion described as being located within the NE¼ NE¼ of Section 36, T.27N., R.57E., M.D.B.&M.²⁵

Application 59950 has a proposed point of diversion described as being located within the NE¼ NE¼ of Section 36, T.27N., R.57E., M.D.B.&M.²⁶

Application 59951 has a proposed point of diversion described as being located within the SW¼ NW¼ of Section 5, T.27N., R.58E., M.D.B.&M.²⁷

Application 59952 has a proposed point of diversion described as being located within the SW¼ NW¼ of Section 5, T.27N., R.58E., M.D.B.&M.²⁸

Application 59953 has a proposed point of diversion described as being located within Lot 6 of Section 5, T.27N., R.58E., M.D.B.&M.²⁹

Application 59954 has a proposed point of diversion described as being located within Lot 6 of Section 5, T.27N., R.58E., M.D.B.&M.³⁰

Application 59955 has a proposed point of diversion described as being located within Lot 6 of Section 5, T.27N., R.58E., M.D.B.& M.³¹

Application 59956 has a proposed point of diversion described as being located within the NE¼ SE¼ of Section 6, T.27N., R.58E., M.D.B.&M.³²

Application 59957 has a proposed point of diversion described as being located within Lot 6 of Section 5, T.27N., R.58E., M.D.B.&M.³³

Application 59958 has a proposed point of diversion described as being located within the NE¼ SE¼ of Section 6, T.27N., R.58E., M.D.B.&M.³⁴

Application 59959 has a proposed point of diversion described as being located within Lot 8 of Section 6, T.27N., R.58E., M.D.B.&M.³⁵

Application 59960 has a proposed point of diversion described as being located within Lot 8 of Section 6, T.27N., R.58E., M.D.B.& M.³⁶

²⁵ File No. 59949, official records in the Office of the State Engineer.

²⁶ File No. 59950, official records in the Office of the State Engineer.

²⁷ File No. 59951, official records in the Office of the State Engineer.

²⁸ File No. 59952, official records in the Office of the State Engineer.

²⁹ File No. 59953, official records in the Office of the State Engineer.

³⁰ File No. 59954, official records in the Office of the State Engineer.

³¹ File No. 59955, official records in the Office of the State Engineer.

³² File No. 59956, official records in the Office of the State Engineer.

³³ File No. 59957, official records in the Office of the State Engineer.

³⁴ File No. 59958, official records in the Office of the State Engineer.

³⁵ File No. 59959, official records in the Office of the State Engineer.

³⁶ File No. 59960, official records in the Office of the State Engineer.

Application 59961 has a proposed point of diversion described as being located within Lot 8 of Section 6, T.27N., R.58E., M.D.B.&M.³⁷

Application 59962 has a proposed point of diversion described as being located within Lot 8 of Section 6, T.27N., R.58E., M.D.B.&M.³⁸

Application 59963 has a proposed point of diversion described as being located within Lot 8 of Section 6, T.27N., R.58E., M.D.B.&M.³⁹

Application 59964 has a proposed point of diversion described as being located within Lot 8 of Section 7, T.27N., R.58E., M.D.B.&M.⁴⁰

Application 59965 has a proposed point of diversion described as being located within Lot 8 of Section 7, T.27N., R.58E., M.D.B.&M.⁴¹

Application 59966 has a proposed point of diversion described as being located within Lot 8 of Section 7, T.27N., R.58E., M.D.B.&M.⁴²

Application 59967 has a proposed point of diversion described as being located within Lot 7 of Section 7, T.27N., R.58E., M.D.B.&M.⁴³

Application 59968 has a proposed point of diversion described as being located within Lot 7 of Section 7, T.27N., R.58E., M.D.B.&M.⁴⁴

Application 59969 has a proposed point of diversion described as being located within Lot 7 of Section 7, T.27N., R.58E., M.D.B.&M.⁴⁵

Application 59970 has a proposed point of diversion described as being located within Lot 7 of Section 7, T.27N., R.58E., M.D.B.&M.⁴⁶

Application 59971 has a proposed point of diversion described as being located within Lot 6 of Section 7, T.27N., R.58E., M.D.B.&M.⁴⁷

Application 59972 has a proposed point of diversion described as being located within Lot 6 of Section 7, T.27N., R.58E., M.D.B.&M.⁴⁸

³⁷ File No. 59961, official records in the Office of the State Engineer.

³⁸ File No. 59962, official records in the Office of the State Engineer.

³⁹ File No. 59963, official records in the Office of the State Engineer.

⁴⁰ File No. 59964, official records in the Office of the State Engineer.

⁴¹ File No. 59965, official records in the Office of the State Engineer.

⁴² File No. 59966, official records in the Office of the State Engineer.

⁴³ File No. 59967, official records in the Office of the State Engineer.

⁴⁴ File No. 59968, official records in the Office of the State Engineer.

⁴⁵ File No. 59969, official records in the Office of the State Engineer.

⁴⁶ File No. 59970, official records in the Office of the State Engineer.

⁴⁷ File No. 59971, official records in the Office of the State Engineer.

⁴⁸ File No. 59972, official records in the Office of the State Engineer.

Application 59973 has a proposed point of diversion described as being located within Lot 7 of Section 18, T.27N., R.58E., M.D.B.& M.⁴⁹

Application 59974 has a proposed point of diversion described as being located within Lot 2 of Section 18, T.27N., R.58E., M.D.B.& M.⁵⁰

Application 59975 has a proposed point of diversion described as being located within Lot 2 of Section 18, T.27N., R.58E., M.D.B.&M.⁵¹

Application 59976 has a proposed point of diversion described as being located within Lot 3 of Section 18, T.27N., R.58E., M.D.B.&M.⁵²

Application 59977 has a proposed point of diversion described as being located within Lot 4 of Section 18, T.27N., R.58E., M.D.B.&M.⁵³

Application 59978 has a proposed point of diversion described as being located within Lot 5 of Section 18, T.27N., R.58E., M.D.B.& M.⁵⁴

Application 59979 has a proposed point of diversion described as being located within Lot 3 of Section 18, T.27N., R.58E., M.D.B.&M.⁵⁵

Application 59980 has a proposed point of diversion described as being located within Lot 5 of Section 18, T.27N., R.58E., M.D.B.&M.⁵⁶

Application 59981 has a proposed point of diversion described as being located within Lot 5 of Section 18, T.27N., R.58E., M.D.B.&M.⁵⁷

Application 59982 has a proposed point of diversion described as being located within Lot 5 of Section 18, T.27N., R.58E., M.D.B.&M.⁵⁸

Application 59983 has a proposed point of diversion described as being located within Lot 7 of Section 19, T.27N., R.58E., M.D.B.&M.⁵⁹

⁴⁹ File No. 59973, official records in the Office of the State Engineer.

⁵⁰ File No. 59974, official records in the Office of the State Engineer.

⁵¹ File No. 59975, official records in the Office of the State Engineer.

⁵² File No. 59976, official records in the Office of the State Engineer.

⁵³ File No. 59977, official records in the Office of the State Engineer.

⁵⁴ File No. 59978, official records in the Office of the State Engineer.

⁵⁵ File No. 59979, official records in the Office of the State Engineer.

⁵⁶ File No. 59980, official records in the Office of the State Engineer.

⁵⁷ File No. 59981, official records in the Office of the State Engineer.

⁵⁸ File No. 59982, official records in the Office of the State Engineer.

⁵⁹ File No. 59983, official records in the Office of the State Engineer.

Application 59984 has a proposed point of diversion described as being located within Lot 6 of Section 19, T.27N., R.58E., M.D.B.&M.⁶⁰

Application 59985 has a proposed point of diversion described as being located within Lot 4 of Section 19, T.27N., R.58E., M.D.B.&M.⁶¹

Application 59986 has a proposed point of diversion described as being located within the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 24, T.27N., R.57E., M.D.B.&M.⁶²

Application 59987 has a proposed point of diversion described as being located within Lot 1 of Section 30, T.27N., R.58E., M.D.B.&M.⁶³

Application 59988 has a proposed point of diversion described as being located within the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 25, T.27N., R.57E., M.D.B.&M.⁶⁴

Application 59989 has a proposed point of diversion described as being located within the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 36, T. 27N., R. 57E., M. D. B. & M.⁶⁵

Application 59990 has a proposed point of diversion described as being located within the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 36, T.27N., R.57E., M.D.B.&M.⁶⁶

Application 61725 has a proposed point of diversion described as being located within the NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 14, T.26N., R.57E., M.D.B.& M.⁶⁷

Application 61727 has a proposed point of diversion described as being located within Lot 1 of Section 23, T.26N., R.57E., M.D.B.&M.⁶⁸

Application 61728 has a proposed point of diversion described as being located within Lot 3 of Section 23, T.26N., R.57E., M.D.B.&M.⁶⁹

Application 61729 has a proposed point of diversion described as being located within Lot 3 of Section 23, T.26N., R.57E., M.D.B.&M.⁷⁰

The proposed place of use of these applications is described as being located within the boundaries of the Ruby Lake National Wildlife Refuge, to wit: within Lots 1, 2, 3 and 4 excepting the South 50.0 feet of said lots of Section 1; Lots 1, 2, 3, 4 and 5 and the NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section

⁶⁰ File No. 59984, official records in the Office of the State Engineer.

⁶¹ File No. 59985, official records in the Office of the State Engineer.

⁶² File No. 59986, official records in the Office of the State Engineer.

⁶³ File No. 59987, official records in the Office of the State Engineer.

⁶⁴ File No. 59988, official records in the Office of the State Engineer.

⁶⁵ File No. 59989, official records in the Office of the State Engineer.

⁶⁶ File No. 59990, official records in the Office of the State Engineer.

⁶⁷ File No. 61725, official records in the Office of the State Engineer.

⁶⁸ File No. 61727, official records in the Office of the State Engineer.

⁶⁹ File No. 61728, official records in the Office of the State Engineer.

⁷⁰ File No. 61729, official records in the Office of the State Engineer.

2; Lot 1 and the SE $\frac{1}{4}$ NE $\frac{1}{4}$ and NE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 3 and all unsurveyed lands in the bed of Ruby Lake within T.25N., R.57E., M.D.B.&M. Lots 1, 2, 3 and 4 of Section 6 and all unsurveyed lands in the bed of Ruby Lake within T.25N., R.58E., M.D.B.&M. Lots 1, 2, 3, 4 and 5 and the SW $\frac{1}{4}$ NE $\frac{1}{4}$ and NW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 1; the NE $\frac{1}{4}$ SE $\frac{1}{4}$ and S $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 11; Lots 1, 2, 3 and 4 and the NW $\frac{1}{4}$ and NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 12; Lot 1 of Section 13; Lots 1, 2, 3 and 4 and the NW $\frac{1}{4}$ NE $\frac{1}{4}$ and NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 14; the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 22; Lots 1, 2, 3, and 4 of Section 23; Lots 1, 2, 3, and 4 of Section 26; the E $\frac{1}{2}$ E $\frac{1}{2}$ of Section 27; Lots 1, 2 and 3, and the W $\frac{1}{2}$ E $\frac{1}{2}$ and SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 34; Lots 1, 2 and 3 of Section 35 and all unsurveyed lands in the bed of Ruby Lake within T.26N., R.57E., M.D.B.&M. Lots 3 and 4 and the S $\frac{1}{2}$ NW $\frac{1}{4}$ and SW $\frac{1}{4}$ of Section 4; Lots 1, 2, 3 and 4 of Section 5; Lot 1 of Section 6; Lots 1, 2, 3 and 4 of Section 8; the W $\frac{1}{2}$ of Section 9; the W $\frac{1}{2}$ of Section 16; Lots 1, 2, 3 and 4 of Section 17; Lots 1, 2, 3 and 4 of Section 20; the W $\frac{1}{2}$ of Section 21; the W $\frac{1}{2}$ of Section 28; Lots 1, 2, 3 and 4 of Section 29; Lot 1 of Section 31; Lots 1, 2 and 3 and the NE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$ and SE $\frac{1}{4}$ of Section 32; and the W $\frac{1}{2}$ of Section 33 and all unsurveyed lands in the bed of Ruby Lake within T.26N., R.58E., M.D.B.&M. The SE $\frac{1}{4}$ of Section 24, Lot 2 and the E $\frac{1}{2}$ NE $\frac{1}{4}$ and SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 25 and the NE $\frac{1}{4}$ NE $\frac{1}{4}$ and SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 36 within T.27N., R.57E., M.D.B.&M. Lots 3 and 4 and the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 2; Lots 1, 2, 3 and 4 and the SE $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$ and SE $\frac{1}{4}$ of Section 3; Lot 1 of Section 4; Lots 2, 3, 4, 5 and 6 and the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 5; Lots 1, 4, 5, 6, 7 and 8 and the SE $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$ and SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 6; Lots 1, 2, 3, 4, 5, 6, 7 and 8 and the NE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 7; Lots 1, 2, 3 and 4 and the E $\frac{1}{2}$ NE $\frac{1}{4}$ and SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 9; the NW $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$ and S $\frac{1}{2}$ SW $\frac{1}{4}$ of Section 10; the W $\frac{1}{2}$ of Section 15; Lots 1, 2, 3 and 4 and the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 16; Lots 1, 2, 3, 4, 5, 6, 7 and 8 of Section 18; Lots 1, 2, 3, 4, 5, 6, and 7 and the NE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 19; Lots 1, 2, 3 and 4 and the E $\frac{1}{2}$ E $\frac{1}{2}$ of Section 21; the W $\frac{1}{2}$ of Section 22; the W $\frac{1}{2}$ of Section 27; Lots 1, 2, 3, 4 and 5 and the NE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$ and SE $\frac{1}{4}$ of Section 28; Lots 1, 2, 3 and 4 of Section 30; Lots 1, 2, 3, 4, 5 and 6 of Section 31; Lots 1, 2, 3 and 4 of Section 32; Lot 1 and the NE $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$ and S $\frac{1}{2}$ of Section 33 and all unsurveyed lands in the bed of Ruby Lake within T.27N., R.58E., M.D.B.&M. Lot 1 and a portion of Lot 2 and the E $\frac{1}{2}$ NE $\frac{1}{4}$ of Section 20; Lots 1, 2, 3 and 4 and the N $\frac{1}{2}$ N $\frac{1}{2}$ of Section 21; Lots 1, 2, 3 and 4 and the NE $\frac{1}{4}$ and N $\frac{1}{2}$ NW $\frac{1}{4}$ of Section 22; Lots 1 and 2 and the N $\frac{1}{2}$ SW $\frac{1}{4}$ and SE $\frac{1}{4}$ of Section 23; Lots 1, 2, 3 and 4 and the E $\frac{1}{2}$ E $\frac{1}{2}$ of Section 26; portions of Lots 1, 2, 3 and 4 of Section 29; Lots 1, 2, 3 and 4 of Section 32; Lot 1 of Section 34; Lots 1, 2 and 3 and the

NE¼, NE¼ SW¼, S½ SW¼ and SE¼ of Section 35 and all unsurveyed lands in the bed of Ruby Lake within T.28N., R.58E., M.D.B.&M.¹

II.

Applications 59922, 59923, 59924, 59925, 59926, 59927, 59928, 59930, 59931, 59946, 59947, 59948, 59949, 59950, 59951, 59952, 59953, 59954, 59955, 59956, 59957, 59958, 59959, 59960, 59961, 59962, 59963, 59964, 59965, 59966, 59967, 59968, 59969, 59970, 59971, 59972, 59973, 59974, 59975, 59976, 59977, 59978, 59979, 59980, 59981, 59982, 59983, 59984, 59985, 59986, 59987, 59988, 59989, 59990 and 61725 were timely protested by the Elko County Board of County Commissioners on the grounds that the Shanty Town development is not being considered, grazing rights have not been considered and the Elko County water usage has not been determined to the beneficial use for all of the Elko County citizens.¹

FINDINGS OF FACT

I.

Nevada Revised Statute (NRS) § 533.365(4) provides that it is within the State Engineer's discretion to determine whether a public administrative hearing is necessary to address the merits of a protest to an application to appropriate the public waters of Nevada. The State Engineer finds that in the case of Applications 59922, 59923, 59924, 59925, 59926, 59927, 59928, 59930, 59931, 59946, 59947, 59948, 59949, 59950, 59951, 59952, 59953, 59954, 59955, 59956, 59957, 59958, 59959, 59960, 59961, 59962, 59963, 59964, 59965, 59966, 59967, 59968, 59969, 59970, 59971, 59972, 59973, 59974, 59975, 59976, 59977, 59978, 59979, 59980, 59981, 59982, 59983, 59984, 59985, 59986, 59987, 59988, 59989, 59990 and 61725, there is sufficient information contained within the records of the Office of the State Engineer to gain a full understanding of the issues and a hearing on this matter is not required.

II.

Some applications were protested by Elko County, in part, on the grounds that grazing rights have not been considered. However, the protest grounds did not include facts as to any specific grazing rights. Nevada Revised Statute § 533.365(1) provides that "[a]ny person interested may, within 30 days after the date of last publication of the notice of application, file with the State Engineer a written protest against the granting of the application, setting forth with reasonable certainty the grounds of such protest, which...must be verified by the affidavit of the protestant, or an agent or attorney thereof." The State Engineer finds Elko County's protest that asserts grazing rights have not been considered is not set forth with reasonable certainty in order for the State

Engineer to ascertain any particular grazing right that it is concerned about and therefore, dismisses the protest. Further, the State Engineer considers all prior appropriations on record within the Office of the State Engineer when making decisions with respect to appropriations of the public waters of the State of Nevada.

III.

The Applications were protested by Elko County, in part, on the grounds that Elko County water usage has not been determined to the beneficial use for all of the Elko County citizens. Nevada water law is based on the doctrine of prior appropriation. The State Engineer finds that this protest issue has no basis within Nevada water law and overrules this protest issue.

IV.

The State Engineer's Office has historically managed surface water and groundwater as separate sources. However, from a hydrologic standpoint, surface water and groundwater are not entirely separate, and it may often be difficult to separate waters as to their source. Surface water often infiltrates into the subsurface, whereby it becomes groundwater. Alternatively, groundwater may discharge onto the land surface in the form of a spring or gaining stream, or may discharge directly into a lake. Such is the case with water on the Ruby Lake National Wildlife Refuge (RLNWR). The supply of water to the RLNWR is almost entirely groundwater that comes to the surface as springs. The springs are located on the valley edges and valley floor, and springs are also known to occur beneath the lakes. These subaqueous springs discharge directly into the Ruby Lakes and are a significant, but relatively unquantified, supply of water to the lakes.

Run-off does not appear to be a major contributor to the water supply of the Ruby Lakes on an annual basis. Spring run-off after an exceptionally wet winter will supply run-off to the lakes, as will a flash flood. But after an average winter, run-off is minimal. The reason is that the adjacent mountains are composed of highly permeable and fractured limestone. Precipitation that falls on these mountains tends to infiltrate rather than run off. The infiltrated water flows through the limestone and subsequently re-emerges at the base of the mountains and on the valley floor as springs.

The water budget for Ruby Valley was first studied by Eakin and Maxey in *Water Resources Bulletin 12*.⁷¹ In that study, the authors estimated that groundwater evapotranspiration (ET) in Ruby Valley averaged 68,000 acre-feet annually. They further estimated that at least 15,000

⁷¹ T.E. Eakin, et al., *Contributions to the Hydrology of Eastern Nevada*, Water Resources Bulletin No. 12, (State of Nevada, Office of the State Engineer and United States Geological Survey), pp. 65-93, 1951.

acre-feet of that total was evaporation from Ruby and Franklin Lakes and transpiration from marsh vegetation. The remaining 53,000 acre-feet was ET from meadows, grasslands, phreatophytic shrubland areas and playas. The perennial yield was established later by the State Engineer. In estimating the perennial yield of Ruby Valley, only the ET from land areas was considered, and the perennial yield was set at 53,000 acre-feet.⁷² The groundwater contribution and, subsequent evaporation from the lakes, was estimated by Eakin and Maxey to be 15,000 acre-feet, but was not included in the perennial yield of the basin.

Subsequent hydrologic studies by the United States Geological Survey and others have re-estimated water budgets in the Ruby Valley and on the RLNWR. These studies are summarized in a State Engineer's staff report on consumptive use/natural ET on the RLNWR that is attached as Appendix A to this ruling.⁷³ As documented in Appendix A, and based on numerous available studies, the State Engineer has re-estimated the water budget for the southern portion of Ruby Valley in the area including the RLNWR. In summary, average annual ET on the RLNWR is estimated to be 56,000 acre-feet. ET from the lakes and marshes averages 40,000 acre-feet annually. Average ET from the adjacent lands is estimated to be 16,000 acre-feet annually. Due to the vagaries of climate, actual annual supply is highly variable. In wet years, substantial inflow can fill and greatly increase the size of the lakes. In dry years, the inflow is much below average and the lakes evaporate and shrink. The Applicant has requested an amount much greater than the average annual inflow as wet years are needed to offset dry years. The State Engineer finds that in many years this quantity of water may not exist at all and in other rare years there may be sufficient water for the full amount applied for under the applications. The State Engineer finds there is unappropriated water in quantities that vary significantly from year to year, but in some years there may be quantities sufficient to satisfy the amounts applied for under these applications.

Applications 59922 through 59929, initially filed for water from an underground source, were later amended to appropriate water from an "other surface water" source. The points of diversion are shown to be water that discharges into the bottom of lakes on the refuge. These are subaqueous springs. There is no specific water source category for a subaqueous spring, and a source of other surface water is consistent with a subaqueous spring. The cumulative diversion of water requested under Applications 59922 through 59929 is 197 cubic feet per second.

⁷² Office of the State Engineer, *Water for Nevada, State of Nevada Water Planning Report No. 3*, p. 23, Oct. 1971.

⁷³ Sullivan, A., 2013, Summary Report: Consumptive Use at Ruby Lakes National Wildlife Refuge, Relating to Applications 59922-59990 and 61725-61729. Attached as Appendix A to this ruling.

Applications 59930, 59931, 59935 through 59990, and 61725, 61727, 61728 and 61729 were filed to appropriate water from spring sources. These springs are located west and south of the lakes, and supply water to phreatophytes and wetland areas adjacent to the lakes and, ultimately, to the lakes and marshes. The cumulative diversion of water applied for under these applications totals 94.13 cubic feet per second.

As discussed above, the total average annual ET from the RLNWR is estimated to be 56,000 acre-feet. The perennial yield of the basin is 53,000 acre-feet, and the amount already appropriated is 25,204 acre-feet.⁷⁴ The ET from the riparian and phreatophytic lands adjacent to Ruby Lake is a component of the basin's perennial yield, but the water that is the supply for that ET is granted herein as a spring water right. Therefore, to avoid double-counting the resource, the estimated average annual ET from the phreatophytes and riparian areas of 16,000 acre-feet will be deducted from the available perennial yield of the basin.

The State Engineer finds Applications 59922 through 59929, 59930, 59931, 59935 through 59990, and 61725, 61727, 61728 and 61729 can be granted at full Application value. The State Engineer finds that these Applications are sufficient to satisfy the average annual water demand on the RLNWR. In order to document actual spring discharge on the RLNWR, a monitoring program for springs, groundwater levels and lake stages on the RLNWR will be required. This monitoring program will be jointly established by the USFWS and the State Engineer, and shall be submitted for approval to the State Engineer within one year from the date these permits are granted.

The combined diversion applied for under these applications is approximately 291 cubic feet per second, and are made up of springs, seeps, wetlands and sub-aqueous springs. Measuring the actual discharge of all these waters for the purposes of proof of beneficial use would be very difficult to complete with any level of certainty, particularly for those subaqueous springs that discharge into the lakes. Estimating the annual evapotranspiration from the RLNWR, as documented by previous studies by the USGS^{75,76} and this office⁷⁷, is a more representative approach to measuring water use on the RLNWR and will be appropriate for filing of the proof of

⁷⁴ Nevada Division of Water Resources; Water Rights Database, Hydrographic Area Summary, Ruby Valley Hydrographic Basin (176), February 26, 2014, official records in the Office of the State Engineer.

⁷⁵ Berger, D.L., et.al., 2001, *Estimates of evapotranspiration from the Ruby Lakes National Wildlife Refuge area, Ruby Valley, northeastern Nevada, May 1999–October 2000*, U.S. Geological Survey Water-Resources Investigations Report 2001-4234, 38 p.

⁷⁶ Berger, D.L., 2006. *Hydrogeology and water resources of Ruby Valley, northeastern Nevada*, U.S. Geological Survey Scientific Investigations Report 2005-5247, 39 p.

⁷⁷ Sullivan, Adam, 2013, *Summary Report: Consumptive Use at Ruby Lake National Wildlife Refuge, Relating to Applications 59922-59990 and 61725-61729*, Attached as Appendix A, 6 pp.

beneficial use for these applications as required by NRS § 533.400-410. Therefore, the State Engineer finds that the USFWS shall measure the total ET in excess of precipitation using accepted methods and practices on the RLNWR for at least five consecutive years, and submit that information to the State Engineer to satisfy the requirement for proof of beneficial use.

CONCLUSIONS

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.⁷⁸

II.

The State Engineer is prohibited by law from granting an application to appropriate the public waters where:⁷⁹

- A. there is no unappropriated water at the proposed source;
- B. the proposed use or change conflicts with existing rights;
- C. the proposed use or change conflicts with protectable interests in existing domestic wells as set forth in NRS § 533.024; or
- D. the proposed use or change threatens to prove detrimental to the public interest.

III.

The State Engineer concludes that Elko County's protest asserting that grazing rights have not been considered was not set forth with reasonable certainty and is dismissed.

IV.

The State Engineer concludes that Elko County's protest that water usage has not been determined to the beneficial use for all of the Elko County citizens has no basis within Nevada Water Law and is overruled.

⁷⁸ NRS Chapters 533 and 534.

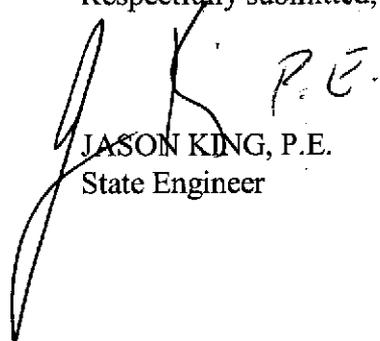
⁷⁹ NRS § 533.370(2).

RULING

The protests are overruled and Applications 59922, 59923, 59924, 59925, 59926, 59927, 59928, 59929, 59930, 59931, 59935, 59936, 59937, 59938, 59939, 59940, 59941, 59942, 59943, 59944, 59945, 59946, 59947, 59948, 59949, 59950, 59951, 59952, 59953, 59954, 59955, 59956, 59957, 59958, 59959, 59960, 59961, 59962, 59963, 59964, 59965, 59966, 59967, 59968, 59969, 59970, 59971, 59972, 59973, 59974, 59975, 59976, 59977, 59978, 59979, 59980, 59981, 59982, 59983, 59984, 59985, 59986, 59987, 59988, 59989, 59990, 61725, 61727, 61728 and 61729 are hereby approved subject to:

1. A monitoring plan approved by the State Engineer,
2. The payment of the statutory permit fees, and
3. Existing rights.

Respectfully submitted,


JASON KING, P.E.
State Engineer

Dated this 29th day of
May, 2014.

BRIAN SANDOVAL
Governor

STATE OF NEVADA

LEO DROZDOFF
Director

JASON KING, P.E.
State Engineer



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March 18, 2013

**Summary Report: Consumptive Use at Ruby Lake National Wildlife Refuge,
Relating to Applications 59922-59990 and 61725-61729**

By: Adam Sullivan

This report summarizes previous hydrologic analyses that provide data related to net evapotranspiration (net ET) at the Ruby Lake National Wildlife Refuge (RLNWR), and describes methods used to determine net ET to support water right applications submitted by the USFWS. Net ET is equal to the total ET minus effective precipitation, and is the measure employed here to establish a water right duty for the refuge.

Average annual net ET on the RLNWR is determined to be 56,000 AFA. Of this total, 16,000 AFA is groundwater ET by phreatophytic vegetation and riparian zones surrounding the marsh, and an additional 40,000 AFA is open water and marsh ET. When the perennial yield was initially established after the early reconnaissance-level hydrologic studies, the perennial yield was based on, and approximately equal to, the groundwater discharge by phreatophytes. Groundwater discharge by ET from the Ruby Marshes was recognized, but was not considered in determining the perennial yield of the basin. The tabulations that are presented here are based on data provided by the USFWS, studies of ET in northeastern Nevada, and review of three USGS published reports described below.

Water Resources Bulletin No. 12

In the 1951 USGS Bulletin *Contributions to the Hydrology of Eastern Nevada*, Eakin, et al estimated annual groundwater discharge from the entire Ruby Valley as part of a reconnaissance-level analysis of the larger region. This is the report used by NDWR to establish a perennial yield of 53,000 AFA for Ruby Valley.

For the portion of Ruby Valley north of Franklin Lake, the authors estimated annual groundwater discharge of 37,400 AF, divided between 34,400 AFA from phreatophyte communities and 3,000 AFA from irrigated meadow. For the portion of Ruby Valley south of the north end of

Franklin Lake, groundwater discharge was estimated at 30,200 AF, divided between 15,200 AF from phreatophyte communities and 15,000 AF of groundwater discharge as evapotranspiration from Ruby and Franklin Lakes and marshes. The perennial yield established by NDWR is the combined phreatophyte discharge of 37,400 AF in the north and 15,200 AF in the south, rounded to 53,000 AF.

The authors of Bulletin No. 12 do not separately estimate mean annual net ET from Ruby Lake and its bordering marshes and phreatophytes within the RLNWR. They do say that their estimate of 15,000 AFA of lake evaporation supplied by groundwater is a minimum because this volume of groundwater discharge plus observed surface water runoff is not sufficient to explain the evaporation from 22,000 acres at Ruby Lake and 10,000 acres at Franklin Lake. They conclude that mountain block recharge and spring discharge, representing most of the water that supports wildlife habitat at the RLNWR, may be much greater than their estimates.

Water Resources Investigations Report 01-4234

In water year 2000, annual ET rates were measured by the USGS at several sites in the RLNWR by Berger, et al using Bowen Ratio stations installed in several different habitats. This study concluded that total ET from RLNWR was 89,000 AF. Of this total, 4,750 AF was attributed to desert-shrub upland habitat covering 4,800 acres. An additional 21,320 AF is from direct precipitation, which is the measured depth of 0.65 feet over 32,800 acres of open water and phreatophytes on the refuge. The remaining 62,800 AF represents ET originating from groundwater discharge, surface runoff, depletion of soil moisture storage, and spring discharge to the marsh. The total volume is divided between 42,000 AF from open water and marsh, and 20,800 AF from phreatophytes and playa.

Results from WRI-01-4234 are not recommended for direct application to RLNWR water right applications because the study was only conducted for one year, and the Bowen ratio data for ET from open water and marsh is high in comparison to other measurements.

Scientific Investigation Report 2005-5247

In 2006, The USGS published a report titled Hydrogeology and Water Resources of Ruby Valley, Northeastern Nevada (Berger, 2006) presenting information on the hydrogeologic framework and water resources of the entire Ruby Valley. This report included estimates of basin-scale water budget components for water years 1985 and 2001, but did not specifically consider net ET at the RLNWR.

Net ET from the RLNWR can be deduced from data provided in SIR 2005-5247 combined with WRI 01-4234 and supporting citations for water years 1985 and 2001. Table 1 shows the numbers used to estimate net ET from the south subbasin of Ruby Valley. The south subbasin is delineated by the topographic divide between Ruby Lake and Franklin Lake, and includes all of RLNWR.

Table 1: Net ET deduced from USGS reports, Ruby Valley south subbasin, WY 1985 and 2001

Category	Water Year 1985				Water Year 2001			
	Area (ac)	Total ET (ft)	Net ET (ft)	Net ET (af)	Area (ac)	Total ET (ft)	Net ET (ft)	Net ET (af)
Open Water	9,170	5.31	4.33	39,706	4,050	5.31	4.65	18,833
Marsh	5,830	4.19	3.21	18,714	5,830	4.19	3.53	20,580
Meadow	5,100	--	2.54 ^a	12,954	5,100	--	2.54 ^a	12,954
Grassland	3,100	--	1.71 ^a	5,301	3,100	--	1.71 ^a	5,301
Mixed Phreatophytes	8,900	1.33	0.35	3,115	8,900	1.33	0.67	5,963
Playa and bare soil	5,100	--	0.15 ^a	765	10,220	--	0.15 ^a	1,533
TOTAL				80,555				65,163

^a Net ET rates determined by Berger, 2001 using data and methods from Nichols, 2000

The categories shown in Table 1 match habitat types determined in WRI 01-4234. Acreage of open water and marsh in 2001 were reported in SIR 2005-5247. For 1985, open water and marsh were measured by NDWR from 1985 Landsat imagery. Marsh area was distinguished from open water by assuming that marsh in 1985 was the same as in 2001, and open water covered the remainder of the 15,000 acres. Acreage for meadow and grassland are values reported in WRI 01-4234 plus additional meadow south of the 2001 RLNWR boundary. Mixed phreatophyte acreage is the sum of 5,500 acres reported by WRI 01-4234 within the RLNWR and additional area to the east of the RLNWR measured by NDWR from field mapping and comparison with aerial imagery, Landsat data, and mapping by Nichols, 2000. Playa area was estimated from information reported in both USGS reports, from Landsat imagery, and by balancing total areas.

Total ET rates shown in Table 1 were measured by Bowen Ratio stations in WY 2000 and reported in WRI 01-4234. Net ET for these categories is the difference between total ET and precipitation measured at the RLNWR headquarters. Net ET rates for other categories are from WRI 01-4234, citing Nichols, 2000.

Results presented in Table 1 are not recommended as an appropriate baseline for determining RLNWR consumptive use because most of the discharge is equated from one year of Bowen ratio ET data reported in WRI 01-4234. In addition, the purpose of SIR 2005-5247 was to develop a basin-scale water balance for the entire Ruby Valley. Estimations of each budget component for the southern subbasin encompassing RLNWF are not explicitly calculated or reported.

USFWS Measurements of Land Cover within the RLNWR

Land Cover within the RLNWR was measured by the USFWS using NAIP imagery from July, 2010 and ASTER imagery from September, 2009 (Epting, 2012). Results are shown in Table 2, with corresponding land cover types determined in WRI 01-4234.

Table 2: RLNWR Land Coverage

USFWS data		Category for net ET analysis
Land Cover	Area (ac)	
water	4,798	Open Water
marsh	8,602	Marsh
meadow	6,265	Meadow
willows	24	Meadow
shrubs	14,162	Mixed Phreatophytes/ Upland
bare	22	Upland
developed	183	Upland
dry grassland	312	Upland
forest	131	Upland
planted trees	6	Upland
unclassified	3	Upland
alkaline flat	270	Playa and bare soil
playa	5,241	Playa and bare soil

Recommended Estimate of Consumptive Use from the RLNWR

The recommended method to determine consumptive use for the RLNWR is to apply standard accepted rates of net ET to land cover categories recently measured by the USFWS, and then combine these to obtain a cumulative net ET for the entire refuge. Land cover categories measured by the USFWS match land cover types determined in WRI 01-4234 and used in Table 3 except for "shrubs" which includes both phreatophyte and upland areas. Upland area within the RLNWR was reported as 4,800 acres in WRI 01-4234. An additional 200 acres of upland are part of the 2,300 acres added to the RLNWR after WRE 01-4234 was published, for a total of 5,000 upland acres within the RLNWR. The remaining shrub area is considered to be phreatophytes. Net ET by land cover category and cumulatively for the entire RLNWR is shown in Table 3.

Table 3: Ruby Lake National Wildlife Refuge Net ET

Category	Area (ac)	Net ET (ft/yr)	Net ET (af/yr)
Open Water	4,800	3.0	14,400
Marsh	8,600	3.0	25,800
Meadow	6,300	2.0	12,600
Mixed Phreatophytes	9,800	0.30	2,940
Upland	5,000	0.0	0
Playa and bare soil	5,500	0.10	550
		Total (rounded)	56,000

Citations

Arnone, III, J.A., Jasoni, R.L., Larsen, J.D., Fenstermaker, L.F., Wohlfahrt, G., Kratt, C.B., Lyles, B.F., Healey, J., Young, M.H., and Thomas, J.M., 2008, Variable evapotranspirative water losses from lowland agricultural and native shrubland ecosystems in the eastern Great Basin of Nevada, USA: Desert Research Institute, Reno, Nevada, 97 p.

Berger, D.L., Johnson, M.J., Tumbusch, M.L., and Mackay, Jeffrey, 2001, Estimates of evapotranspiration from the Ruby Lake National Wildlife Refuge area, Ruby Valley, northeastern Nevada, May 1999–October 2000: U.S. Geological Survey Water-Resources Investigations Report 2001-4234, 38 p., online at <http://pubs.usgs.gov/wri/wri014234>.

Berger, D.L., 2006. Hydrogeology and water resources of Ruby Valley, northeastern Nevada: U.S. Geological Survey Scientific Investigations Report 2005-5247, 39 p., online at <http://pubs.water.usgs.gov/sir2005-5247>.

Devitt, D.A., Baghzouz, M., Bird, B., Fenstermaker, L., Conrad, B., and Young, M.H., 2008, Evapotranspiration estimates in north Eastern Nevada Basins: University of Nevada, Las Vegas, Las Vegas, Nevada, 106 p.

Eakin, T.E., G.B. Maxey, T.W. Robinson, J.C. Fredericks, and O.J. Loeltz, Contributions to the hydrology of eastern Nevada: Nevada State Engineer, Water Resources Bulletin 12, p. 65-93.

Epting, J., U.S. Fish and Wildlife Service, personal communication and email correspondence, March 13 and May 1, 2012.

Huntington, J.L., and Allen, R.G., 2010, Evapotranspiration and net irrigation water requirements for Nevada: Department of Conservation and Natural Resources–Division of Water Planning, Carson City, Nevada, 288 p., online at <http://water.nv.gov/mapping/>.

Moreo, M.T., Laczniak, R.J., and Stannard, D.I., 2007, Evapotranspiration rate measurements of vegetation typical of ground-water discharge areas in the Basin and Range carbonate-rock aquifer system, White Pine County, Nevada, and adjacent areas in Nevada and Utah, September 2005–August 2006: U.S. Geological Survey Scientific Investigations Report 2007-5078, 36 p., online at <http://pubs.usgs.gov/sir/2007/5078>.

Nichols, W.D., 2000, Regional ground-water evapotranspiration and ground-water budgets, Great Basin, Nevada: U.S. Geological Survey Professional Paper 1628, 82 p., online at <http://pubs.er.usgs.gov/usgspubs/pp/pp1628>.

Nevada State Engineer, Ruling No. 6140, official records in the Office of the State Engineer, online at <http://images.water.nv.gov/images/rulings>.